

ACCOUNTING

Associate in Applied Science (AAS)

Program Code: 10-101-1

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu

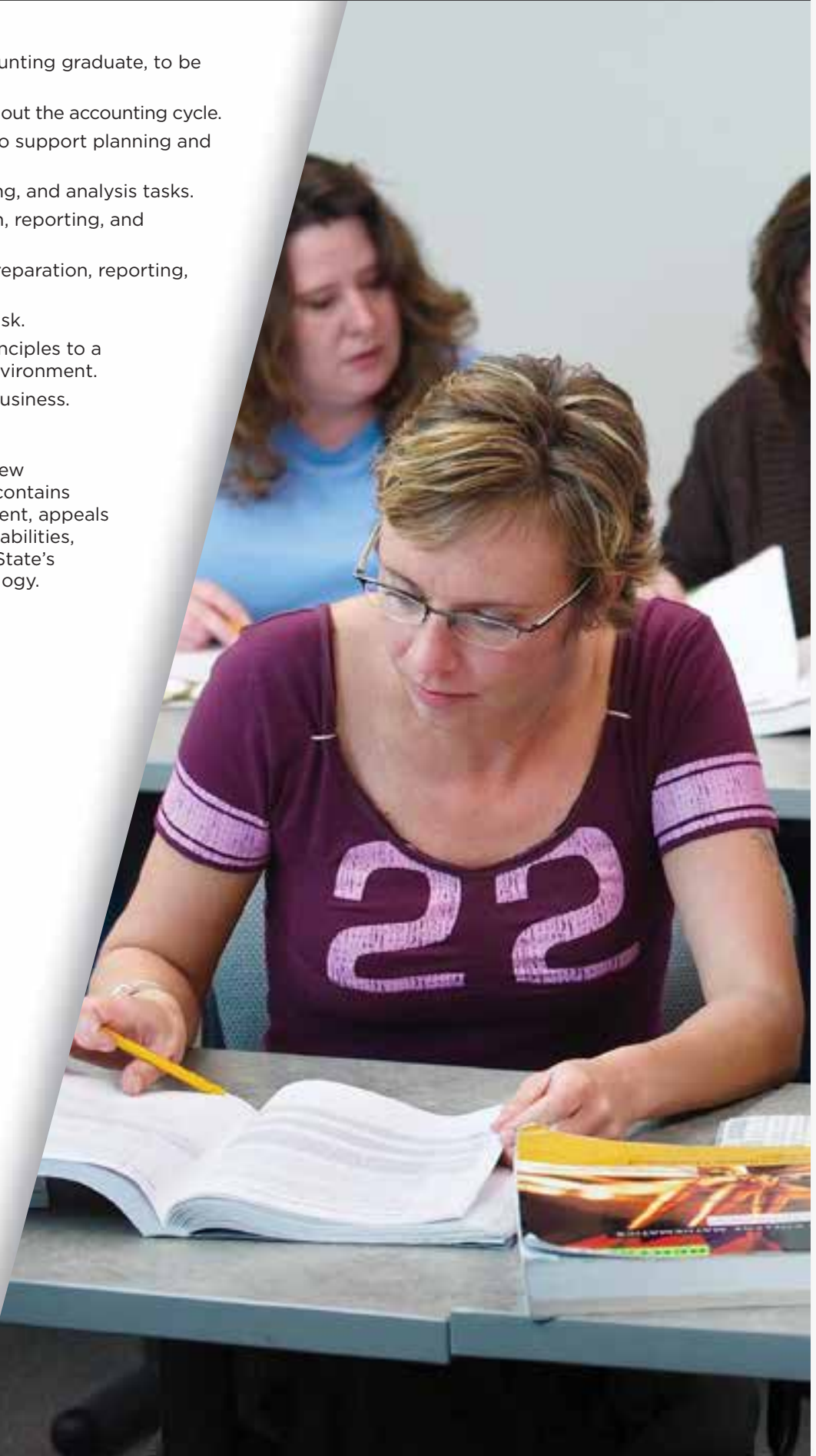
PROGRAM OUTCOMES

Employers will expect you, as an Accounting graduate, to be able to:

- Process financial transactions throughout the accounting cycle.
- Analyze financial and business info to support planning and decision making.
- Perform payroll preparation, reporting, and analysis tasks.
- Perform cost accounting preparation, reporting, and analysis tasks.
- Perform individual tax accounting preparation, reporting, and analysis tasks.
- Identify internal controls to reduce risk.
- Adapt accounting processes and principles to a government and/or not-for-profit environment.
- Design an accounting system for a business.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		16 credits
1010111	Accounting I	4
1010123	Income Tax Accounting	3
10102101	Intro to Business	3
10103106	Microsoft Office-Introduction	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3

Term		17-18 credits
10101113	Accounting II	4
10101120	Payroll Accounting	3
10101129	Accounting: Computerized	3
10103124	Excel-Intermediate	1
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3

Term		16 credits
10101115	Accounting III	4
10101128	Managerial Accounting	3
10101131	Governmental Accounting	3
10102104	Business Law	3
10809195	Economics	3

Term		19 credits
10101117	Accounting IV	4
10101125	Cost Accounting	3
10101130	Accounting Systems	3
10809166	Intro to Ethics: Theory & Application	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Total credits 68-69

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		7 credits
10101111	Accounting I	4
10103106	Microsoft Office-Introduction	3

Term		7 credits
10101113	Accounting II	4
10102101	Intro to Business	3

Term		6-7 credits
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3

Term		7 credits
10101123	Income Tax Accounting	3
10101115	Accounting III	4

Term		7 credits
10101117	Accounting IV	4
10101125	Cost Accounting	3

Term		6 credits
10809195	Economics	3
10809166	Intro to Ethics: Theory & Application	3

Term		6 credits
10101128	Managerial Accounting	3
10102104	Business Law	3

Term		6 credits
10101120	Payroll Accounting	3
10101129	Accounting: Computerized	3

Term		6 credits
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Term		4 credits
10101131	Governmental Accounting	3
10103124	Excel-Intermediate	1

Term		6 credits
10101130	Accounting Systems	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3

Total credits 68-69

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Accounting I

10101111..... 4 credits

A beginning course designed especially for majors or those who need a strong foundation in accounting principles. Develops the accounting cycle of journaling, posting, adjusting, closing, and reporting. Also emphasizes service and merchandising sole proprietorships in developing the accounting cycle. Explores issues for accounting for cash, accounts and notes receivable, inventories, and fixed assets.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Accounting II

10101113..... 4 credits

Studies accounting procedures for partnerships and corporations. Issues involving incorporation are reviewed. Accounting procedures for corporate stock, dividends, retained earnings, bonds, and long-term investments are presented. Analysis of financial statements is introduced and statements of cash flows are prepared.

Prerequisite: Accounting I 10101111

Accounting III

10101115..... 4 credits

Builds on accounting concepts in Accounting I and II, and details the accounting for assets using generally accepted accounting principles. Incorporates the time value of money, and defends the role of the Financial Accounting Standards Board.

Prerequisite: Accounting II 10101113

Accounting IV

10101117..... 4 credits

Examines accounting issues and the application of generally accepted accounting principles to those issues. Some issues examined are liabilities, long-term financing, capital stock issues, revenue recognition, capital leases, deferred taxes, earnings per share, and accounting changes.

Prerequisite: Accounting III 10101115

Accounting: Computerized

10101129..... 3 credits

Uses the computer as a tool to reinforce and build on accounting concepts, prepares financial statements and managerial reports, produces business documents, and accounts for service and merchandising business entities. Explores Excel worksheet applications for accountants.

Prerequisites: Accounting I 10101111 and Beginning Excel 10103123 or Microsoft Office-Introduction 10103106

Accounting Systems

10101130..... 3 credits

Designs management and accounting information systems for service, merchandising, and manufacturing business entities including data collection, data processing, data storage, information distribution, and internal controls; prepares oral and written reports; and produces individual and group projects.

Prerequisite: Accounting II 10101113

Business Law

10102104 3 credits

This course introduces the student to the basic foundation of laws and regulatory systems applicable to the business environment. Students examine the UCC, contract torts, agency law, and business and cybercrime. Students apply business legal theory in conjunction with ethical decision making through practical application.

Recommended Accuplacer scores: Reading 55 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better; Sentence Skills 60 or completion of Intro to College Writing 10831103 with a "C" or better; Arithmetic 34 or completion of Pre-Algebra 10834109 with a "C" or better

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Cost Accounting

10101125 3 credits

Accumulates production costs for materials, labor, and overhead for job order or process costing systems. Determines and records variances from standard. Computes various cost-volume-profit relationships for control and decision making.

Prerequisite: Accounting II 10101113

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Economics

10809195 3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Excel-Intermediate

10103124 1 credit

Develop charts, PivotTables, and manage multiple worksheets/workbooks.

Prerequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

Governmental Accounting

10101131..... 3 credits

The basic concepts, techniques, and terminology of fund accounting as utilized by governmental entities are emphasized. Institutional accounting for educational institutions and hospitals, and the uniqueness of accounting for not-for-profit organizations and agencies, are also studied.

Prerequisite: Accounting II 10101113

Income Tax Accounting

10101123 3 credits

Applies current tax laws in preparing individual tax returns and supporting forms and schedules.

Minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Business

10102101..... 3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better*

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

course descriptions

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of "C" or better, or College Math 10804107 with a grade of "C" or better. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Managerial Accounting

10101128 3 credits

Develops managerial and finance analytical and decision-making skills. Develops an appreciation of the financial statements as a framework for controlling the activities of a business entity, the ability to do financial statement analysis and forecasting, and make recommendations for appropriate courses of action based on the results. Examines the methodology and develops the skills to manage leverage, working capital, and long-term financing. Examines the American financial system and how the business entity functions within it. Develops an appreciation for the skills needed to determine the time value of money. Prepares cash flow, operating, and capital budgets.

Prerequisite: Accounting II 10101113

Microsoft Office-Introduction

10103106 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

Payroll Accounting

10101120 3 credits

Develops a working knowledge of payroll legislation, payroll records, and payroll accounting. Payroll accounting is accomplished through manual methods and automated methods.

Corequisites: Accounting I 10101111 and Microsoft Office-Introduction 10103106

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

ADMINISTRATIVE PROFESSIONAL

Associate in Applied Science (AAS)

Program Code: 10-106-6

our graduates
INDEMAND

2017/2018



mstc.edu

OFFICE SUPPORT SPECIALIST



Mid-State's Office Support Specialist program develops students into key members of an office team. The program emphasizes document preparation and the effective use of personal interactions and ever-changing technology to support your role as the central communications link in an office. You'll experience hands-on learning through the organization of high-profile events. You'll also learn to handle multiple projects and deadlines, manage time, solve problems, and be helpful in nature—all in high demand by employers.

Graduates of the Office Support Specialist technical diploma may advance into the Administrative Professional program.

Technical Diploma

Total Credits: 36-37

Salary information:
mstc.edu/programsalaries

Careers: Administrative Assistant, Clerk, Customer Service Representative, General Office Clerk, Office Assistant, Program Assistant, and Receptionist

In general, there is growing demand for these careers. Example: General Office Clerk has remained the same over the last 2 years and is expected to grow by 2% over the next 10 years. Currently 42,376 General Office Clerks are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

CUSTOMER RELATIONSHIP PROFESSIONAL



Mid-State's Customer Relationship Professional program develops students into important members of a call center or customer service team. The program focuses on communicating with customers to help them navigate past challenges to fulfill their needs, emphasizing active listening, effective verbal communication, and customer service skills. Through hands-on projects, you will learn telephone etiquette, how to respond appropriately to customers, and how to perform quick problem-solving analysis while exceeding customer expectations.

Graduates of the Customer Relationship Professional technical diploma may advance into the Office Support Specialist program or the Administrative Professional program.

Technical Diploma

Total Credits: 12

Salary information:
mstc.edu/programsalaries

Careers: Account Representative, Client Services Specialist, Contact Center Agent, Customer Service Representative, and Customer Care Representative

In general, there is growing demand for these careers. Example: Customer Service Representative career has grown by 1% over the last two years and is expected to grow by 8% over the next 10 years. Currently 24,654 Customer Service Representatives are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

OTHER OPTIONS

RELATED PROGRAMS

Accounting, Business Management, Court Reporting, IT Network Specialist, IT Software Developer, and Marketing

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as an Administrative Professional graduate, to be able to:

- Demonstrate effective workplace communications.
- Apply technology skills to business and administrative tasks.
- Perform routine administrative procedures.
- Manage administrative projects.
- Maintain internal and external relationships.
- Model professionalism in the workplace.

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Administrative Professional program outcomes are measured in the TSA-designated courses Administrative Office Procedures and Supervised Field Experience.

PROGRAM PROGRESSION

In order to maintain a passing status and progress in the program, students must:

- Receive a grade of “C” or better in Administrative Office Procedures and Supervised Field Experience.

MOBILE DEVICE ENHANCEMENT

To support your hands-on learning and give you an edge in today’s digital workplace, Administrative Professional program students are required to purchase an iPad device. Students accepted into the program will receive specific details about purchasing the mobile device (financial aid available).

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

SAMPLE FULL-TIME CURRICULUM OPTION

Term		18-19 credits
10102101	Intro to Business	3
10103106	Microsoft Office-Introduction	3
10106157	Document Formatting	3
10106160	Proofreading & Editing	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		18 credits
10103114	Word-Intermediate	1
10103124	Excel-Intermediate	1
10103134	Access-Intermediate	1
10106140	Business Information Management	3
10106150	Administrative Office Procedures	3
10106172	Digital Communication Technology	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10102130	Career Development -or-	
10801199	Employment Strategies	3
Term		18 credits
10102120	Customer Service Management -or-	
10106106	Quality Customer Service	3
10106162	Graphics & Print Media	3
10106180	Advanced Software Applications	3
10809195	Economics	3
10809122	Intro to American Government -or-	
10809196	Intro to Sociology	3
	Elective	3
Term		14 credits
10104107	Social Media Marketing	3
10106135	Supervised Field Experience	2
10809166	Intro to Ethics: Theory & Application	3
10809172	Introduction to Diversity Studies	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Total credits 68-69		

Please Note:

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- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10102101	Intro to Business	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		6-7 credits
10103106	Microsoft Office-Introduction	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		6 credits
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Term		9 credits
10106157	Document Formatting	3
10106160	Proofreading & Editing	3
10106150	Administrative Office Procedures	3
Term		6 credits
10103114	Word-Intermediate	1
10103124	Excel-Intermediate	1
10103134	Access-Intermediate	1
10106140	Business Information Management	3
Term		6 credits
10809122	Intro to American Government -or-	
10809196	Intro to Sociology	3
10809172	Introduction to Diversity Studies	3
Term		6 credits
10106180	Advanced Software Applications	3
10809195	Economics	3
Term		6 credits
10102120	Customer Service Management -or-	
10106106	Quality Customer Service	3
10106172	Digital Communication Technology	3
Term		6 credits
10102130	Career Development -or-	
10801199	Employment Strategies	3
	Elective	3
Term		6 credits
10106162	Graphics & Print Media	3
10809166	Intro to Ethics: Theory & Application	3
Term		5 credits
10104107	Social Media Marketing	3
10106135	Supervised Field Experience	2
Total credits 68-69		

course descriptions

Access-Intermediate

10103134 1 credit

Students develop forms, reports, and queries.

Prerequisite: Microsoft Office-Introduction 10103106 or Access-Beginning 10103133

Administrative Office Procedures

10106150 3 credits

Develops professional skills and attitudes needed in a global

business environment. Skills include time management, problem solving, and decision making while working independently and as part of a team. Tasks such as electronic mail, calendaring, meeting and event planning, domestic and international travel, and project management and minute-taking are included. Familiarity with office machines is required. *Corequisites: Written Communication 10801195 and Microsoft Office Introduction 10103106*

Advanced Software Applications

10106180 **3 credits**

Integrates multiple advanced software applications by utilizing concepts such as importing/exporting, linking/embedding, and copying/pasting. Students manage information and apply critical thinking skills to create professional documents simulating real-world projects.

Prerequisites: Microsoft Office-Introduction 10103106, Word-Intermediate 10103114, Excel-Intermediate 10103124, and Access Intermediate 10103134

Business Information Management

10106140 **3 credits**

Following commonly-used ARMA rules, the student applies basic filing methods to paper and database filing systems. Methods to permanently archive data are also covered.

Corequisite: Microsoft Office-Introduction 10103106

Career Development

10102130 **3 credits**

Prepares students for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment.

NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

College Mathematics

10804107 **3 credits**

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Customer Service Management

10102120 **3 credits**

An application of the skills and tools necessary to manage and measure the customer service function. Learners practice quality customer service, develop customer service plans, train and develop staff in quality customer service, measure the effectiveness of customer service, and lead continuous improvement of customer service.

Recommended Accuplacer scores - Reading 55 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better, Sentence Skills 60 or completion of Intro to College Writing 10831103 with a "C" or better, Arithmetic 34 or completion of Pre-Algebra 10834109 with a "C" or better

Developmental Psychology

10809188 **3 credits**

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Digital Communication Technology

10106172 **3 credits**

Introduces the student to digital and communication technology used in the office today, including digital cameras, digital video cameras, video conferencing, web conferencing, and multimedia presentations. The content focuses on understanding communication technologies and how they impact employees.

Corequisite: Microsoft Office-Introduction 10103106

Document Formatting

10106157 **3 credits**

Students are able to format styles of business letters, business and academic reports, memos, tables, business meeting documents, itineraries, legal documents, and business forms. Also includes drill work for improving keying speed and accuracy. Minimum typing speed of 30 wpm required (alphabetic keys only).

Corequisite: Microsoft Office-Introduction 10103106

Economics

10809195 **3 credits**

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Employment Strategies

10801199 **3 credits**

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation.

NOTE: To enroll you must have completed 50 percent of technical

program credits or receive department approval. See program advisor or program faculty to register.

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Excel-Intermediate

10103124 1 credit

Students develop charts and PivotTables and manage multiple worksheets/workbooks.

Prerequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

Graphics & Print Media

10106162 3 credits

Develops skill to effectively create graphics and design publications. Students produce print media, design, and layout print jobs using the most appropriate software package for the job.

Corequisite: Microsoft Office Introduction 10103106

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Business

10102101..... 3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance,

personnel, and management in business operations.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to

course descriptions

co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of “C” or better, or College Math 10804107 with a grade of “C” or better. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Microsoft Office-Introduction

10103106 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Proofreading & Editing

10106160 3 credits

Sharpens proofreading and editing skills. Competencies include detecting and editing errors in keying, spelling, capitalization, plurals, possessives, punctuation, numbers, grammar, sentence structure, and formatting. Documents are edited for clarity, conciseness, and completeness.

Corequisite: Microsoft Office-Introduction 10103106

Quality Customer Service

10106106 3 credits

Addresses sensitivity in communicating with customers and co-workers. Includes international communications, teamwork, working relationships, and telephone skills.

Social Media Marketing

10104107 3 credits

Addresses how social media has transformed marketing

communications from traditional mass media to individualized marketing. Using social media tools such as Facebook, YouTube, Twitter, LinkedIn, and more, this class explores the different methodologies for social media marketing. Topics include creating social media, integrating social media as part of a marketing campaign, the concept of viral marketing, ethical and potential legal concerns that have arisen over these forms of communication, and how organizations and individuals have successfully applied social media marketing.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a “C” or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a “C” or better or equivalent.

Supervised Field Experience

10106135 2 credits

This course integrates Administrative Professional classroom study with specific off-campus occupational experiences at selected training sites. An organized plan of experiences built around office competencies is planned, supervised, and evaluated by the instructor and cooperating business trainer.

Prerequisite: Completion of at least 24 credits of Computer Software 10-103 and/or Administrative Professional 10-106 courses or consent of instructor.

Word-Intermediate

10103114 1 credit

Students create columns, lists, and a table of contents. Desktop publishing, templates, and mail merge are also covered.

Prerequisite: Microsoft Office-Introduction 10103106 or Word-Beginning 10103113

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

AGRIBUSINESS AND SCIENCE TECHNOLOGY

Associate in Applied Science (AAS)

Program Code: 10-006-2

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



FARM OPERATION



The Farm Operation program at Mid-State prepares graduates to confidently run the day-to-day operations on a dairy farm. You'll learn about livestock and their products, livestock diseases and prevention, quality milk and meat production, soils, crop production, and more. This hands-on program features agribusiness professionals who share their knowledge directly through presentations, demonstrations, and tours. Course topics include best practices for farming, such as how to manage farm records, farm computerization, and critical facts about financial credit, income tax law, and marketing.

Graduates of the Farm Operation technical diploma may advance into the Agribusiness and Science Technology program.

Technical Diploma

Total Credits: 27

Salary information:
mstc.edu/programsalaries

Careers: A.I. Technician, Agricultural Manager, Dairy Equipment Service Technician, Dairy Herdsman, Farmer, Farm Assistant, and Farm and Ranch Manager

Though there are fewer farmers in the region, the opportunity for today's farmers to benefit from more profitable techniques and strategies has never been greater.

FARM BUSINESS & PRODUCTION MANAGEMENT



Mid-State's Farm Business & Production Management program teaches the skills needed to be competitive in agriculture and maximize profits. You'll learn how to identify your farm's strengths and weaknesses, analyze farm records to uncover hidden opportunities, apply proven marketing techniques, and more. Classes are offered fall and winter and include instruction in the classroom, on the farm, and via group tours. Topics include crop production, soil management, and financial planning and analysis as well as the feeding, breeding, and management of livestock.

Graduates of the Farm Business & Production Management technical diploma may advance into the Agribusiness and Science Technology program.

Technical Diploma

Total Credits: 19

Salary information:
mstc.edu/programsalaries

Careers: Agricultural Manager, Dairy Equipment Service Technician, Farm Assistant, Farm Manager, Feed Sales, First Line Supervisors of Agricultural Crop and Horticulture Worker, Grain Operator, Mill Production Operator, and Plant Manager

Though there are fewer farmers in the region, the opportunity for today's farmers to benefit from more profitable techniques and strategies has never been greater.

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

OTHER OPTIONS

RELATED PROGRAMS

Urban Forestry Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as an Agribusiness and Science Technology graduate, to be able to:

- Utilize agronomic resources for optimal farm production (both crops & soils).
- Create farm business and livestock management plans.
- Plan for operation and maintenance of farm facilities and equipment.
- Apply marketing principles to agricultural enterprises.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		14-15 credits
10080105	Intro to Soil Science	3
10080140	Farm Financial Analysis	3
10091102	Intro to Animal Science	3
10093101	Integrated Pest Management	2
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
Term		15 credits
10070101	Basic Agricultural Electrical Systems	2
10091103	Animal Nutrition	4
10093102	Intro to Precision Agriculture	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10806184	Plant Biology	3
Term		15 credits
10006103	Introduction to Food Science	3
10006104	Intro to Agriculture Engineering Technology	3
10090101	Agriculture Business Management	3
10093104	Principles of Crop Management	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term		16 credits
10003101	Agricultural Diesel Engine Systems	3
10006101	Agricultural Computations	3
10006102	Agribusiness Equipment & Facilities	2
10070102	Precision Equipment Systems	2
10809166	Intro to Ethics: Theory & Application	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Total credits 60-61		

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10080105	Intro to Soil Science	3
10091102	Intro to Animal Science	3
Term		7 credits
10091103	Animal Nutrition	4
10093102	Intro to Precision Agriculture	3
Term		6 credits
10090101	Agriculture Business Management	3
10093104	Principles of Crop Management	3
Term		8 credits
10006101	Agricultural Computations	3
10006102	Agribusiness Equipment & Facilities	2
10003101	Agricultural Diesel Engine Systems	3
Term		8 credits
10080140	Farm Financial Analysis	3
10093101	Integrated Pest Management	2
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		8 credits
10070101	Basic Agricultural Electrical Systems	2
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10806184	Plant Biology	3
Term		9-10 credits
10006103	Introduction to Food Science	3
10006104	Intro to Agriculture Engineering Technology	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
Term		8 credits
10070102	Precision Equipment Systems	2
10809166	Intro to Ethics: Theory & Application	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Total credits 60-61		

ohm's law, generators, batteries, electric motors, water heaters, overcurrent protection, conductor sizing, and national electrical code requirements.

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores – Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Farm Financial Analysis

10080140..... 3 credits

This course identifies farm record-keeping skills and provides opportunities to develop these necessary business skills for operating a successful farm business. These skills include recording livestock and crop

information, calculating depreciation and capital gains, gathering federal and state tax form information, calculating inventories, developing budgets, formulating yearly credit needs, and conducting a financial farm business analysis.

Integrated Pest Management

10093101..... 2 credits

An effective and environmentally sensitive approach to pest management. Learners explore various approaches in integrated pest management (IPM) and gather information on the life cycles of pests and their interactions with the environment. This information in combination with available pest control methods are used to identify the most economical pest management options, with the least possible hazard to people, property, and environment.

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to Agriculture Engineering Technology

10006104..... 3 credits

Studies engineering concepts and principles as they apply to farm power and machinery, electrical energy and processing, structures and environment, irrigation and drainage, and food engineering. Students are exposed to techniques in design, planning, construction, and performance evaluation.

Intro to Animal Science

10091102 3 credits

Introduces the basics of livestock management. Examines management of dairy, beef, sheep, and other common livestock with concentration on nutrition, feedstuff's classification, reproduction, genetics, animal behavior, animal health, and sustainable agriculture practices. Includes basic husbandry and care procedures for animals.

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Precision Agriculture

10093102 3 credits

Explores agricultural applications of GPS, yield monitoring systems, and mapping. Students learn to interpret maps generated by precision agriculture equipment. Learners experience setup, calibration and operation of equipment/software designed to support the production crop industry.

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better*

Intro to Soil Science

10080105 3 credits

Designed to provide students with fundamental knowledge of soil and soil composition. Includes study of soil types, formation factors, physical properties, biological properties, and basic soil chemistry. Units covering tillage, conservation, pH, soil management, plant nutrients, and fertilizer sources are also included. Students gain the skills required to interpret soil test reports and soil survey maps and recognize qualities of various soil types. Students perform soil sampling, residue measurements, compaction assessments, and soil loss determinations per crop rotation guidelines.

Introduction to Food Science

10006103 3 credits

Offers students unique opportunities to learn where their food supply comes from, how the food is produced, and how consumption is met on a global basis. Applying science principles to food production will enhance the student's ability to understand the phenomena of food production.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Plant Biology

10806184 3 credits

This lecture/laboratory course provides students with an in-depth study of the plant kingdom. The content includes, but is not limited to, plant cell anatomy and physiology, plant genetics, plant classification, plant anatomy and physiology, plant responses, plant life cycles, and ecology. A survey of viruses, prokaryotes, protista, and fungi as they pertain to plants is presented.

Precision Equipment Systems

10070102 2 credits

Provides experience with different precision farming GPS systems used on agriculture equipment. Students learn proper setup, calibration, and installation of the systems. Students also create and interpret maps and learn adjustments and settings as well as GPS display and the different functions related.

Principles of Crop Management

10093104 3 credits

The basic principles and concepts of sound agronomic practices are discussed for corn, soybeans, small grains, and forage crops grown in Wisconsin. All sound agronomy practices are emphasized for each crop area as it relates to cultural and other specific inputs of crop production, environmental factors, and sustainable systems.

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a “C” or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a “C” or better or equivalent.

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

AUTOMOTIVE MAINTENANCE TECHNICIAN

Technical Diploma

Program Code: 31-404-3

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

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AUTOMOTIVE MAINTENANCE TECHNICIAN



Mid-State's Automotive Maintenance Technician program prepares students for entry-level automotive repair work with special emphasis on mechanical relationships, basic engine performance, and suspension systems. You'll learn from industry experts to test and maintain basic automotive systems. You'll also apply the techniques learned in lecture in an automotive shop laboratory setting, with access to state-of-the-art hand and power tools and complex electrical diagnostic equipment. Graduates will have the confidence to start their careers in automotive repair facilities and retail service centers.

Graduates of the Automotive Maintenance Technician technical diploma may advance into the Automotive Technician program.

Technical Diploma

Total Credits: 26

Salary information:
mstc.edu/programsalaries

Careers: Automotive Apprentice, Automotive Parts Sales/Service Technician, Automotive Service Attendant, and Tire and Lubrication Technician

In general, there is growing demand for these careers. Example: Automotive Service Attendant career has grown by 4% over the last two years and is expected to grow by 8% over the next 10 years. Currently 941 Automotive Service Attendants are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

AUTOMOTIVE TECHNICIAN



Mid-State's Automotive Technician program gives students the experience and skills they need to diagnose and repair today's vehicles. The program emphasizes engine and transmission repair, the drive train and axles, suspension and steering systems, brakes, electrical systems, heating and air conditioning, and engine performance. You'll receive instruction from industry experts and have access to state-of-the-art equipment, including a variety of hand and power tools and complex electrical diagnostic equipment. Hands-on learning and opportunities to diagnose and repair cars for real customers will have you ready to enter the workforce with confidence.

Technical Diploma

Total Credits: 64

Salary information:
mstc.edu/programsalaries

Careers: Automotive and Truck Technician, Automotive Master Mechanic, Automotive Parts Salesperson, Maintenance Technician, Service Station Technician, and Small Engine Technician

In general, there is growing demand for these careers. Example: Automotive Master Mechanic career has grown by 3% over the last two years and is expected to grow by 9% over the next 10 years. Currently 6,811 Automotive Master Mechanics are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

bachelor's degree opportunities

UW-Stout, BA Business or Automotive (Tech Ed Teacher)

For more information and additional opportunities, go to mstc.edu/transfer

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTION

RELATED PROGRAM

Diesel & Heavy Equipment Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as an Automotive Maintenance Technician graduate, to be able to:

- Service brake and suspension systems.
- Perform all tire-related activities.
- Service all lubrication and fluid systems.
- Prepare service and part orders.

PROTECTIVE CLOTHING

Students are required to purchase three “Mid-State Automotive Technician Student” uniform shirts. These shirts are available the first week of class for approximately \$30 each. Students are also required to wear safety glasses at all times in the lab. Acquisition of safety glasses is the responsibility of the student.

REQUIRED EQUIPMENT

Students need to purchase a Fluke 177 or Fluke 88V multimeter and test lead set before the start of the second term. These are available for purchase through the campus Bookstore for approximately \$270.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		13 credits
10605108	Intro to Electronics	2
32404307	Suspension & Steering Systems	5
32404308	Braking Systems-Automotive	5
32404375	Service Practices in Transportation Industry	1

Term		13 credits
10462116	Metal Fabrication	3
32404311	Electrical Systems-Auto	5
32404324	Engine Repair	5

Total credits 26

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.



academic career plan

Term/Year	Credits

Term/Year	Credits

course descriptions

Braking Systems-Automotive

32404308 **5 credits**

Studies fundamentals of vehicle braking systems including drum and disc on hydraulic and air systems. Includes power and anti-skid systems with emphasis on troubleshooting and component replacement and reconditioning.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043 and minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Electrical Systems-Auto

32404311 **5 credits**

Studies construction, function, and principles of operation of starting motors, charging systems, and controls. Covers basic electronics, including capacitance, inductance, series and parallel circuits, magnetism and Ohm's Law, wiring schematics, soldering techniques, and use of diagnostic equipment. Vehicle control and accessory systems are studied.

Corequisite: Intro to Electronics 10605108

Engine Repair

32404324 **5 credits**

Provides a general overview of engine types and operating characteristics. Includes the diagnosis and repair of cylinder heads, valve train components, and engine blocks and related components. Covers engine support systems such as the lubrication systems, cooling system, ignition system, fuel and exhaust systems.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician 314043 program

Intro to Electronics

10605108 **2 credits**

Presents a survey of electricity and electronics, including lab activities. Designed for persons required to learn some of the basics of electricity and electronics and an excellent refresher course to get back into electronics or improve a skills list. Intended for persons where electronics has become a critical core skill and/or a need exists to identify various electronic components and perform basic tests using test equipment such as multimeters. Covers concepts and applications of DC and AC electricity and

some semiconductor components using basic math skills. *Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 65*

Metal Fabrication

10462116 **3 credits**

An introduction to structural steel and plate fabrication, sheet metal fabrication, and basic electric arc and oxyacetylene welding. Presents fabrication techniques, metal selection, layout, cutting, bending, drilling, threading, and joining. Information is presented to the student followed by lab activities to provide a hands-on experience. Emphasizes developing an understanding of tools, techniques, and safe work habits as well as the application of metal fabrication skills.

Service Practices in Transportation Industry

32404375 **1 credit**

Introduces the student to common tools, terminology, and service practices in the transportation service field. Covers safety, environmental concerns, and basic customer relations. Service shop management practices and the use of automated work order, parts ordering, and time management concepts are included.

Prerequisite: Admission to Automotive Technician program 324042, Automotive Maintenance Technician program 314043, or Diesel & Heavy Equipment Technician program 324121

Suspension & Steering Systems

32404307 **5 credits**

Highlighted an analysis of construction and working principles of chassis components. Includes frames, suspension systems, steering gears and linkages, wheels and tires, and wheel alignment. Special attention given to products used in servicing chassis components.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043; Recommended minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

AUTOMOTIVE TECHNICIAN

Technical Diploma

Program Code: 32-404-2

our graduates
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2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



automotive technician career pathway

AUTOMOTIVE TECHNICIAN



Mid-State's Automotive Technician program gives students the experience and skills they need to diagnose and repair today's vehicles. The program emphasizes engine and transmission repair, the drive train and axles, suspension and steering systems, brakes, electrical systems, heating and air conditioning, and engine performance. You'll receive instruction from industry experts and have access to state-of-the-art equipment, including a variety of hand and power tools and complex electrical diagnostic equipment. Hands-on learning and opportunities to diagnose and repair cars for real customers will have you ready to enter the workforce with confidence.



bachelor's degree opportunities
UW-Stout, BS Career, Technical Education & Training (Automotive Tech Ed Teacher)
For more information and additional opportunities, go to mstc.edu/transfer

Technical Diploma

Total Credits: 64

Salary information:
mstc.edu/programsalaries

Careers: Automotive and Truck Technician, Automotive Master Mechanic, Automotive Parts Salesperson, Maintenance Technician, Service Station Technician, and Small Engine Technician

In general, there is growing demand for these careers. Example: Automotive Master Mechanic career has grown by 3% over the last two years and is expected to grow by 9% over the next 10 years. Currently 6,811 Automotive Master Mechanics are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

AUTOMOTIVE MAINTENANCE TECHNICIAN



Mid-State's Automotive Maintenance Technician program prepares students for entry-level automotive repair work with special emphasis on mechanical relationships, basic engine performance, and suspension systems. You'll learn from industry experts to test and maintain basic automotive systems. You'll also apply the techniques learned in lecture in an automotive shop laboratory setting, with access to state-of-the-art hand and power tools and complex electrical diagnostic equipment. Graduates will have the confidence to start their careers in automotive repair facilities and retail service centers.

Graduates of the Automotive Maintenance Technician technical diploma may advance into the Automotive Technician program.

Technical Diploma

Total Credits: 26

Salary information:
mstc.edu/programsalaries

Careers: Automotive Apprentice, Automotive Parts Sales/Service Technician, Automotive Service Attendant, and Tire and Lubrication Technician

In general, there is growing demand for these careers. Example: Automotive Service Attendant career has grown by 4% over the last two years and is expected to grow by 8% over the next 10 years. Currently 941 Automotive Service Attendants are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAM

Diesel & Heavy Equipment Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as an Automotive Technician graduate, to be able to:

- Diagnose, service, and repair automotive systems.
- Proficiently operate tools and equipment common to the industry.
- Practice safety procedures.
- Apply theoretical concepts to mechanical repair.
- Comply with regulations that impact the automotive service industry.

PROTECTIVE CLOTHING

Students are required to purchase three “Mid-State Automotive Technician Student” uniform shirts. These shirts are available the first week of class for approximately \$30 each. Students are also required to wear safety glasses at all times in the lab. Acquisition of safety glasses is the responsibility of the student.

REQUIRED EQUIPMENT

Students need to purchase a Fluke 177 or Fluke 88V multimeter and test lead set before the start of the second term. These are available for purchase through the campus Bookstore for approximately \$270.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.



Career Development

10102130 3 credits

Prepares students for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment.

NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Electrical Systems-Auto

32404311..... 5 credits

Studies construction, function, and principles of operation of starting motors, charging systems, and controls. Covers basic electronics, including capacitance, inductance, series and parallel circuits, magnetism and Ohm's Law, wiring schematics, soldering techniques, and use of diagnostic equipment. Vehicle control and accessory systems are studied.

Corequisite: Intro to Electronics 10605108

Electronic Control System Programming

10404101..... 3 credits

Introduces students to fundamental electronic control programming logic, terminology, and design. Students learn basic programming and digital control techniques to complete control tasks that are analogous to control tasks found in modern automobiles.

Prerequisites: Intro to Electronics 10605108 and College Mathematics 10804107

Employment Strategies

10801199 3 credits

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation.

NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

Engine Repair

32404324 5 credits

Provides a general overview of engine types and operating characteristics. Includes the diagnosis and repair of cylinder heads, valve train components, and engine blocks and related components. Covers engine support systems such as the lubrication systems, cooling system, ignition system, fuel and exhaust systems.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician 314043 program

Fuel Control System-Auto

32404326 5 credits

Provides an introduction to vehicle ignition systems, fuel systems, air induction systems, emission control systems, and engine electrical systems. Focuses on problem diagnosis, component testing, and repairs for domestic as well as import vehicles. Includes a review of engine operation and related servicing.

Prerequisite: Admission to Automotive Technician program 324042

Heating/Air Conditioning

32404322 3 credits

Provides an introduction to vehicle air conditioning systems. System components, operating characteristics, component testing, diagnosis, and repair are covered in detail for popular system types. Includes servicing of engine cooling systems as well as diagnosis and servicing of vehicle heating systems.

Prerequisite: Admission to Automotive Technician program 324042 or Diesel & Heavy Equipment Technician program 324121

Hybrid Systems-Auto

32404320 1 credit

Includes a general overview of hybrid vehicle systems, including motor, inverter, and CVT operation. Also provides an overview of hybrid safety requirements and demonstration of proper high voltage lockout procedures.

Corequisites: Automatic Transmissions 32404323, Advanced Electricity 3240431, and Fuel Control Systems-Auto 32404326

Intro to Electronics

10605108 2 credits

Presents a survey of electricity and electronics, including lab activities. Designed for persons required to learn some of the basics of electricity and electronics and an excellent refresher course to get back into electronics or improve a skills list. Intended for persons where electronics has become a critical core skill and/or a need exists to identify various electronic components and perform basic tests using test equipment such as multimeters. Covers concepts and applications of DC and AC electricity and some semiconductor components using basic math skills.
Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 65

Manual Transmissions

32404325 5 credits

Covers manual transmission problem diagnosis and repair. Study includes clutch, drive shaft, and universal joint diagnosis and servicing. Additional topics include rear axle servicing as well as four-wheel drive diagnosis and repair.
Corequisite: Automatic Transmissions 32404323

Metal Fabrication

10462116 3 credits

An introduction to structural steel and plate fabrication, sheet metal fabrication, and basic electric arc and oxyacetylene welding. Presents fabrication techniques, metal selection, layout, cutting, bending, drilling, threading, and joining. Information is presented to the student followed by lab activities to provide a hands-on experience. Emphasizes developing an understanding of tools, techniques, and safe work habits as well as the application of metal fabrication skills.

Service Practices in Transportation Industry

32404375 1 credit

Introduces the student to common tools, terminology, and service practices in the transportation service field. Covers safety, environmental concerns, and basic customer relations. Service shop management practices and the use of automated work order, parts ordering, and time management concepts are included.

Prerequisite: Admission to Automotive Technician program 324042, Automotive Maintenance Technician program 314043, or Diesel & Heavy Equipment Technician program 324121

Suspension & Steering Systems

32404307 5 credits

Highlighted an analysis of construction and working principles of chassis components. Includes frames, suspension systems, steering gears and linkages, wheels and tires, and wheel alignment. Special attention given to products used in servicing chassis components.

Prerequisite: Admission to Automotive Technician program 324042 or Automotive Maintenance Technician program 314043; Recommended minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

BARBER TECHNOLOGIST

Technical Diploma

Program Code: 30-502-5

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

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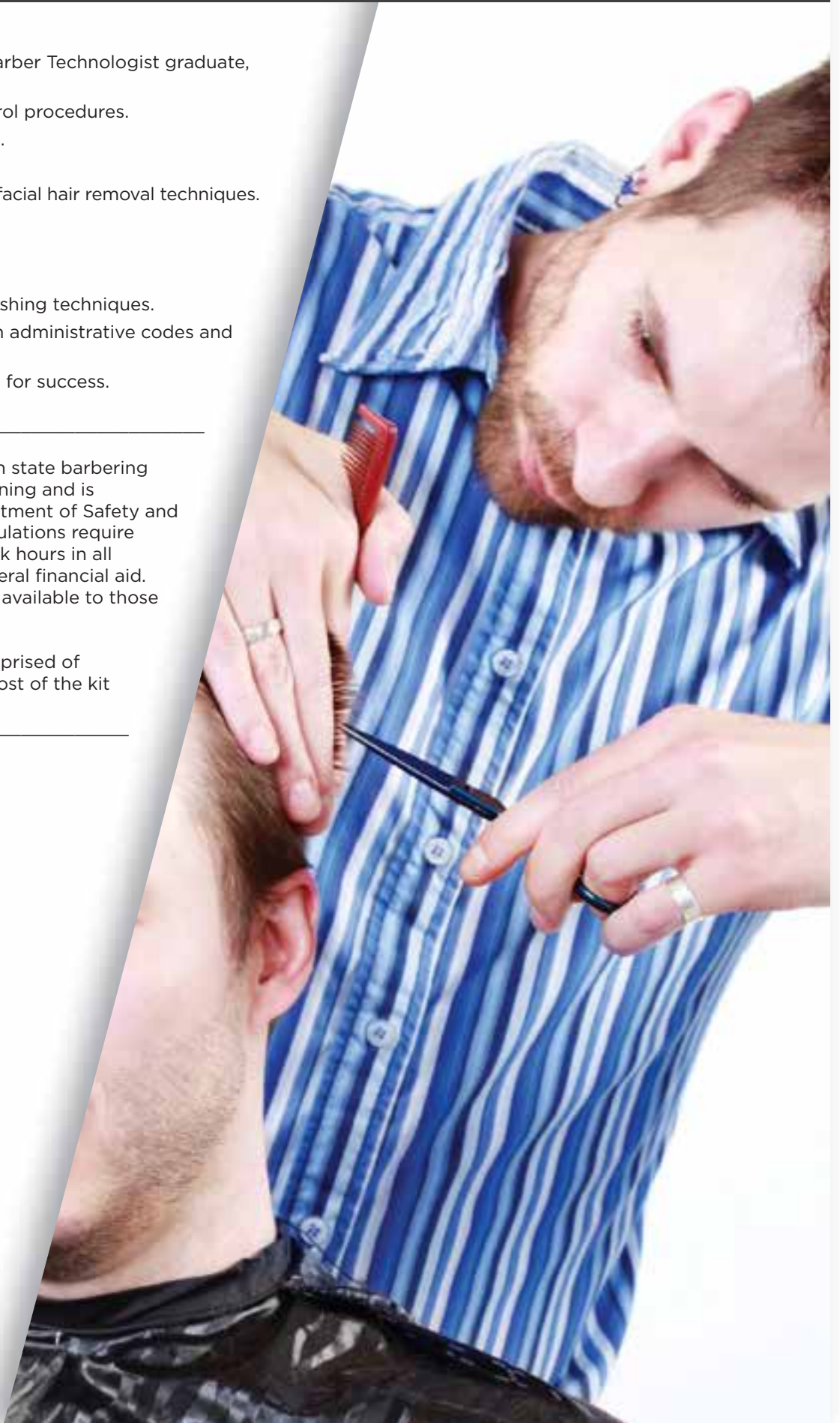
PROGRAM OUTCOMES

Employers will expect you, as a Barber Technologist graduate, to be able to:

- Apply safety and infection control procedures.
- Identify hair and scalp disorders.
- Perform haircutting services.
- Demonstrate shaving and other facial hair removal techniques.
- Perform male facial procedures.
- Perform texture services.
- Perform hair color services.
- Demonstrate hairstyling and finishing techniques.
- Adhere to the current Wisconsin administrative codes and statutes for barbers.
- Demonstrate interpersonal skills for success.

This program meets the Wisconsin state barbering requirement of 1,000 hours of training and is regulated by the Wisconsin Department of Safety and Professional Services. Federal regulations require programs for licensure to use clock hours in all areas of administering Title IV federal financial aid. Financial aid and scholarships are available to those who qualify.

Students must purchase a kit comprised of required tools and supplies. The cost of the kit is approximately \$1,100.



Barber Client Services 1

30502730 2 credits

This course introduces client services performed by the barber. Emphasis is on hair and scalp analysis, shampooing, haircutting techniques, shaving, and chemical services.

Students apply knowledge and skills to provide all barber services on customers in the on-campus salon.

Prerequisite: Admission to Barber Technologist program 305025 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Barber Client Services 2

30502731 2 credits

Students explore client services performed by the barber.

Emphasis is on hair and scalp analysis, shampooing, haircutting techniques, shaving, facial services, and chemical services. Students apply knowledge and skills to provide all barber services on customers in the on-campus salon.

Prerequisite: Barber Client Services 1 30502730

Barber Client Services 3

30502732 2 credits

Students practice building speed and accuracy in client services performed by the barber. Emphasis is on haircutting techniques, shaving, facial services, and chemical services. Students apply knowledge and skills to provide all barber services on customers in the on-campus salon.

Prerequisite: Barber Client Services 2 30502731

Barber Client Services 4

30502733 2 credits

Students practice building speed and accuracy in client services performed by the barber. Emphasis is on haircutting techniques, shaving, facial services, and chemical services.

Students apply knowledge and skills to provide all barber services on customers in the on-campus salon.

Prerequisite: Barber Client Services 3 30502732

Barber Client Services 5

30502734 2 credits

This course provides students with opportunities to acquire barbering skills in preparation for entry-level, licensed employment. Emphasis is on providing services with speed and accuracy, including hair and scalp analysis, shampooing, haircutting, shaving, facial services, and chemical services. Students apply knowledge and skills to provide all barber services on customers in the client lab and complete preparation for the Wisconsin state barber licensing exam.

Corequisite: Barber Client Services 4 30502733

Business Management for Barbers

30502722 1 credit

This course includes business and management principles for barbers, barbering rules and regulations, and career strategies.

Prerequisite: Admission to Barber Technologist program 305025 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Chemical Texturing for Barbers

30502705 2 credits

This course provides an overview of permanent waving, including various wrap techniques, hair relaxing applications, reformation curls, and chemical blow-out services.

Prerequisite: Admission to Barber Technologist program 305025 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Facial Hair & Skin Care Services for Barbers

30502702 2 credits

This course includes how to apply facial physiology and skin analysis in facial hair design, hair removal, facial massage, and facial treatment.

Prerequisite: Admission to Barber Technologist program 305025 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Haircoloring for Barbers

30502704 2 credits

This course includes the theory and chemistry of color mixing as well as procedures, including lightening, cap, foiling, and corrective color.

Prerequisite: Admission to Barber Technologist program 305025 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Haircutting for Barbers

30502701 4 credits

This course introduces haircutting theory and terminology and provides students with practice in basic and advanced haircutting techniques as well as trend cuts.

Prerequisite: Admission to Barber Technologist program 305025 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Hairstyling for Barbers

30502706 2 credits

This course emphasizes wet and dry hairstyling and includes hair analysis, shampooing, conditioning, reconditioning, scalp and hair treatments, blow drying, finger waves, pin curls, roller setting, thermal styling, and hair replacement techniques.

Prerequisite: Admission to Barber Technologist program 305025 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Introduction to the Barber Profession

30502703 2 credits

This course provides an overview of the barbering profession, safety and decontamination in the barbershop, properties and disorders of the skin and scalp, and related science theory.

Prerequisite: Admission to Barber Technologist program 305025 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

BUSINESS ANALYST

Associate in Applied Science (AAS)

Program Code: 10-102-1

our graduates
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2017/2018



mstc.edu

BUSINESS ANALYST



The Business Analyst associate degree is a two-year program that prepares individuals to work closely with stakeholders to identify business needs and offer opportunities for improvements in systems or workflow. The skills gained in this program are in demand within the industries of healthcare, IT, manufacturing, insurance, and finance. In this program you will research, analyze, and design solutions using business requirements and best practices. Through group projects you will develop and leverage leadership- and team-building tools using a variety of different collaboration methods.



bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Associate in Applied Science

Total Credits: 63-64

Salary information:
mstc.edu/programsalaries

Careers: Applications Analyst, Business Analyst, Computer Systems Analysts, Functional Analyst, Project Coordinator, and Systems Analyst

In general, there is growing demand for these careers. Example: Computer Systems Analysts career has grown by 4% over the last two years and is expected to grow by 15% over the next 10 years. Currently 7,227 Computer Systems Analysts are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Business Management, IT Computer Support Specialist, and IT Software Developer

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Business Analyst graduate, to be able to:

- Identify and define objectives to meet a business need, including gathering (eliciting), validating, and analyzing requirements.
- Build relationships with stakeholders.
- Work closely with stakeholders to collect feedback, provide organizational communication, improve work flow, and make decisions.
- Offer solutions to problems by using best practices and continuous quality improvement.
- Act as a project coordinator to research, design, assist implementation, and provide documentation and training.
- Demonstrate leadership throughout business analysis efforts.
- Demonstrate professional communication in a business environment.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		15-16 credits
10102210	Business Analyst Essentials	3
10103106	Microsoft Office-Introduction	3
10196189	Team Building & Problem Solving	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		18 credits
10102211	Business Analyst Fundamentals 1	3
10102213	Requirements Analysis	3
10102214	Continuous Improvement	3
10156101	Database Concepts and Design	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Term		15 credits
10102212	Business Analyst Fundamentals 2	3
10102216	Solutions Design	3
10156102	SQL Development	3
10196190	Leadership Development	3
10809103	Think Critically & Creatively	3
Term		15 credits
10102215	Business Analyst Fundamentals 3	3
10102220	Business Analyst Capstone	3
10196188	Project Management	3
10801197	Technical Reporting	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Total credits 63-64		

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

SAMPLE PART-TIME CURRICULUM OPTION

Term		9 credits
10102210	Business Analyst Essentials	3
10196189	Team Building & Problem Solving	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term		9 credits
10102211	Business Analyst Fundamentals 1	3
10102213	Requirements Analysis	3
10156101	Database Concepts and Design	3
Term		6-7 credits
10103106	Microsoft Office-Introduction	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		9 credits
10102212	Business Analyst Fundamentals 2	3
10102216	Solutions Design	3
10156102	SQL Development	3
Term		9 credits
10102214	Continuous Improvement	3
10196188	Project Management	3
10801197	Technical Reporting	3
Term		6 credits
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Term		9 credits
10196190	Leadership Development	3
10809103	Think Critically & Creatively	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Term		6 credits
10102215	Business Analyst Fundamentals 3	3
10102220	Business Analyst Capstone	3
Total credits 63-64		

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Business Analyst Capstone

10102220 3 credits

This course provides Business Analyst students the opportunity to integrate the knowledge they have obtained throughout their curriculum by demonstrating their proficiency during the entire lifecycle of a project.
Corequisite: Business Analyst Fundamentals 2 10102212

Business Analyst Essentials

10102210 3 credits

Students learn a wide range of strategies to enhance their professional success as a business analyst, including business etiquette, professional image, ethical behavior, professional communication, time management, work ethic, multi-tasking, stress management, work place relationships, accountability, team building, problem solving, and leadership. The course also includes an introduction to the program outcomes and relates how the competencies of this course align to those outcomes.

Business Analyst Fundamentals 1

10102211 3 credits

Students learn how to identify and define business needs while navigating diverse business structures. Project roles and responsibilities will be explored with an emphasis on effective communication within each level of the organization. Also examines the necessity of project vision, strategy, goals, objectives, and scope definition.
Prerequisite: Business Analyst Essentials 10102210

Business Analyst Fundamentals 2

10102212..... 3 credits

Students recommend potential solutions, assess for overall effectiveness and resource management, identify and communicate with impacted resources, define transition requirements, and define measurements of success. Also introduces change management principles.
Prerequisite: Business Analyst Fundamentals 1 10102211

Business Analyst Fundamentals 3

10102215 3 credits

Students create a communication plan to support ongoing collaboration and requirements validation. Explores methods used to communicate, verify, and validate requirements.
Prerequisite: Business Analyst Fundamentals 2 10102212

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores – Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Continuous Improvement

10102214 3 credits

Emphasizes using data to make sound business decisions. Students gain exposure to various tools used to assemble, organize, and manage data sets. Students further refine their skills in requirements documentation and validation by tracing and prioritizing solution requirements. Students also identify, measure, and validate solution requirements to support organizational change while complying with organizational standards.

Prerequisite: Business Analyst Essentials 10102210

Database Concepts and Design

10156101 3 credits

Introduces the concepts of relational database design, development, and maintenance. Topics include relational normalization, referential integrity, and SQL.

Developmental Psychology

10809188 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to American Government

10809122 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of “C” or better, or College Math 10804107 with a grade of “C” or better. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Leadership Development

10196190 3 credits

Applies skills and tools necessary to fulfill his/her role as a modern leader. Each learner evaluates personal leadership effectiveness, use individual and group motivation strategies, implement mission and goals, demonstrate ethical behavior, adapt personal leadership style to worker readiness, use power, facilitate employee development, coach, manage change, and resolve conflict. Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Microsoft Office-Introduction

10103106 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Project Management

10196188..... 3 credits

Applies skills and tools necessary to design, implement, and evaluate formal projects. Each learner writes a project proposal, works with project teams, sequences project tasks, develops project budgets, identifies project resources, implements the project, charts project progress, deals with variations, evaluates the project, and uses various technology in these processes. Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Requirements Analysis

10102213..... 3 credits

A practical course that provides an overview of the systems development life cycle and then focuses on the analysis phase of real-world computer and manual systems. Students learn concepts, techniques, and tools to aid in the analysis of existing systems, the identification of user requirements, and the design of database files. Emphasizes both written and oral communications. Most of the work is done in groups.

Solutions Design

10102216 3 credits

Students assess organizational readiness by facilitating testing and training of the solution. Emphasizes test plan creation, execution, and facilitation as well as the development of training plans.

Prerequisite: Requirements Analysis 10102213

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

SQL Development

10156102 3 credits

Expands on earlier courses with advanced SQL syntax (indexes, views, stored procedures, and triggers), database design, and data transformation. Additional topics include alternate database technologies, emerging database trends, and database administration and security. Data Warehousing concepts are discussed.

Prerequisite: Database Concepts and Design 10156101

Team Building & Problem Solving

10196189 3 credits

Applies skills and tools necessary to facilitate problem solving in a team environment. Each learner assumes the roles and responsibilities of team leadership in the stages of team development, uses a systematic problem-solving process, and employs consensus-building and conflict-management strategies. Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Technical Reporting

10801197 3 credits

The student prepares and presents oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course.

Prerequisite: Written Communication 10801195 with a grade of "C" or better, or English Composition I 10801136 with a grade of "C" or better. Proficiency in word processing skills recommended.

Think Critically & Creatively

10809103 3 credits

Provides instruction in the vital, realistic, and practical methods of thinking that are in high demand in all occupations of substance today. Provides in-depth consideration of decision making, problem solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more. Students apply specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is based on demonstration, discussion, projects, and teamwork. Assignments range from the short and simple to the detailed and complex. Focuses on reality and practicality throughout. A student scoring between 55–80 on the Accuplacer Reading exam or 60–80 on the Accuplacer Sentence Skills exam is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Accuplacer Reading score of 55 and Accuplacer Sentence Skills score of 60 or equivalent, or Intro to College Reading 10848104 with a "C" or better and Intro to College Writing 10831103 with a "C" or better

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

BUSINESS MANAGEMENT

Associate in Applied Science (AAS)

Program Code: 10-102-3

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu

business management career pathway

BUSINESS MANAGEMENT



Mid-State's Business Management program provides a broad business background that prepares individuals to work in middle management or run a business. Students develop general technical and interpersonal skills related to management, finance, operations, customer service management, ethics, and much more. Guest speakers, field trips, business tours, and professional organization presentations are combined with hands-on simulations, mock interviews, and projects for local businesses. Students may choose a specialization track, such as entrepreneurship or health care management.



bachelor's degree opportunities

Lakeland University, BA Business Management
University of Phoenix, BS Management
For more information and additional opportunities, go to mstc.edu/transfer

Associate in Applied Science

Total Credits: 68-69

Salary information:
mstc.edu/programsalaries

Careers: Account Executive, Account Manager, Administrative Support Workers, Assistant Manager, Business Entrepreneur, Customer Service Representative, Department Supervisor, First Line Supervisors of Office and Administrative Support Workers, Floor Supervisor, Health Care Supervisor, Human Resource Assistant, Inside Sales or Account Representative, Insurance Representative, Lead Worker, Office Manager, Operations Manager, Production Supervisor, Project Manager, Purchasing Assistant, Service Manager, Store Leader, Team Leader, and Technical Recruiter

In general, there is growing demand for these careers. Example: First Line Supervisors of Office and Administrative Support Workers career has grown by 2% over the last two years and is expected to grow by 9% over the next 10 years. Currently 12,408 First-Line Supervisors of Office and Administrative Support Workers are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Accounting, Administrative Professional, Court Reporting, IT Network Specialist, IT Software Developer, Marketing, and Office Support Specialist

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

PROGRAM OUTCOMES

Employers will expect you, as a Business Management graduate, to be able to:

- Plan the operations of a business across functional areas.
- Organize resources to achieve the goals of the organization.
- Direct individuals and/or processes to meet organizational goals.
- Control business processes.

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Business Management program outcomes are measured in the TSA-designated course Business Decision Making.

PROGRAM PROGRESSION

In order to maintain a passing status and progress in the program, students must:

- Receive a grade of “C” or better in the Business Decision Making course.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		16 credits
10102101	Intro to Business	3
10102147	Principles of Management	3
10103106	Microsoft Office-Introduction	3
10104102	Marketing Principles	4
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		16-17 credits
10101111	Accounting I	4
10102110	Employment Law	3
10196193	Human Resource Management	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		18 credits
10102104	Business Law	3
10102120	Customer Service Management	3
10102130	Career Development -or-	
10801199	Employment Strategies	3
10102180	International Business	3
10196191	Supervision	3
10809195	Economics	3
Term		18 credits
10101128	Managerial Accounting -or-	
10102117	Business Finance	3
10102131	Entrepreneurial Management	3
10102160	Business Decision Making	3
10809166	Intro to Ethics: Theory & Application	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
		Total credits 68-69

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		9 credits
10102101	Intro to Business	3
10102147	Principles of Management	3
10103106	Microsoft Office-Introduction	3
Term		10 credits
10101111	Accounting I	4
10102110	Employment Law	3
10196193	Human Resource Management	3
Term		10 credits
10104102	Marketing Principles	4
10102180	International Business	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		9-10 credits
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10809195	Economics	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		9 credits
10102120	Customer Service Management	3
10196191	Supervision	3
10102104	Business Law	3
Term		9 credits
10102131	Entrepreneurial Management	3
10809166	Intro to Ethics: Theory & Application	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Term		6 credits
10102130	Career Development -or-	
10801199	Employment Strategies	3
10809122	Intro to American Government -or-	
10809196	Intro to Sociology -or-	
10809172	Introduction to Diversity Studies	3
Term		6 credits
10101128	Managerial Accounting -or-	
10102117	Business Finance	3
10102160	Business Decision Making	3
		Total credits 68-69

BUSINESS MANAGEMENT SPECIALIZATIONS

Prospective students seeking a Business Management associate degree specialization should list it under “Program/Major Choice” on their Mid-State Application. Those who wish to declare a specialization after acceptance into the Business Management program should see their student success counselor. Students pursuing an Entrepreneurship or Health Care Management specialization will complete courses in the first column in place of the courses in the Business Management program noted in the second column in the charts on the right. The specialization is indicated as a sub-plan on your Mid-State transcript.

ENTREPRENEURSHIP SPECIALIZATION

Complete These Courses		In Place of These Courses	
10145185	Organizing Your Small Business	10102131	Entrepreneurial Management
10145186	Financial Management for Your Small Business	10102117	Business Finance
10145187	Marketing Your Small Business	10104102	Marketing Principles
10145188	Entrepreneurial Service Management	10102120	Customer Service Management
10145189	Writing a Business Plan for Your Small Business	10102131	Entrepreneurial Management
10103124	Excel-Intermediate		

HEALTH CARE MANAGEMENT SPECIALIZATION

Complete These Courses		In Place of These Courses	
10501101	Medical Terminology	10102110	Employment Law
10501109	Medical Law, Ethics, and Professionalism		
10530125	Organization of Healthcare	10102180	International Business
10530150	Introduction to Health Information Technology	10105160	Business Law
10102120	Customer Service Management	10102120	Customer Service Management
10102147	Principles of Management	10102147	Principles of Management
10196191	Supervision	10196191	Supervision
10196193	Human Resource Management	10196193	Human Resource Management

academic career plan

Term/Year	Credits	Term/Year	Credits

Accounting I

1010111..... 4 credits

A beginning course designed especially for majors or those who need a strong foundation in accounting principles. Develops the accounting cycle of journaling, posting, adjusting, closing, and reporting. Also emphasizes service and merchandising sole proprietorships in developing the accounting cycle. Explores issues for accounting for cash, accounts and notes receivable, inventories, and fixed assets.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Business Decision Making

10102160..... 3 credits

Develops skill to enable students to make individual decisions and participate in and facilitate group decisions in pursuit of the goals and objectives of an organization. Students analyze decision-making environments; employ a systematic decision-making process; use creative and analytic thinking tools for information gathering and analysis; employ ethical and social standards; contribute in group decision-making; and facilitate the group decision-making process.

Prerequisites: Twelve Business Management 10-102 credits, Human Resources Management 10-196-193, and Supervision 10-196-191; AND Corequisite: Business Finance 10-102-117 (Business Finance 10-102-117 may not be used to satisfy the twelve Business Management 10-102 credits.)

Business Finance

10102117..... 3 credits

Introduces the basic concepts needed for firms to efficiently control the flow of money within a business to balance profitability with risk. Students determine the financial impact of quality programs on a company, analyze financial statements using ratio analysis and industry comparison data, determine break-even points and leverage, compare alternatives for short- and long-term financing, explore options for global financing, and prepare a cash budget and pro forma financial statements for a firm.

Prerequisite: Accounting I 10101111

Business Law

10102104..... 3 credits

Introduces the basic foundation of laws and regulatory systems applicable to the business environment. Students examine the UCC, contract torts, agency law, and business and cybercrime. Students apply business legal theory in conjunction with ethical decision making through practical application.

Recommended Accuplacer scores - Reading 55 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better, Sentence Skills 60 or completion of Intro to College Writing 10831103 with a "C" or better; Arithmetic 34 or completion of Pre-Algebra 10834109 with a "C" or better

Career Development

10102130..... 3 credits

Prepares students for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search

process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment.
NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

College Mathematics

10804107..... 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Customer Service Management

10102120..... 3 credits

An application of the skills and tools necessary to manage and measure the customer service function. Learners practice quality customer service, develop customer service plans, train and develop staff in quality customer service, measure the effectiveness of customer service, and lead continuous improvement of customer service.

Recommended Accuplacer scores - Reading 55 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better, Sentence Skills 60 or completion of Intro to College Writing 10831103 with a "C" or better; Arithmetic 34 or completion of Pre-Algebra 10834109 with a "C" or better

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Economics

10809195 3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/ or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Employment Law

10102110 3 credits

Introduces a broad scope of employment laws and provides the opportunity to apply these laws to the employment arena. Includes laws relating to anti-discrimination, including the Civil Rights Act, ADEA, and ADA; wage and hour regulation, including FLSA; employer-provided pensions, including ERISA; health insurance, including COBRA and ACA; and unemployment and worker's compensation insurance.

Recommended Accuplacer scores - Reading 55 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better, Sentence Skills 60 or completion of Intro to College Writing 10831103 with a "C" or better, Arithmetic 34 or completion of Pre-Algebra 10834109 with a "C" or better

Employment Strategies

10801199 3 credits

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation. *NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.*

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Entrepreneurial Management

10102131 3 credits

Introduces students to the concept of entrepreneurship. Learners study entrepreneurial practices primarily by developing a business plan for a venture of their choice. This includes comparing ways of going into business as well as developing marketing, legal, financial, products/ services, management, and operations plans for a small business of their choice. Entrepreneurial behavior within companies is examined.

Prerequisite: Twelve Business Management 10-102 credits or twelve Supervisory Management 10-196 credits or a combination of Business Management 10-102 and Supervisory Management 10-196 credits that total twelve.

Entrepreneurial Service Management

10145188..... 3 credits

Brings together the elements of a successful business with a strategic plan that focuses on servicing customers with a winning attitude, performance, teamwork, and competition.

Excel-Intermediate

10103124 1 credit

Students develop charts and PivotTables and manage multiple worksheets/workbooks.

Prerequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

Financial Management for Your Small Business

10145186 3 credits

Emphasizes the importance of good record-keeping systems, reports, and the records necessary for a small business. Financial analysis techniques are explored through hands-on income statements and cash flow projections for the small business. Financial and other technical support resources are identified throughout the course.

Human Resource Management

10196193..... 3 credits

Applies skills and tools necessary to perform human resource functions in an organization. Each learner demonstrates skill in following EEOC laws; writing job descriptions; recruiting, selecting, and orienting employees; developing policies and procedures; developing and conducting training; designing performance appraisal plans; developing employee development plans; and selecting compensation and benefit strategies.

Recommended Accuplacer scores - Reading 80 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better, Sentence Skills 86 or completion of Intro to College Writing 10831103 with a "C" or better, Arithmetic 90 or completion of Pre-Algebra 10834109 with a "C" or better

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

International Business

10102180 3 credits

Introduces topics concerning international business while illustrating its scope and importance. Topics include the impact of geography, trade protectionism, culture, legal structure, politics, and currency on business dealings. Students also research a particular country in depth.

Recommended Accuplacer scores - Reading 55 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better, Sentence Skills 60 or completion of Intro to College Writing 10831103 with a "C" or better, Arithmetic 34 or completion of Pre-Algebra 10834109 with a "C" or better

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Business

10102101..... 3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring

between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Marketing Your Small Business

10145187..... 3 credits

Enables prospective or existing business owners/managers to implement and evaluate a marketing plan for their small business. Students develop a marketing plan for a selected small business. Components of the plan include market research, customer focus, quality, pricing, and advertising.

Medical Law, Ethics, and Professionalism

10501109..... 2 credits

Prepares students to display professionalism and perform within ethical boundaries in the healthcare setting. Students maintain confidentiality, examine legal aspects of the medical record, perform risk management procedures, and examine legal and bioethical issues.

Medical Terminology

10501101..... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

Microsoft Office-Introduction

10103106..... 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Oral/Interpersonal Communication

10801196..... 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Organization of Healthcare

10530125..... 2 credits

Examines the organization and delivery of health-care services, external standards, regulations, initiatives, payment and reimbursement systems, and healthcare providers and disciplines.

Organizing Your Small Business

10145185..... 3 credits

Explores the components of small business ownership by examining a variety of small business startup and operation scenarios. Students assess their own readiness to begin the entrepreneurial adventure.

Principles of Management

10102147..... 3 credits

Introduces the student to the job of management in organizations. Develops an understanding of the roles and tasks of all levels of management in the functions of organizational planning, controlling, staffing, leading, and controlling.

Recommended Accuplacer scores – Reading 55 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better, Sentence Skills 60 or completion of Intro to College Writing 10831103 with a "C" or better, Arithmetic 34 or completion of Pre-Algebra 10834109 with a "C" or better

Speech

10801198..... 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Supervision

10196191..... 3 credits

Applies skills and tools necessary to perform the functions of a contemporary frontline leader. Students engage in operational planning, analyze organizational structures, review the staffing process, employ techniques to enhance employee personal and group effectiveness, and develop control techniques to measure effectiveness in the above areas.

Recommended Accuplacer scores – Reading 55 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better, Sentence Skills 60 or completion of Intro to College Writing 10831103 with a "C" or better, Arithmetic 34 or completion of Pre-Algebra 10834109 with a "C" or better

Writing a Business Plan for Your Small Business

10145189..... 3 credits

Focuses on the business plan as a necessary component to starting and operating a small business. Students prepare a business plan to assist in obtaining financing for a proposed business and/or to guide their strategic business operations.

CENTRAL SERVICE TECHNICIAN

Technical Diploma

Program Code: 30-534-1

our graduates
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2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



CENTRAL SERVICE TECHNICIAN



Mid-State's hands-on Central Service Technician program prepares students to work with supplies and equipment related to surgery, obstetrics, emergency departments, and other patient care settings. Effective communication is vital within this multi-service area. The curriculum includes online instruction, lab, and clinical experience. The clinical portion of the course places students at a minimum of two sites. Students learn the principles of standard precautions, asepsis, disinfection, and sterilization procedures. Course completion leads to a technical diploma and eligibility for certification exams.

Graduates of the Central Service Technician technical diploma may advance into the Surgical Technologist program.

Technical Diploma

Total Credits: 19-22

Salary information:
mstc.edu/programsalaries

Careers: Central Processing or Instrument Technician, Central Service Aide, Central Service Technician, Central Service Technologist, Materials Manager, Medical Equipment Preparer, and Processing/Distributions Technician

In general, there is growing demand for these careers. Example: Medical Equipment Preparer career has grown by 4% over the last two years and is expected to grow by 10% over the next 10 years. Currently 204 Medical Equipment Preparers are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

SURGICAL TECHNOLOGIST



The Surgical Technologist program at Mid-State prepares graduates to work as part of the surgical team in operating rooms, providing instruments and supplies to the surgeon. Students learn skills and techniques used in central service with instrument processing. Training encompasses both classroom and lab instruction. You will gain clinical hands-on experience in surgery, ambulatory centers, central service, and other related areas. After successful completion of the program and certification exam, you will be a Certified Surgical Technologist (CST).

Technical Diploma

Total Credits: 38-40

Salary information:
mstc.edu/programsalaries

Careers: Ambulatory Surgery Technician, Cath Lab Surgical Technologist, Central Service Technician, Dental Office Assistant, Emergency Room Technician, Material Management, Surgical Technologist, and Veterinary Surgery Assistant

In general, there is growing demand for these careers. Example: Surgical Technologist career has grown by 2% over the last two years and is expected to grow by 8% over the next 10 years. Currently 1,116 Surgical Technologists are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

OTHER OPTIONS

RELATED PROGRAMS

Medical Assistant and Phlebotomy Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Central Service Technician graduate, to be able to:

- Apply principles of infection control in the role of the central service technician.
- Decontaminate instruments and equipment.
- Prepare instruments, equipment, and supplies.
- Apply sterilization techniques.
- Perform inventory control and distribution.
- Function as an ethical, legal, and professional member of the health care team.

ADDITIONAL ENTRY CRITERIA

To apply to the Central Service Technician program, please submit the following document to Mid-State Admissions:

Criminal Background Statement of Understanding and Release of Information form.

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a central service technician is available at mstc.edu/programs/central-service-technician. Contact the disability services coordinator in the Student Services Office to receive assistance.

CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.



Applied Microbiology

31806311..... 2 credits

Directs the learner's understanding of aseptic techniques, antimicrobial methods, specimen collection, preparation of cultures, body defenses against microorganisms, the infectious process, and the transmission of disease-causing organisms. Students learn such techniques as standard and transmission-based precautions, sanitization, disinfection, sterilization, preparation of cultures, and microscopic slide preparations with simple staining and gram staining.

Prerequisites: Human Body in Health and Disease 10509102 or General Anatomy & Physiology 10806177.

Central Service

30534301..... 5 credits

Students are prepared with the knowledge and skills necessary to function as a central service technician. Central service is the hub of all activities involving supplies and equipment for surgery, obstetrics, emergency departments, and other patient care areas. Students learn the principles of standard precautions, asepsis, disinfection, and sterilization procedures. Effective communication is vital within this multi-service area. Central service is located in all health care facilities such as nursing homes, clinics, and hospitals. Patient interaction is minimal within this area of specialty. Online instruction, lab, and clinical experience are part of the curriculum. Upon graduation, students are eligible for certification exams. Students are responsible for transportation to and from classroom, lab, and clinical sites. A minimum of two clinical sites will be utilized in the clinical portion of this class.

Prerequisite: Admission to Central Service Technician program 305341

General Anatomy & Physiology

10806177..... 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: Minimum Accuplacer score for Reading is 55 (Students scoring between 55-80 are encouraged to enroll in Introduction to College Reading) and one semester of college-level biology or chemistry with a "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better, or Emergency Medical Technician-Basic 10531168 with a "C" or better

Human Body in Health and Disease

10509102..... 3 credits

Focuses on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis, and prevention of common diseases.

Medical Law, Ethics, and Professionalism

10501109..... 2 credits

Prepares students to display professionalism and perform within ethical boundaries in the healthcare setting. Students maintain confidentiality, examine legal aspects of the medical record, perform risk management procedures, and examine legal and bioethical issues.

Medical Terminology

10501101..... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

Microbiology

10806197..... 4 credits

Examines microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms, and the medical impact of microbes in the environment, industry, and biotechnology are also addressed.

Prerequisite: General Anatomy & Physiology 10806177, or General Biology 10806114, or Plant Biology 10806184 with a grade of "C" or better

Microsoft Office-Introduction

10103106..... 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Student Success in Allied Health

10501123..... 1 credit

Explores success strategies for allied health programs, including time management, study skills, test preparation and test taking skills, planning, and stress management.

Prerequisite: Admission to Central Service Technician program 305341, Phlebotomy Technician program 305131 or Surgical Technologist program 315121

CIVIL ENGINEERING TECHNOLOGY-HIGHWAY TECHNICIAN

Associate in Applied Science (AAS)

Program Code: 10-607-4

our graduates
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2017/2018



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CIVIL ENGINEERING TECHNOLOGY-HIGHWAY TECHNICIAN



Unique in the Wisconsin Technical College System, Mid-State's Civil Engineering Technology-Highway Technician program prepares students to work in the construction of public projects like roads, bridges, parking structures, and stormwater management systems. This important work also includes railroad, pipeline, power line, dam, canal, wastewater treatment facility, and airport construction. Through hands-on exercises and a capstone design project, you'll learn how to support the work of civil engineers, designers, surveyors, and city planners. You'll also receive training in surveying, soils, construction material testing, computer drafting, estimating, site design, mapping, and inspection procedures.

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Associate in Applied Science

Total Credits: 68

Salary information:
mstc.edu/programsalaries

Careers: CAD Specialist, Civil Engineering Technician, Construction Grade Supervisor, Draftsperson, Engineering Specialist and Technician, Environmental/Water Quality Technician, Estimator, Inspector/Quality Control, Materials Technician, Right-of-Way Technician, Sales-Construction (Equipment-Supplies), Soils Tester, Solid Waste/Landfill Technician, Structural and Utility Technician, and Surveyor (Construction-Land)

Regional demand for skilled technicians has grown over the last two years.

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Electrical Power Engineering Technician and Industrial Automation & Controls Engineering Technology

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

PROGRAM OUTCOMES

Employers will expect you, as a Civil Engineering Technology-Highway Technician graduate, to be able to:

- Design civil engineering layouts.
- Understand safety requirements for the civil engineering field.
- Acquire civil engineering technology knowledge to aid in obtaining appropriate certifications.
- Exhibit CAD skills.
- Apply theoretical and practical concepts to surveying practices.
- Work cooperatively in groups.
- Acquire working knowledge of instruments used in the civil engineering field.
- Understand quantities and materials used in the civil engineering technology area.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term	18 credits	
10103123	Excel-Beginning	1
10103124	Excel-Intermediate	1
10607118	Land Records	1
10607145	Soils	3
10607155	Intro to Surveying	2
10623100	Problem Solving & Critical Thinking	1
10623106	Intro to AutoCAD	2
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10804118	Intermediate Algebra with Applications	4

Term	17 credits	
10607110	Cemented Aggregate Mixtures	4
10607150	Civil Engineering Drafting I	3
10607156	Surveying-Total Station	3
10804196	Trigonometry with Applications	3
10806154	General Physics 1	4

Term	17 credits	
10607117	GIS Fundamentals	2
10607160	Civil Engineering Drafting II	2
10607170	Storm Water Management	3
10607171	Highway Surveying	2
10607174	GPS for Surveyors	2
10804195	College Algebra with Applications	3
10809166	Intro to Ethics: Theory & Application -or-	
10809195	Economics	3

Term	16 credits	
10607149	Highway Bridges, Medians, & Barriers	3
10607166	Construction Estimating & Management	3
10607167	Inspection	2
10607180	Civil Engineering Capstone	2
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Total credits 68

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term	12 credits	
10103123	Excel-Beginning	1
10103124	Excel-Intermediate	1
10623100	Problem Solving & Critical Thinking	1
10623106	Intro to AutoCAD	2
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10804118	Intermediate Algebra with Applications	4

Term	10 credits	
10607155	Intro to Surveying	2
10607145	Soils	3
10607117	GIS Fundamentals	2
10804196	Trigonometry with Applications	3

Term	10 credits	
10607110	Cemented Aggregate Mixtures	4
10607150	Civil Engineering Drafting I	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3

Term	9 credits	
10607118	Land Records	1
10607160	Civil Engineering Drafting II	2
10607170	Storm Water Management	3
10804195	College Algebra with Applications	3

Term	10 credits	
10607156	Surveying-Total Station	3
10806154	General Physics 1	4
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Term	7 credits	
10607171	Highway Surveying	2
10607174	GPS for Surveyors	2
10809166	Intro to Ethics: Theory & Application -or-	
10809195	Economics	3

Term	10 credits	
10607149	Highway Bridges, Medians, & Barriers	3
10607166	Construction Estimating & Management	3
10607167	Inspection	2
10607180	Civil Engineering Capstone	2

Total credits 68

NOTES:

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Cemented Aggregate Mixtures

10607110 **4 credits**

Presents inspection/testing concepts, sampling procedures, aggregate properties, PCC mix design methods, HMA design, and field laboratory quality control testing. ACI Grade I and WisDOT PCCTEC certifications are available through this course.

Corequisite: Intermediate Algebra with Applications 10804118

Civil Engineering Capstone

10607180 **2 credits**

This capstone class is a project-based learning experience that allows students to integrate and demonstrate their civil engineering drafting, design, and survey skills by applying them to a specific engineering problem. Students collaborate in teams to apply their problem-solving and technology skills to a design experience. Working in collaboration with a faculty member, students plan, produce, document and present quality engineering designs. Students should be in their last semester of the Civil Engineering Technology program to enroll in this class.

Prerequisites: Civil Engineering Drafting II 10607160, Storm Water Management 10607170, and Highway Surveying 10607171

Civil Engineering Drafting I

10607150 **3 credits**

Provides fundamentals necessary for using civil engineering software to create subdivision, property, traverse, topographic, and contour drawings. Information

collected in Surveying - Total Station is downloaded onto the computer to create drawings.

Prerequisite: Intro to AutoCAD 10623106

Civil Engineering Drafting II

10607160 **2 credits**

Expands on topics learned in Civil Engineering Drafting I. Covers fundamentals necessary for creating a set of highway plans. Drawings include the development and design of alignments, profiles, cross-sections, and earthwork calculations. Design information is downloaded from the computer to the total station to be used for staking.

Prerequisite: Civil Engineering Drafting I 10607150; Corequisite: Intro to Surveying 10607155

College Algebra with Applications

10804195 **3 credits**

Covers the skills needed for success in calculus and many application areas on a baccalaureate level. Topics include the real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinatorics, and the binomial theorem.

Prerequisite: Trigonometry with Applications 10804196 with a grade of "C" or better

Construction Estimating & Management

10607166 3 credits

Presents goals and performance of quantity takeoff, cost estimation, resource leveling, estimating labor, and contract interpretation. Project bidding, construction techniques, and equipment capabilities are evaluated. *Prerequisites: Excel-Intermediate 10103124, Intermediate Algebra with Applications 10804118, and Intro to AutoCAD 10623106*

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better*

Economics

10809195 3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing, respectively. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better*

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents. *Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.*

Excel-Beginning

10103123..... 1 credit

Enables students to use the Excel electronic spreadsheet application to work with any data that can be represented in rows and columns. Develops skill to create and modify spreadsheets using commands, functions, and formulas. Popular spreadsheet applications include general ledger, budgets, inventory control, and sales records.

Excel-Intermediate

10103124 1 credit

Students develop charts and PivotTables and manage multiple worksheets/workbooks. *Prerequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123*

General Physics 1

10806154 4 credits

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation, and applications. Topics include unit conversion and analysis, vectors, translational and rotational kinematics, translational and rotational dynamics, heat and temperature, and harmonic motion and waves. *Corequisite: Trigonometry with Applications 10804196*

GIS Fundamentals

10607117 2 credits

An introduction to geographic information systems (GIS) and how they are used to document and convey information that has a spatial component. Students use GIS software to create, manipulate, and present geographic information.

GPS for Surveyors

10607174..... 2 credits

Explores basic operation of survey-grade GPS equipment and equipment limitation. Emphasizes data collection, stakeout, and performing calculations with a hand-held data collector. Discusses interaction of design team and surveyors. *Prerequisite: Intro to Surveying 10607155*

Highway Bridges, Medians, & Barriers

10607149 3 credits

Studies the processes, considerations, and safety aspects of constructing and maintaining highway bridges, medians, and barriers. Includes investigation of structural loads, stress factors, and valid design procedures for these critical components of today’s modern roads and highways. *Prerequisite: Highway Surveying 10607171; Corequisite: Inspection 10607167*

Highway Surveying

10607171 2 credits

Studies principles of geometric design of highways, including horizontal curves, vertical curves, superelevation, and using station/offset orientation. Also includes basic design principles of airports, railways, and pipeline design. Includes evaluation of existing traffic and designing for future needs.

Prerequisites: Trigonometry with Applications 10804196, Civil Engineering Drafting I 10607150, and Intro to Surveying 10607155

Inspection

10607167 2 credits

Concerns construction inspection and its importance, the role of the inspector, requirements for a good inspector, and general duties of the inspector. Emphasizes concrete and asphalt inspection.

Prerequisite: Intro to Surveying 10607155

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to AutoCAD

10623106 2 credits

This introductory course in computer-aided drafting (CAD) using AutoCAD software provides foundation skills in using CAD software to create and print two-dimensional technical drawings. This course is available to students in any program. Computer skills and prior knowledge of drawing/drafting techniques is recommended.

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better*

Intro to Surveying

10607155 2 credits

Presents fundamental principles of surveying and the use of surveying instruments in the application of these principles. Topics include measurement of horizontal distances, care and use of survey equipment, note keeping, differential leveling, angular measurement, and surveying field procedures. Actual field problems supplement classroom instruction.

Recommended minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 65 or equivalent; Corequisite: Intermediate Algebra with Applications 10804118 and Intro to AutoCAD 10623106

Land Records

10607118 1 credit

Focuses on the interpretation of land documents, including property descriptions, the Public Land Survey System, meridians, angle measurements, and line direction formats used by surveyors.

Recommended minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 65; Corequisite: Intro to Surveying 10607155

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

Problem Solving & Critical Thinking

10623100 1 credit

Centers around logical approaches to problem solving through defining the problem, identifying contributing factors, creating and testing plans, and reviewing results. Includes problem solving from variety of perspectives and touches on approaches that are mathematical and logical and consider risk.

Soils

10607145 3 credits

Studies the general classification and properties of soil and subsurface materials. Includes subsurface exploration soil tests and hydraulic principles as used in the field of civil engineering. Laboratory techniques are developed for testing and classifying soil and aggregate.

Recommended minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 65; Corequisite: Intermediate Algebra with Applications 10804118

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Storm Water Management

10607170 3 credits

Emphasizes storm water management, calculations, planning, and design. Topics include open channel and pressure flow, storage and treatment facility design concepts, and regulation, permitting, and enforcement of sanitary and storm water ordinances.

Prerequisite: Civil Engineering Drafting I 10607150; Corequisite: Trigonometry with Applications 10804196

Surveying - Total Station

10607156..... 3 credits

Studies advanced principles of surveying and use of surveying instruments. Topics include land surveying, calculation and layout of vertical and horizontal curves, and topographic surveys using transits and total stations. The data collected is downloaded onto computers for use in Civil Engineering Drafting I. Actual field problems supplement classroom instruction.

Prerequisites: Intro to Surveying 10607155; Corequisite: Trigonometry with Applications 10804196 and Civil Engineering Drafting I 10607150

Trigonometry with Applications

10804196 3 credits

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles, complex numbers, DeMoivre's Theorem, polar coordinates, and vectors.

Prerequisite: Intermediate Algebra with Applications 10804118, with a grade of "C" or better

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

IT COMPUTER SUPPORT SPECIALIST

Associate in Applied Science (AAS)

Program Code: 10-154-3

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

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IT COMPUTER SUPPORT SPECIALIST



The Computer Support Specialist program prepares individuals for help desk positions that provide technical support, assistance, advice, troubleshooting, training, and documentation to computer end users for hardware, software, and systems. Graduates have a working knowledge of computer hardware and software and their applications within wide area networks. In this program, hands-on instruction will build your familiarity with various desktop and server environments; basic computer network technologies; help desk ticketing, management and customer support; and database design, development, and administration. The program helps to prepare graduates to test for the CompTIA A+ and Linux+ certifications as well as the Microsoft Certified Solutions Associate for Windows 10.

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Associate in Applied Science

Total Credits: 65-66

Salary information:
mstc.edu/programsalaries

Careers: Computer Support Specialist, Help Desk Technician, Network Assistant, PC Repair Technician, Support Technician, Systems Administrator, and Technical Support Specialist

In general, there is growing demand for these careers. Example: Computer Support Specialist career has grown by 4% over the last two years, and is expected to grow by 13% over the next 10 years. Currently 5,053 Computer User Support Specialists are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Administrative Professional, IT Network Specialist, IT Software Developer, and Medical Office Specialist

For estimated tuition and fees, visit mstc.edu/programcosts.

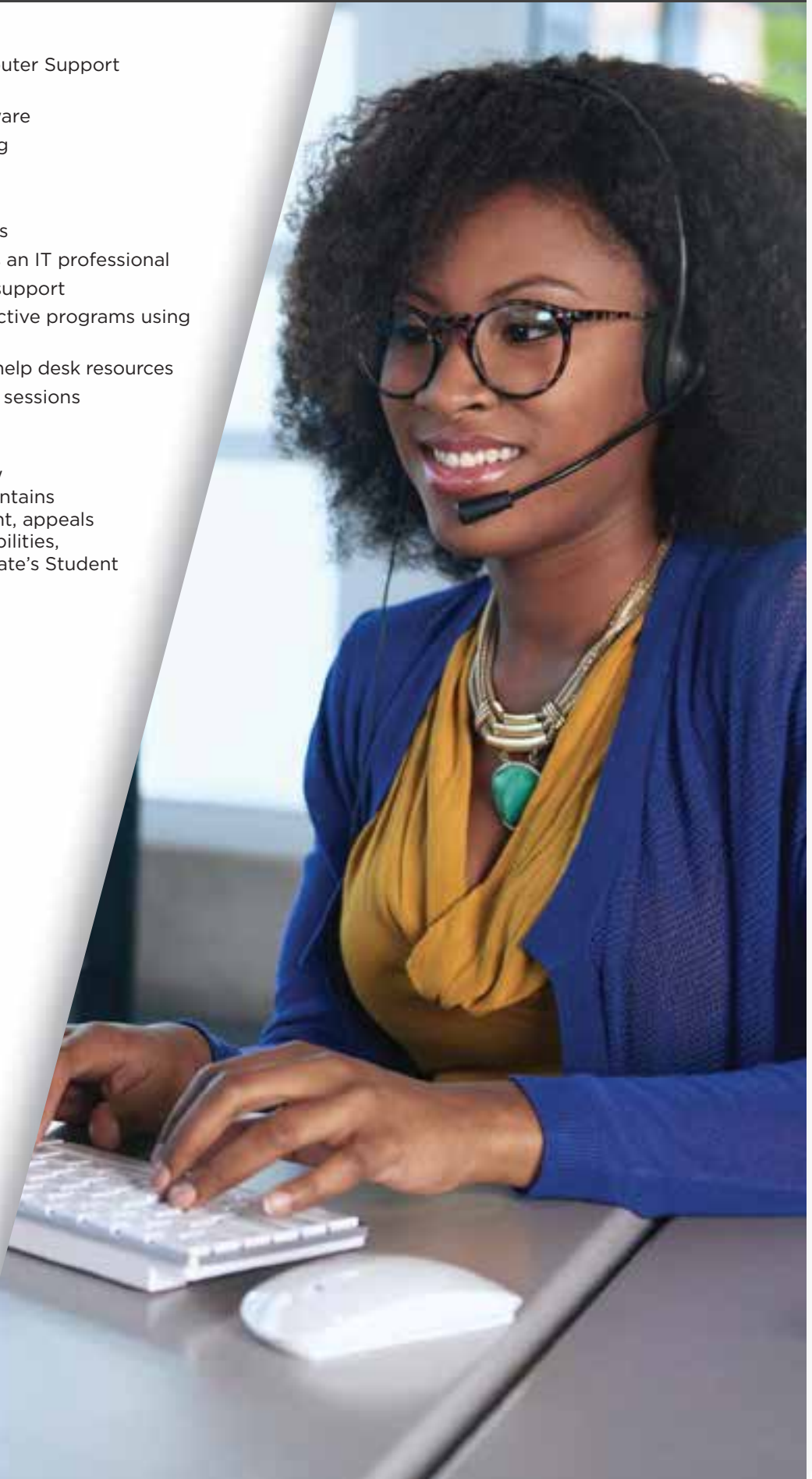
PROGRAM OUTCOMES

Employers will expect you, as a IT Computer Support Specialist graduate, to be able to:

- Manage information technology hardware
- Manage software updates and licensing
- Support computer networks
- Provide end user support
- Solve information technology problems
- Demonstrate customer service skills as an IT professional
- Utilize a ticketing system to prioritize support
- Demonstrate the ability to write interactive programs using a web interface
- Develop technical documentation and help desk resources
- Conduct one-on-one or group training sessions

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		15 credits
10103106	Microsoft Office-Introduction	3
10151105	Linux	3
10154102	Hardware Essentials I	3
10154110	Desktop Management	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		18 credits
10150120	Server Administration-Beginning	3
10150165	Network Server Scripting	3
10151110	Information Security I	3
10154103	Hardware Essentials II	3
10154120	Advanced Desktop Management	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term		17-18 credits
10150110	Networking I	3
10154101	IT Customer Support	2
10154132	Help Desk Fundamentals	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
10809103	Think Critically & Creatively	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Term		15 credits
10102130	Career Development -or-	
10154141	Computer Support Internship -or-	
10801199	Employment Strategies	3
10154142	Help Desk Advanced	3
10156101	Database Concepts and Design	3
10801197	Technical Reporting	3
10809166	Intro to Ethics: Theory & Application	3
Total credits 65-66		

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

SAMPLE PART-TIME CURRICULUM OPTION

Term		9 credits
10151105	Linux	3
10154102	Hardware Essentials I	3
10154110	Desktop Management	3
Term		9 credits
10150120	Server Administration-Beginning	3
10154103	Hardware Essentials II	3
10154120	Advanced Desktop Management	3
Term		6 credits
10103106	Microsoft Office-Introduction	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		8 credits
10150110	Networking I	3
10154101	IT Customer Support	2
10154132	Help Desk Fundamentals	3
Term		9 credits
10150165	Network Server Scripting	3
10151110	Information Security I	3
10156101	Database Concepts and Design	3
Term		6-7 credits
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		9 credits
10809103	Think Critically & Creatively	3
10809166	Intro to Ethics: Theory & Application	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Term		9 credits
10102130	Career Development -or-	
10154141	Computer Support Internship -or-	
10801199	Employment Strategies	3
10154142	Help Desk Advanced	3
10801197	Technical Reporting	3
Total credits 65-66		

Database Concepts and Design

10156101 3 credits

Introduces the concepts of relational database design, development, and maintenance. Topics include relational normalization, referential integrity, and SQL.

Desktop Management

10154110 3 credits

Introduces students to the skills needed to support client PC Operating Systems. Through significant hands-on activities, students learn how to configure, secure, use, and troubleshoot client operating systems.

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better*

Employment Strategies

10801199 3 credits

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation.

NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

Hardware Essentials I

10154102 3 credits

The first in a two-course series that aligns with the CompTIA A+ certification. This class is designed to teach students how to build, configure, secure, network, and troubleshoot PCs. The course covers the objectives of the CompTIA A+ exams but is not designed or intended to be a “test prep” course.

Hardware Essentials II

10154103 3 credits

The second in a two-course series that aligns with the CompTIA A+ certification. This class is designed to teach students how to build, configure, secure, network, and troubleshoot PCs. Covers the objectives of the CompTIA A+ exams but is not designed nor intended to be a “test prep” course.

Prerequisite: Hardware Essentials I 10154102

Help Desk Advanced

10154142 3 credits

Expands the learners’ ability to troubleshoot all information technology issues using help desk and asset management applications. Learners expand their knowledge of ITIL practices and procedures used to manage an IT operation and its associated infrastructure. Communication, documentation, and teamwork skills are enforced.

Prerequisite: Help Desk Fundamentals 10154132

Help Desk Fundamentals

10154132..... 3 credits

Provides the learner with the knowledge required to become a help desk support technician. Students learn fundamental help desk concepts such as operations, roles and responsibilities, processes and procedures, tools and technologies, individual and team performance measures, and how to provide support as a help desk professional.

Prerequisite: Desktop Management II 10154120

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of “C” or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of “C” or better, or College Math 10804107 with a grade of “C” or better. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Information Security I

10151110 3 credits

Introduces students to the fundamentals of information security. Topics include security terms and concepts, risk assessment, cryptography, monitoring and auditing, attacks and techniques, and the legal and ethical issues associated with information security.

Prerequisites: Networking I 10150110 and Hardware Essentials I 10154102 or equivalent work experience with consent of instructor

IT Customer Support

10154101 2 credits

Introduces learners to the field of user support professionals. Focuses on providing quality customer support, problem solving while exploring software quality assurance, information technology project development methodologies, and strategies for keeping current in an ever-changing field.

Prerequisite: Written Communication 10801195 or consent of instructor

Linux

10151105 3 credits

Covers introductory Linux topics, including operating system basics, system installation, file system management, file system administration, and basic commands. Includes considerable hands-on.

Corequisite: Hardware Essentials I

Microsoft Office-Introduction

10103106 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Network Server Scripting

10150165 3 credits

Provides best practices and techniques in Linux and Windows shell and command line scripting using PowerShell and BASH.

Corequisite: Server Administration-Beginning 10150120

Networking I

10150110 3 credits

Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, participants will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course is the first of four courses that align with CCNA certification. Covers the objectives of the first CCNA exam but is not designed or intended to be a “test prep” course.

Corequisite: Hardware Essentials I 10154102

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Server Administration-Beginning

10150120 3 credits

Develops skill in the design, installation, administration, and management of computer networks. Topics include network design; installation and configuration of a commonly used network operating system; service packs and updated drivers; user accounts, groups, profiles, and policies; file system security; printer management; and application software installation, backup, and recovery.

Prerequisite: Network Fundamentals 10150101

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Technical Reporting

10801197 3 credits

The student prepares and presents oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course.

Prerequisite: Written Communication 10801195 with a grade of "C" or better, or English Composition I 10801136 with a grade of "C" or better. Proficiency in word processing skills recommended.

Think Critically & Creatively

10809103 3 credits

Provides instruction in the vital, realistic, and practical methods of thinking that are in high demand in all occupations of substance today. Provides in-depth consideration of decision making, problem solving, detailed analysis of ideas, troubleshooting, argumentation, persuasion, creativity, setting goals and objectives, and more. Students apply specific thinking strategies and tools to situations in a wide variety of workplace, personal, academic, and cultural situations. Classroom instruction is based on demonstration, discussion, projects, and teamwork. Assignments range from the short and simple to the detailed and complex. Focuses on reality and practicality throughout. A student scoring between 55-80 on the Accuplacer Reading exam or 60-80 on the Accuplacer Sentence Skills exam is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Accuplacer Reading score of 55 and Accuplacer Sentence Skills score of 60 or equivalent, or Intro to College Reading 10848104 with a "C" or better and Intro to College Writing 10831103 with a "C" or better

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

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WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

CORRECTIONS & COMMUNITY ADVOCACY

Associate in Applied Science (AAS)

Program Code: 10-504-7

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



CORRECTIONS & COMMUNITY ADVOCACY



The Corrections & Community Advocacy program at Mid-State teaches the operations and management of adult/juvenile correctional institutions, probation/parole, community advocacy agencies, special needs populations, alcohol and other drug abuse, and mental health services. Graduates may work in jails, prisons, juvenile detention facilities, halfway houses, and shelter care facilities as well as in the court system. Experienced faculty emphasize professionalism and integrity needed to work in these settings. You'll experience a blend of classroom theory, simulation, and occupational observation, setting you up for success in this field. Our state-of-the-art facilities include a reproduction of a secure detention facility to allow you to develop your skills in a safe yet challenging environment.



- bachelor's degree opportunities**
- Lakeland University, BA Criminal Justice
 - UW-Oshkosh, BAS Public Safety emphasis in Leadership and Organizational Studies
 - UW-Oshkosh, BS Human Services Leadership
 - UW-Stout, Criminal Justice Rehabilitation
 - UW-Whitewater, Criminology emphasis in Law Enforcement and Investigation
 - Viterbo, BA Criminal Justice
- For more information and additional opportunities, go to mstc.edu/transfer

Associate in Applied Science

Total Credits: 64-65

Salary information:
mstc.edu/programsalaries

Careers: Correctional Officer, Home Detention Specialist, Juvenile Detention Officer, Psychiatric Care Technician, Shelter Care Worker, Victim/Witness Coordinator, Clerk of Courts Assistant, Child Support Case Manager, Probation and Parole Agent, and Social and Human Services Assistants

In general, there is growing demand for these careers. Examples: Correctional Officers career has grown by 1% over the last two years and is expected to grow by 1% over the next 10 years. Currently 4,189 Correctional Officers and Jailers are employed in the region. Social and Human Service Assistants career has grown by 1% over the last two years and is expected to grow by 6% over the next 10 years. Currently 5,516 Social and Human Service Assistants are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTION

RELATED PROGRAM

Criminal Justice-Studies

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

PROGRAM OUTCOMES

Employers will expect you, as a Corrections & Community Advocacy graduate, to be able to:

- Think critically.
- Manage emergencies.
- Communicate effectively.
- Demonstrate professionalism.
- Conduct investigations.
- Interact with others.
- Demonstrate tactical skills (applies to occupational certifications).

You may be eligible to enter the jail officer certification track. Successful completion of the certification track provides the education and hands-on training required by the Wisconsin Law Enforcement Standards Board to become certifiable as a jail/colocated officer.

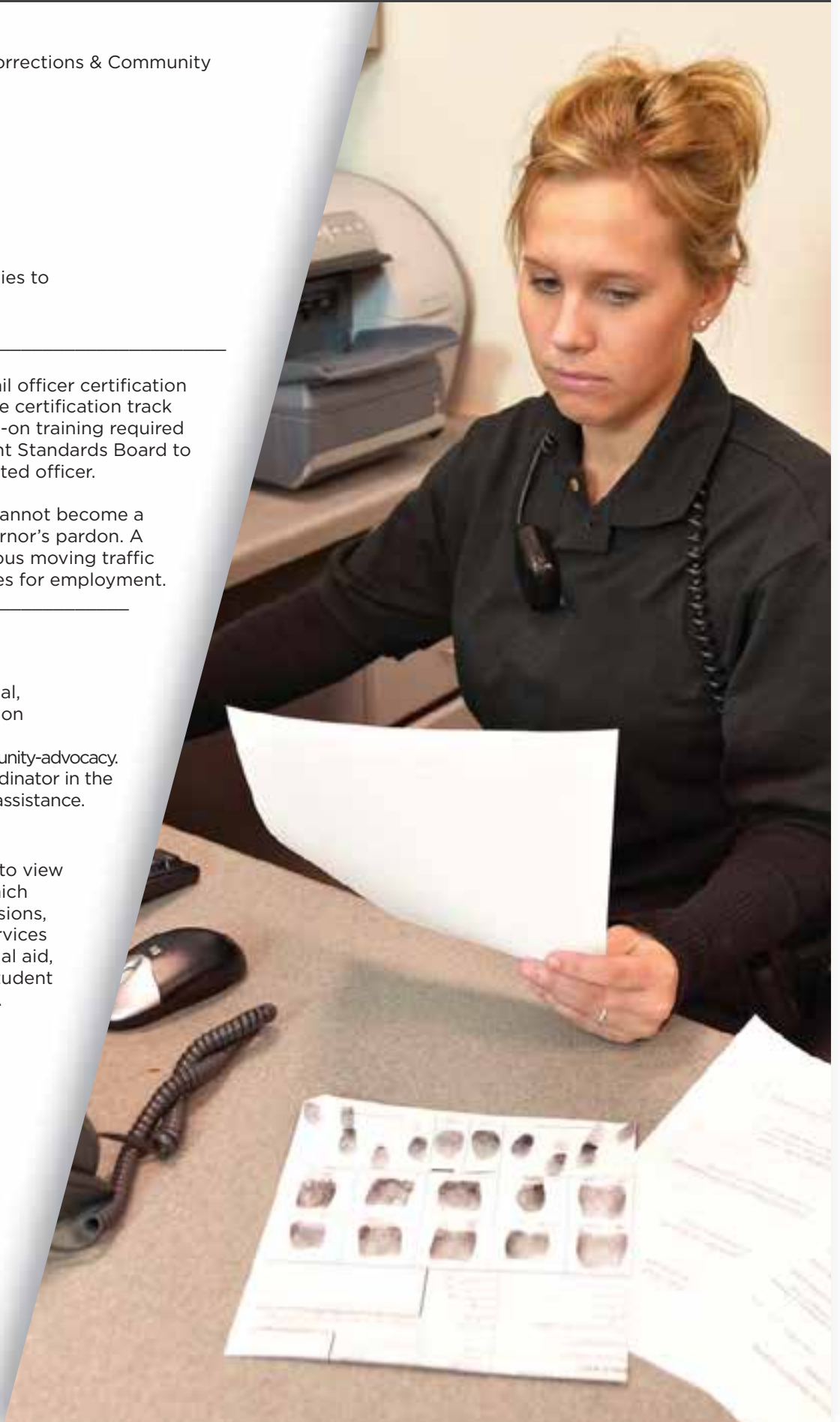
Anyone with a felony conviction cannot become a corrections officer without a governor's pardon. A lengthy criminal history or numerous moving traffic violations may hinder opportunities for employment.

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a jail officer is available at mstc.edu/programs/corrections-community-advocacy. Contact the disability services coordinator in the Student Services Office to receive assistance.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		15 credits
10504112	Court Procedures	3
10504114	Introduction to Law Enforcement	3
10504176	Corrections/Correctional Institutions	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10809166	Intro to Ethics: Theory & Application	3

Term		15 credits
10504156	Child Advocacy	3
10504158	Basic Mediation	3
10504159	Interpersonal Violence/Victimology	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3

Term		16-17 credits
10504128	Telecommunications	2
10504178	Secure Detention	2
10504184	Basic Jail Academy 1	3
10504185	Basic Jail Academy 2	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Term		18 credits
10504116	Probation & Parole	3
10504132	Advanced Relational Skills	3
10504144	Wellness in Protective Services	3
10504175	Understanding Substance Abuse	3
10504179	Management of Adult Population	3
10809122	Intro to American Government	3

Total credits 64-65

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

NOTES:

SAMPLE PART-TIME CURRICULUM OPTION

Term		9 credits
10504112	Court Procedures	3
10504114	Introduction to Law Enforcement	3
10504176	Corrections/Correctional Institutions	3

Term		12 credits
10504156	Child Advocacy	3
10504158	Basic Mediation	3
10504159	Interpersonal Violence/Victimology	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3

Term		9-10 credits
10809122	Intro to American Government	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
10809166	Intro to Ethics: Theory & Application	3

Term		12 credits
10504116	Probation & Parole	3
10504175	Understanding Substance Abuse	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Term		10 credits
10504128	Telecommunications	2
10504178	Secure Detention	2
10504184	Basic Jail Academy 1	3
10504185	Basic Jail Academy 2	3

Term		12 credits
10504132	Advanced Relational Skills	3
10504144	Wellness in Protective Services	3
10504179	Management of Adult Population	3
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3

Total credits 64-65

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Advanced Relational Skills

10504132..... 3 credits

Uses scenario-based instruction to prepare students in the use of specific techniques and processes required for effective communication in today's professional criminal justice professions. Emphasizes communication skills that enhance professional interactions within service professions.

Prerequisite: Admission to Corrections & Community Advocacy program 105047

Basic Jail Academy 1

10504184 3 credits

This State of Wisconsin jail preparatory training program includes the following topics: Introduction to Corrections, Principles of Subject Control, Maintain Jail Security, Jail Hostage Response, Professional Communication Skills, Ethics and Ethical Decision Making, Admit and Release Inmates, Inmate Supervision and Behavior Control, Supervision of Special Needs Inmates/Crisis Intervention, Prepare Reports, Correctional Law, Jail Health Care, Cardio-Pulmonary Resuscitation, Jail Fire Safety, Application: Scenarios/Simulations, and Testing/Evaluation. Once learners successfully complete this course and the Basic Jail Academy 2 course, they are eligible for certifiable status by the State of Wisconsin to work in a county jail. This is primarily a lab-based class.

Prerequisite: Admission to Corrections and Community Advocacy 105047 program; Corequisite: Basic Jail Academy 2 10504185

Basic Jail Academy 2

10504185..... 3 credits

This State of Wisconsin jail preparatory training program includes the following topics: Introduction to Corrections,

Principles of Subject Control, Maintain Jail Security, Jail Hostage Response, Professional Communication Skills, Ethics and Ethical Decision Making, Admit and Release Inmates, Inmate Supervision and Behavior Control, Supervision of Special Needs Inmates/Crisis Intervention, Prepare Reports, Correctional Law, Jail Health Care, Cardio-Pulmonary Resuscitation, Jail Fire Safety, Application: Scenarios/Simulations, and Testing/Evaluation. Once learners successfully complete this course and the Basic Jail Academy 1 course, they are eligible for certifiable status by the State of Wisconsin to work in a county jail. This is primarily a lab-based class.

Prerequisite: Admission to Corrections and Community Advocacy 105047 program; Corequisite: Basic Jail Academy 1 10504184

Basic Mediation

10504158..... 3 credits

Students learn how to handle conflict using a mediation technique involving two or more parties who agree to meet with an impartial third party to try to resolve their dispute. Offers basic mediation training through role-playing, lectures, exercises, case histories, and demonstrations of disputes and dispute resolution. Designed for occupations requiring resolution of disagreements.

Prerequisite: Admission to Corrections & Community Advocacy program 105047; Recommended minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Child Advocacy

10504156 3 credits

An introduction to the concepts of child advocacy with an emphasis on the public service professional's role in identifying and managing situations involving child abuse and neglect. Provides an overview of the field of

child advocacy, and explores the role of child advocate in different professions as well as ethical, legal, and professional responsibilities. Takes a multi-disciplinary team approach to examining family problems related to poverty, drug abuse, and violence. The family system is also examined. Students complete guided self-study online then gather for two hours of live classroom discussion weekly.
Prerequisite: Admission to Corrections & Community Advocacy program 105047; Recommended minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Corrections/Correctional Institutions

10504176..... 3 credits

Examines the history and current trends of the correctional system in the United States. Students analyze the changing philosophies of corrections and review the programs available to offenders at various stages of their involvement in the criminal justice system. Chain of command, management practices, personnel needs, types of offenders, organizational theories, policymaking, and the role of correctional personnel are addressed. Students complete guided self-study online then gather for two hours of live classroom discussion weekly.

Prerequisite: Admission to Criminal Justice-Studies program 105045 or Corrections & Community Advocacy program 105047

Court Procedures

10504112 3 credits

Examines the court system, including procedures from incident of arrest to final disposition. The stages of a criminal trial are examined in depth. Reviews the authority of law enforcement officials to arrest and/or detain a subject. Constitutional, federal, state, and civil laws as they apply to this criminal process are presented. Victims' rights are examined.

Prerequisite: Admission to Criminal Justice-Studies program 105045 or Corrections & Community Advocacy program 105047

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Interpersonal Violence/Victimology

10504159 3 credits

Explores interpersonal violence, defined as abuse that occurs between people who know each other and that can occur within or outside a family setting. This abuse involves one person who uses power and control over another through physical, sexual, or emotional threats or actions; economic control; isolation; or other kinds of coercive behavior. Explores different types of interpersonal violence, including physical abuse, bullying, dating/relationship violence, gang violence, and sexual violence. Students complete guided self-study online then gather for two hours of live classroom discussion weekly.

Prerequisite: Admission to Corrections & Community Advocacy program 105047

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or

Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Law Enforcement

10504114 3 credits

Presents an overview of the duties and responsibilities of a law enforcement officer. Explores major skills and services performed by patrol officers in order to provide students with a realistic understanding of the occupation. Students will learn basic professional police communication skills police officers use every day when interacting with victims, complainants, and witnesses. Explores investigations, traffic enforcement, the use of force including defense and arrest tactics, and firearms basics.

Prerequisite: Admission to Criminal Justice-Studies program 105045 or Corrections & Community Advocacy program 105047

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of “C” or better, or College Math 10804107 with a grade of “C” or better. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Management of Adult Population

10504179..... 3 credits

Reviews the importance of working positively with the incarcerated adult population. Focuses on the practice of constructive interaction skills, including positive behavior control, dispute resolution, and incident debriefing. Learners explore belief systems, social pressure, moral problems, decision making, and the consequences of decisions.

Prerequisite: Admission to Corrections & Community Advocacy program 105047

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

Probation & Parole

10504116 3 credits

Analyzes modern probation and parole practices and services, examines current probation procedures and the case law affecting those decisions; and reviews the advantages of community-based treatment, special programs, and the use of non-professionals. Through learning activities, students are exposed to a portion of the "daily life" of a probation and parole agent.

Prerequisite: Admission to Corrections & Community Advocacy program 105047

Secure Detention

10504178..... 2 credits

Reviews theories of adolescent development, history of juvenile court, the Wisconsin Juvenile Justice Code, and the Wisconsin Administrative Code as it applies to juvenile offenders. Learners become familiar with procedures to admit/release adolescents in secure detention. Learners also apply strategies for effective supervision, protection, and discipline of juveniles and adolescents in secure detention settings, including those classified as special-needs offenders. Students meeting all requirements of this course they will be certifiable to work in a juvenile detention colocated facility in the State of Wisconsin.

Prerequisite: Admission to Corrections & Community Advocacy program 105047

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence

Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Telecommunications

10504128..... 2 credits

Prepares learners to embrace emergency communications as a profession; describe legal and ethical issues regarding telecommunicator responsibility and accountability; apply enhanced 9-1-1, computer-aided dispatch and map reading techniques; apply proper call-receiving guidelines; demonstrate effective emergency radio communications techniques; interpret police computer information system data; perform telecommunications record-keeping functions; demonstrate effective crisis management skills in techniques to alleviate stress in emergency communications; and perform simulated dispatch functions.

Prerequisite: Admission to Corrections & Community Advocacy program 105047

Understanding Substance Abuse

10504175..... 3 credits

Examines the problems of drug abuse and issues across the spectrum, including the latest thoughts about prevention and awareness. Provides an understanding of the origins and current status of drug use, including special situations addressed for a person who may be experiencing problems with substance abuse. Assessment, intervention, rehabilitation, and recovery are also introduced. Students complete guided self-study online then gather for two hours of live classroom discussion weekly.

Prerequisite: Admission to Corrections & Community Advocacy program 105047

Wellness in Protective Services

10504144 3 credits

Students develop and apply the skills and abilities needed to deal constructively with stressors in the correctional field. Focuses on assessing individual stressors, analyzing the impact of stress, reducing stressors, and developing stress-coping mechanisms. Coping mechanisms include assertion, anger management, conflict resolution, time management, relaxation activities, and exercise and diet planning.

Prerequisite: Admission to Criminal Justice-Studies program 105045 or Corrections & Community Advocacy program 105047

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

COSMETOLOGY

Technical Diploma

Program Code: 31-502-1

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



PROGRAM OUTCOMES

Employers will expect you, as a Cosmetology graduate, to be able to:

- Apply safety and sanitation procedures.
- Adhere to the current Wisconsin administrative codes and statutes for cosmetology.
- Demonstrate interpersonal skills for success.
- Perform hair cutting services.
- Perform shampoo services.
- Perform skin care services.
- Perform texture services.
- Perform hair color services.
- Demonstrate hair styling and finishing techniques.
- Perform nail services.
- Develop strategies to market products and services.

Most classes are offered in a face-to-face format. Theory of General Science is offered only in an online format. Work on mannequins, other students, and in an on-campus salon completes the practical component of your training.

Students must purchase a kit of required tools and supplies. The cost of the kit is approximately \$1,700 and must be purchased for use on the first day of class.

Students who successfully complete the program will meet the Wisconsin requirement of 1,550 hours of theoretical and practical instruction. Financial aid and scholarships are available to those who qualify.



FUNCTIONAL ABILITIES

Students must have good fine motor skills, especially finger dexterity, as well as good hand-eye coordination and 20/40 vision in best eye with 70 degrees to each side for peripheral vision, as determined by the Department of Transportation.

PROGRAM PROGRESSION

In order to progress in and successfully complete the program, students must repeat core courses (courses numbered 31-502-xxx) not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequisites.

Please note that the ability to repeat courses is dependent upon availability of courses. Students may be required to apply for program re-entry in order to repeat courses.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		14 credits
31502334	Hairstyling	3
31502335	Haircutting	3
31502336	Chemical Texture Services	3
31502337	Nail Technology	1
31502340	Facials	1
31502347	Haircolor	3

Term		13 credits
31502316	Theory of General Sciences	1
31502338	Salon Services I	1
31502342	Capstone Experience	3
31502343	Salon Services II	4
31502344	Salon Services III	4

Term		6 credits
31502349	Summer Salon Services IV	3
31502350	Summer Salon Services V	3

Total credits 33

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Capstone Experience

31502342 3 credits

Students prepare for the state board exam and for securing a job. Students complete a mock assessment of all state board practical and written concepts, including state law. Students also prepare for their job search and for working with the business side of the cosmetology industry.
Corequisites: Salon Services II 31502343, Facials 31502340, Saturday Salon 31502348, and consent of instructor

Chemical Texture Services

31502336 3 credits

Includes the basics of safe and sanitary permanent waving and chemical hair relaxing. Includes history and product knowledge of these chemical services as well as advanced techniques and procedures that define current trends in the salon.

Prerequisite: Admission to Cosmetology program 315021 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Facials

31502340 1 credit

Students learn the different types of skin and study structure and functions of the skin. Applies basic facial techniques. Students will study microdermabrasion, laser hair removal, and chemical peels. They also perform basic skin waxing techniques, removal of superfluous hair, makeup application, false eyelash application, and skin analysis.

Prerequisite: Admission to Cosmetology program 315021

Hair Color

31502347 3 credits

Covers hair-color basics which include the law of color, the color wheel, and the theory behind these concepts. Students identify the chemicals used in hair color and discover the differences between temporary, semi/demi, and permanent color. Students mix and apply color while developing skills and building client consultation techniques. Studies application methods governed by the state board regulations. Also teaches the study of bleach theory and complete lightening applications, including foiling. Students experience advanced color formulations, color placement techniques, and color correction procedures.

Prerequisite: Admission to Cosmetology program 315021 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Haircutting

31502335 3 credits

Involves designing haircuts, understanding form, and applying various haircutting techniques. Students perform various haircuts, including blunt, uniform, increased, and graduated haircuts. Students also perform men's haircuts including razor cutting, shear over comb, clipper cutting clipper over comb, short tapered, and flattops. Trimming techniques used for men's facial hair are also emphasized and practiced, including shaving, beards, mustaches, and side burns.

Prerequisite: Admission to Cosmetology program 315021 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Hairstyling

31502334 3 credits

Emphasizes wet and dry hairstyling to include rollers, air-forming, thermal styling, hair straightening, finger waving, pin curls, hair analysis, shampooing, scalp treatments, braiding, long hair design, and hair pressing. Fundamentals of thermal styling and comb-outs are performed. Practical aspects of hair enhancements including wigs, hair extensions, and hair pieces will also be performed.

Prerequisite: Admission to Cosmetology program 315021 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Nail Technology

31502337 1 credit

Students achieve skills in manicuring, pedicuring, and nail enhancement services, including polish application and massage techniques. Students study nail shape and safe and sanitary use of nail care products. Paraffin hand dips, advanced polish techniques, and various nail art application are practiced.

Prerequisite: Admission to Cosmetology program 315021 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Salon Services I

31502338 1 credit

Promotes beginning-level concentrated student development of skills and proficiencies by providing a wide range of client-related services. Emphasizes client consultations, proper business practices, professional attitudes, and refining techniques that ensure entry-level preparedness for the Wisconsin licensing exam.

Minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34; Corequisites: Haircolor 31502347, Hairstyling 31502334, Haircutting 31502335, Chemical Texture Services 31502336, Nail Technology 31502337, and Facials 31502340

Salon Services II

31502343 4 credits

Builds on Salon Services I by promoting student development of skills and proficiencies in delivering a wide range of client-related services. Emphasizes client consultations, proper business practices, professional attitudes, and refining techniques that will ensure entry-level preparedness for the Wisconsin licensing exam. Students complete this course by working in an on-campus beauty salon environment. In addition, students must complete 25 hours of on-the-job training (outside of the Mid-State salon and any other current employment location of the student) and secure approval from the course instructor.

Corequisite: Salon Services I 31502338

COURT REPORTING

Associate in Applied Science (AAS)

Program Code: 10-170-2

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



COURT REPORTING



Mid-State's Court Reporting program trains students to create word-for-word transcriptions at trials, depositions, and other legal proceedings. The program emphasizes speed, accuracy, and confidentiality. Core program courses are offered via video conference hosted by Lakeshore Technical College and are supported by select classes available in the Mid-State district. You'll need to hear, speak, see, and use both hands to manipulate a computer keyboard and stenograph machine. This program is certified by the National Court Reporters Association (NCRA).

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Associate in Applied Science

Total Credits: 60

Salary information:
mstc.edu/programsalaries

Careers: Freelance Reporter, Legislative Reporter, Official Court Reporter in the Court System, and Scopist

Though today we're seeing a decline in regional demand for court reporting services, skilled professionals find success.

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Accounting, Administrative Professional, Business Management, Marketing, and Office Support Specialist

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

PROGRAM OUTCOMES

Employers will expect you, as a Court Reporting graduate, to be able to:

- Develop proficiency in machine shorthand using real-time theory.
- Develop a personal dictionary and read, translate, and edit transcripts using CAT (computer-assisted transcription) software.
- Produce salable transcripts on a real-time translation system.
- Demonstrate knowledge of proper reporting procedures and responsibilities for freelance and official reporting.
- Demonstrate knowledge of legal and medical concepts and terminology.
- Demonstrate knowledge of the professional reporting organizations and methods of gaining certification as a registered professional reporter.

GRADUATION REQUIREMENT

Three five-minute timings must be passed in each of the following categories with a minimum of 95 percent accuracy:

- Two-voice testimony @ 225 wpm
- Jury charge @ 200 wpm
- Literary @ 180 wpm

Judicial Reporting Procedures and Judicial Reporting Internship must be taken within 18 months of graduation.



ADMISSIONS PROCEDURES

To apply to the Court Reporting program, please submit the following documents to Lakeshore Technical College:

1. Complete a WTCS application form and return it with the \$30 non-refundable application fee. Check is payable to LTC.
2. Complete the Accuplacer or ACT test.
Minimum scores required:
 - Reading - Accuplacer score of 55
 - Sentence Skills - Accuplacer score of 70
 - Arithmetic - Accuplacer score of 50
 - ACT equivalents for above scores are acceptable

You may take the Accuplacer again if you did not meet the required scores. Additional options, including coursework and tutoring, are also available to assist you. Contact the Student Services Office on your local campus to learn about your options. To schedule an Accuplacer test, contact your local Campus Office.

Written Communication, mathematics courses, and some science courses have placement requirements. Please refer to the course description section at the end of this guide for course specific information.

3. Submit an official copy of all academic transcripts, including high school, college or university, and HSED/GED.
4. Program advising session.
5. Notification of Laptop/Steno Rental Requirement form.
6. Authorization to Release Confidential Information for Shared Programs form.
7. Upon receipt of the above materials, you will be accepted to Lakeshore Technical College. LTC will then notify you of additional program requirements.

Lakeshore Technical College • Admissions
1290 North Avenue
Cleveland, WI 53015-1414

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

STUDENT HANDBOOK

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SAMPLE FULL-TIME CURRICULUM OPTION

Term		14 credits
10170106	Realtime Reporting 1	5
10170144	Realtime Reporting Orientation	1
10170160	Legal Terminology	1
10170804	Realtime Reporting 1 Lab	1
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10809198	Intro to Psychology	3

Term		12 credits
10170105	Realtime Reporting 2	5
10170159	Realtime Reporting Technology	2
10170805	Realtime Reporting 2 Lab	1
10170184	English for Realtime Reporters	1
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3

Term		6 credits
10170104	Broadcast Captioning Research Method	1
10170108	Realtime Reporting Speed Development	2
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies	3

Term		14 credits
10170109	Literary 1-Advanced	2
10170128	Jury Charge 1 - Advanced	2
10170156	Testimony 1 - Advanced	3
10170161	Realtime Reporting Technology Advanced	2
10170171	Medical Reporting & Terminology	2
10804107	College Mathematics -or-	
10804123	Math with Business Applications -or-	
10806112	Principles of Sustainability	3

Term		14 credits
10170101	Captioning/CART	3
10170111	Literary 2-Advanced	2
10170129	Jury Charge 2-Advanced	2
10170141	Court Reporting Procedures	2
10170145	Court Reporting Internship	1
10170146	Four Voice	1
10170157	Testimony 2-Advanced	3

Total Credits 60

Please Note:

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- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

English for Realtime Reporters

10170184 1 credit

Enhances the student's ability to use proper English grammar, spelling, punctuation, capitalization, and vocabulary techniques in the transcription of the spoken word.

Four Voice

10170146 1 credit

Prepares the student to write four-voice testimony from material dictated at a minimum speed of 160 wpm for 5 minutes with a minimum of 95 percent accuracy.

Intro to American Government

10809122 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introduction to Diversity Studies

10809172 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Jury Charge 1 - Advanced

10170128 2 credits

Prepares the student to write jury charge material at 160 words per minute for 3 minutes and transcribe at least 3 timings with a minimum of 95 percent accuracy and prepare salable transcripts.

Prerequisite: 10170121 Jury Charge 1 - Beginner or 10106121 Jury Charge 1 - Beginner or Condition: Minimum of 130 WPM met

Jury Charge 2 - Advanced

10170129 2 credits

Prepares the learner to write jury charge material at 200 words per minute for 5 minutes and transcribe at least 3 timings with a minimum of 95 percent accuracy and prepare salable transcripts.

Prerequisite: 10170122 Jury Charge 2 - Beginner or 10106122 Jury Charge 2 - Beginner or Condition: Minimum of 180 WPM met

Legal Terminology

10170160 1 credit

Provides the student with the ability to spell, pronounce, and define legal terms.

Literary 1 - Advanced

10170109 2 credits

Prepares the learner to write literary material at 150 words per minute for three minutes, transcribe at least three timings with a minimum of 95 percent accuracy, write and read back current events dictation, and prepare salable transcripts.

Prerequisite: 10170113 Literary 1-Beginner or 10106113 Literary 1-Beginner or Condition: Minimum of 130 WPM met

Literary 2 - Advanced

10170111 2 credits

Prepares the learner to write literary material at 180 words per minute for five minutes, transcribe at least three timings with a minimum of 95 percent accuracy, write and read back current events dictation, and prepare salable transcripts.

Prerequisite: 10170114 Literary 2 - Beginner or 10106114 Literary 2 - Beginner or Condition: Minimum of 160 words per minute met

Math with Business Applications

10804123..... 3 credits

Covers real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, math concepts applied to the purchasing/buying process, math concepts applied to the selling process, and basic statistics with business/consumer applications.

Prerequisite: Accuplacer Math minimum score of 79 or equivalent or 10834109 Pre-Algebra and Corequisite: 10838105 Intro Reading and Study Skills or Condition: Reading Accuplacer minimum score of 74 or equivalent or 610061 Agribusiness/Agronomy Basic program admissions requirements met

Medical Reporting and Terminology

10170171..... 2 credits

Prepares the student to write medical terminology in machine shorthand using appropriate medical terminology from material dictated at a minimum speed of 150 wpm for five minutes with a minimum of 95 percent accuracy. The student will research medical information, prepare salable transcripts, and submit timings.

Prerequisite: 10170156 Testimony 1 - Advanced or 10106156 Testimony 1 -A dvanced

Oral/Interpersonal Communication

10801196..... 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Principles of Sustainability

10806112..... 3 credits

Prepares students to develop sustainable literacy, analyze interconnections among physical and biological sciences and environmental systems, summarize effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal/recycling in the U.S., and analyze approaches used by your community.

Corequisite: 10838105 Intro Reading and Study Skills or Accuplacer Reading score of 74 or equivalent or Condition: 610062 Agribusiness/Financial Basic program admissions met

Realtime Reporting 1

10170106..... 5 credits

Prepares the learners to use machine shorthand to write consonants, vowels, numbers, multi-syllabic words, multi-consonant words, punctuation and special symbols, short forms and phrases, words in their singular and plural forms, and prefixes and suffixes. Concurrent registration in Realtime Reporting I Lab is required.

Condition: 101701 Broadcast Captioning or 101702 Court Reporting or 101061 Judicial Reporting program requirements met

Realtime Reporting 2

10170105..... 5 credits

Prepares the learner to write multi-syllabic words, punctuation and special symbols, short forms and phrases, prefixes and suffixes, numbers, frequently used words and phrases, contractions using the Z-rule, and the "Flagged Alphabet." Apply realtime conflict elimination principles. Apply realtime theory and write dictation using a realtime theory at a minimum speed of 100 wpm. Concurrent registration in Realtime Reporting II Lab is required.

Realtime Reporting 1 Lab

10170804..... 1 credit

Prepares the learner to use machine shorthand to write consonants, vowels, numbers, multi-syllabic words, multi-consonant words, punctuation and special symbols, short forms and phrases, words in their singular and plural forms, and prefixes and suffixes. Concurrent registration in Realtime Reporting I is required.

Corequisite: 10170106 Realtime Reporting I or 10106104 Realtime Reporting 1 and Condition: 101701 Broadcast Captioning or 101702 Court Reporting or 101061 Judicial Reporting program requirement met

Realtime Reporting 2 Lab

10170805..... 1 credit

Expands the learner's ability to write multi-syllabic words, punctuation and special symbols, short forms and phrases, prefixes and suffixes, numbers, frequently used words and phrases, contractions using the Z-rule, and the "Flagged Alphabet." Apply realtime conflict elimination principles. Apply realtime theory and write dictation using a realtime theory. Concurrent registration in Realtime Reporting II is required.

Corequisite: 10170105 Realtime Reporting II or 10106105 Realtime Reporting 2

Realtime Reporting Orientation

10170144..... 1 credit

Prepares the student to use computer-assisted, real-time transcription software, Windows, email, a steno machine, and a laptop in writing machine shorthand in court reporting and to complete and submit required coursework.

Condition: 101701 Broadcast Captioning or 101702 Court Reporting program requirements met

Realtime Reporting Speed Development

10170108 2 credits

Further develops skills acquired in Realtime Reporting II on literary and testimony material beginning at 100 wpm. Scheduled during the summer term, students must pass two, 3-minute timings at a minimum speed of 110 words per minute.

Prerequisite: 10170105 Realtime Reporting II or 10106105 Realtime Reporting II

Realtime Reporting Technology

10170159 2 credits

Prepares the student to use CAT (Computer-Assisted Transcription) and real-time software; build personal dictionaries; and read, translate, and edit transcripts. Students are introduced to real-time translation procedures in court, depositions, captioning, and educational environments.

Realtime Reporting TechnologyAdvanced

10170161 2 credits

Prepares the learner to expand their knowledge of computer-assisted transcription and realtime software, dictionary management, specialized editing functions, transcript preparation, auto-included block files, and specialized macros for Steno-related tasks.

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Testimony 1 - Advanced

10170156 3 credits

Prepares the learner to write two-voice testimony material at 160 words per minute for three minutes and transcribe at least 3 timings with a minimum of 95 percent accuracy and prepare salable transcripts. Concurrent registration in Testimony 1 Lab - Advanced is required.

Prerequisite: 10170153 Testimony 1 - Beginner or 10106153 Testimony 1 - Beginner or CONDITION: or Minimum of 130 WPM met

Testimony 2 - Advanced

10170157 3 credits

Prepares the learner to write two-voice testimony material at 225 words per minute for five minutes and transcribe at least three timings with a minimum of 95 percent accuracy and prepare salable transcripts. Concurrent registration in Testimony 2 Lab-Advanced is required.

Prerequisite: 10170154 Testimony 2 - Beginner or 10106154 Testimony 2 - Beginner or Condition: Minimum of 180 WPM

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

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715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

CRIMINAL JUSTICE-STUDIES

Associate in Applied Science (AAS)

Program Code: 10-504-5

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



CRIMINAL JUSTICE-STUDIES



The Criminal Justice-Studies program prepares students to meet the challenges that come with a variety of positions in the criminal justice field. Graduates interested in pursuing a career as a law enforcement officer are prepared for entry into the 720-hour certification training required for law enforcement certifiable status by the Wisconsin Department of Justice. Graduates who do not seek sworn law enforcement positions may use their skills in civilian law enforcement positions, such as record and documentation maintenance, dispatch or communications center operations, or secure correctional facility operations. This program is designed to help secure employment, keep students abreast of rapidly changing advancements, and encourage further education. Experienced instructors emphasize professionalism, integrity, and quality work performance, with a significant focus on high ethical and moral standards.



bachelor's degree opportunities

Lakeland University, BA Criminal Justice

UW-Oshkosh, BAS Public Safety emphasis in Leadership and Organizational Studies

UW-Oshkosh, BS Human Services Leadership

UW-Whitewater, Criminology emphasis in Law Enforcement and Investigation

For more information and additional opportunities, go to mstc.edu/transfer

Associate in Applied Science

Total Credits: 65-66

Salary information:
mstc.edu/programsalaries

Careers: Civilian Law Enforcement Employee, Conservation Enforcement, Correctional Officer, Deputy Sheriff, Homeland Security Law Enforcement Officer, Park Ranger, Police Patrol Officer, Private Security, Public Defender Investigator, State Trooper, and Telecommunicator

In general, there is growing demand for these careers. Example: Police Patrol Officers career has grown by 1% over the last two years and is expected to grow by 2% over the next 10 years. Currently 6,038 Police Patrol Officers are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTION

RELATED PROGRAM

Corrections & Community Advocacy

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

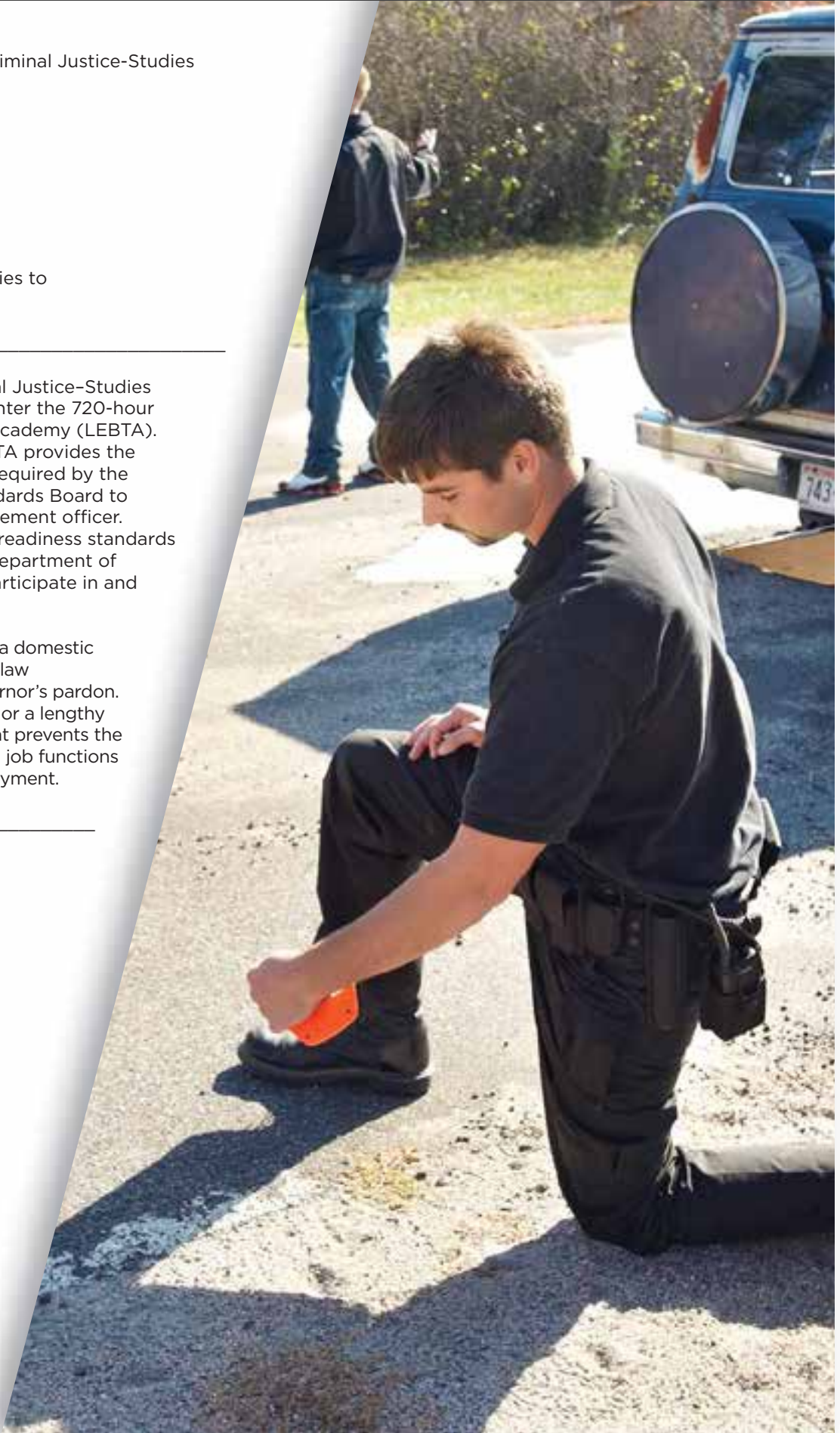
PROGRAM OUTCOMES

Employers will expect you, as a Criminal Justice-Studies graduate, to be able to:

- Think critically.
- Manage emergencies.
- Communicate effectively.
- Demonstrate professionalism.
- Conduct investigations.
- Interact with others.
- Demonstrate tactical skills (applies to occupational certifications).

Upon graduation from the Criminal Justice-Studies program, you may be eligible to enter the 720-hour Law Enforcement Basic Training Academy (LEBTA). Successful completion of the LEBTA provides the education and hands-on training required by the Wisconsin Law Enforcement Standards Board to become certifiable as a law enforcement officer. Entrance and exit physical fitness readiness standards as established by the Wisconsin Department of Justice must be met in order to participate in and complete the LEBTA.

Anyone with a felony conviction or a domestic abuse conviction cannot become a law enforcement officer without a governor's pardon. Numerous moving traffic violations or a lengthy criminal history or mental illness that prevents the applicant from performing essential job functions may hinder opportunities for employment.



Corrections/Correctional Institutions

10504176..... 3 credits

Examines the history and current trends of the correctional system in the United States. Students analyze the changing philosophies of corrections and review the programs available to offenders at various stages of their involvement in the criminal justice system. Chain of command, management practices, personnel needs, types of offenders, organizational theories, policymaking, and the role of correctional personnel are addressed. Students complete guided self-study online then gather for two hours of live classroom discussion weekly.

Prerequisite: Admission to Criminal Justice-Studies program 105045 or Corrections & Community Advocacy program 105047

Court Procedures

10504112 3 credits

Examines the court system, including procedures from incident of arrest to final disposition. The stages of a criminal trial are examined in depth. Reviews the authority of law enforcement officials to arrest and/or detain a subject. Constitutional, federal, state, and civil laws as they apply to this criminal process are presented. Victims' rights are examined.

Prerequisite: Admission to Criminal Justice-Studies program 105045 or Corrections & Community Advocacy program 105047

Criminal Investigation Theory

10504123..... 3 credits

Covers the fundamentals of criminal investigation, including the gathering of investigative information from victims and witnesses, the search and recording of crime scenes, and the techniques involved in collecting and preserving physical evidence. Includes a strong emphasis on investigative policies, procedures, and practices.

Prerequisite: Admission to Criminal Justice-Studies program 105045

Criminal Justice Ethics

10504166 3 credits

Provides students with an introduction to ethical duties and decision making dilemmas facing criminal justice professionals. Provides the basic foundations of ethical reasoning and the standards for determining sound ethical decision making. Increases the learner's application of ethical reasoning in the face of agency corruption, use of force, gender and race discrimination, due process, and duty towards others.

Prerequisite: Admission to Criminal Justice-Studies program 105045

Criminal Law for Law Enforcement

10504164 3 credits

A basic study of the structure, definitions, and most frequently used sections of the Wisconsin Criminal Code. Students learn how to apply the law and its related legal rules to practical situations and scenarios that are likely to be encountered by law enforcement officers.

Prerequisite: Admission to Criminal Justice-Studies program 105045

Criminology

10504143 3 credits

Analysis of crime as an institution, with reference to behavior of those who define, engage in, or become the victims of criminal behavior. Includes the study of theories of crime, both past and present.

Prerequisite: Admission to Criminal Justice-Studies program 105045

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Law Enforcement

10504114 3 credits

Presents an overview of the duties and responsibilities of a law enforcement officer. Explores major skills and services performed by patrol officers in order to provide students with a realistic understanding of the occupation. Students will learn basic professional police communication skills police officers use every day when interacting with victims, complainants, and witnesses. Explores investigations, traffic enforcement, the use of force including defense and arrest tactics, and firearms basics.

Prerequisite: Admission to Criminal Justice-Studies program 105045 or Corrections & Community Advocacy program 105047

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of "C" or better, or College Math 10804107 with a grade of "C" or better. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Juvenile Justice System

10504150 3 credits

Explores the juvenile justice system, including the handling of cases of children in need of protection or services or alleged to be delinquent, constitutional law issues that are relevant to juveniles, and the role of law enforcement in the handling of cases involving children. Includes contemporary issues involving juvenile justice.

Prerequisite: Admission to Criminal Justice-Studies program 105045

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Patrol Procedures

10504125..... 3 credits

Prepares students to utilize effective patrol techniques, including the use of computer information and telecommunication systems available to police agencies. Throughout this course, students have opportunity to apply learned patrol strategies while conducting low- and high-risk vehicle contacts.

Prerequisite: Admission to Criminal Justice-Studies program 105045

Report Writing for Protective Services

10504140 3 credits

Students learn how to write a variety of law enforcement reports to accurately and fairly convey necessary information, in a format appropriate for the criminal justice field. Students will also participate in criminal justice situational analysis leading to scenario construction, role playing, and video capture to formulate a broad base of available scenarios to be used in their report-writing exercises.

Prerequisite: Admission to Criminal Justice-Studies program 105045

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Wellness in Protective Services

10504144 3 credits

Students develop and apply the skills and abilities needed to deal constructively with stressors in the correctional field. Focuses on assessing individual stressors, analyzing the impact of stress, reducing stressors, and developing stress-coping mechanisms. Coping mechanisms include assertion, anger management, conflict resolution, time management, relaxation activities, and exercise and diet planning.

Prerequisite: Admission to Criminal Justice-Studies program 105045 or Corrections & Community Advocacy program 105047

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

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CUSTOMER RELATIONSHIP PROFESSIONAL

Technical Diploma

Program Code: 30-106-8

our graduates
INDEMAND

2017/2018



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CUSTOMER RELATIONSHIP PROFESSIONAL



Mid-State's Customer Relationship Professional program develops students into important members of a call center or customer service team. The program focuses on communicating with customers to help them navigate past challenges to fulfill their needs, emphasizing active listening, effective verbal communication, and customer service skills. Through hands-on projects, you will learn telephone etiquette, how to respond appropriately to customers, and how to perform quick problem-solving analysis while exceeding customer expectations.

Graduates of the Customer Relationship Professional technical diploma may advance into the Office Support Specialist program or the Administrative Professional program.

Technical Diploma

Total Credits: 12

Salary information:
mstc.edu/programsalaries

Careers: Account Representative, Client Services Specialist, Contact Center Agent, Customer Service Representative, and Customer Care Representative

In general, there is growing demand for these careers. Example: Customer Service Representative career has grown by 1% over the last two years and is expected to grow by 8% over the next 10 years. Currently 24,654 Customer Service Representatives are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

OFFICE SUPPORT SPECIALIST



Mid-State's Office Support Specialist program develops students into key members of an office team. The program emphasizes document preparation and the effective use of personal interactions and ever-changing technology to support your role as the central communications link in an office. You'll experience hands-on learning through the organization of high-profile events. You'll also learn to handle multiple projects and deadlines, manage time, solve problems, and be helpful in nature—all in high demand by employers.

Graduates of the Office Support Specialist technical diploma may advance into the Administrative Professional program.

Technical Diploma

Total Credits: 36-37

Salary information:
mstc.edu/programsalaries

Careers: Administrative Assistant, Clerk, Customer Service Representative, General Office Clerk, Office Assistant, Program Assistant, and Receptionist

In general, there is growing demand for these careers. Example: General Office Clerk has remained the same over the last 2 years and is expected to grow by 2% over the next 10 years. Currently 42,376 General Office Clerks are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

OTHER OPTIONS

RELATED PROGRAMS

Accounting, Business Management, Court Reporting, IT Network Specialist, IT Software Developer, and Marketing

For estimated tuition and fees, visit mstc.edu/programcosts.

ADMINISTRATIVE PROFESSIONAL



Graduates of Mid-State's Administrative Professional program are known for being adaptable and well prepared for today's workforce. Students learn to prepare correspondence and work with customers, prepare research reports, handle private or confidential records, and more. The program emphasizes fundamental knowledge of software applications, customer service skills, and the expert operation of a variety of office technology and equipment. You'll experience hands-on learning through the organization of high-profile events.

Associate in Applied Science

Total Credits: 68-69

Salary information:
mstc.edu/programsalaries

bachelor's degree opportunities

Lakeland University,
BA Specialized Administration

For more information and additional opportunities, go to mstc.edu/transfer

Careers: Administrative Professional, Customer Service Representative, Legal Secretary, Medical Secretary, Office Assistant, Program Assistant, Receptionist, and Secretary

In general, there is growing demand for these careers. Example: Secretary career has grown by 3% over the last two years and is expected to grow by 9% over the next 10 years. Currently 13,342 Secretaries and Administrative Assistants are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

PROGRAM OUTCOMES

Employers will expect you, as a Customer Relationship Professional graduate, to be able to:

- Demonstrate effective workplace communications.
- Maintain internal and external relationships.
- Model professionalism in the workplace.
- Demonstrate hands-on ability in the use of business hardware and software.
- Communicate orally in an effective manner.
- Demonstrate proper written and oral communications.
- Demonstrate customer service skills as a Customer Relationship Professional.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

academic career plan

Term/Year	Credits
Term/Year	Credits

SAMPLE FULL-TIME CURRICULUM OPTION

Term		12 credits
10103106	Microsoft Office-Introduction	3
10106106	Quality Customer Service	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10809172	Introduction to Diversity Studies	3
Total credits		12

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10103106	Microsoft Office-Introduction	3
10106106	Quality Customer Service	3
Term		
		6 credits
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10809172	Introduction to Diversity Studies	3
Total credits		12

course descriptions

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Microsoft Office-Introduction

10103106 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Quality Customer Service

10106106 3 credits

Addresses sensitivity in communicating with customers and co-workers. Includes international communications, teamwork, working relationships, and telephone skills.

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

DIESEL AND HEAVY EQUIPMENT TECHNICIAN

Technical Diploma

Program Code: 32-412-1

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



PROGRAM OUTCOMES

Employers will expect you, as a Diesel & Heavy Equipment Technician graduate, to be able to:

- Practice safe working procedures.
- Diagnose, service, and repair diesel powered equipment.
- Comply with federal, state, and local regulations.
- Proficiently operate tools and equipment common to the industry.
- Diagnose, service, and repair electrical systems.
- Apply theoretical concepts to mechanical equipment.

PROTECTIVE CLOTHING

Students are required to wear school uniform shirts while working in the diesel shop. Uniform shirts can be purchased from the Wisconsin Rapids campus Bookstore. Students are also required to provide and wear leather work shoes with oil-resistant soles.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



Career Development

10102130 3 credits

Prepares students for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment.

NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Drive Trains

32412312 4 credits

Provides training in the proper diagnosis and repair of clutches, manual transmissions, drive shafts and universal joints, and drive axles. Includes coverage of track-type vehicle service. The diagnostic and service procedures studied apply to the truck, construction, and heavy equipment industries.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121

Electrical Systems

32412313 4 credits

Studies the construction, function, and principles of operation of starting motors, charging systems, and controls. Covers basic electronics, including capacitance, inductance, series and parallel circuits, magnetism and Ohm's Law, wiring schematics, soldering techniques, and use of diagnostic equipment. Includes study of vehicle control and accessory systems.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121

Employment Strategies

10801199 3 credits

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation.

NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

Engine Performance & Emissions-Diesel

32412310 5 credits

Provides an introduction to ignition systems, fuel systems, air induction systems, exhaust systems, emission control systems, and engine electrical systems. Emphasizes the proper diagnosis and repair of system components as related to the truck, construction, and heavy equipment industry. A review of engine operation and related servicing is also provided.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121

Engine Repair

32412324 5 credits

Provides a general overview of engine types and operating characteristics. Emphasizes the diagnosis and repair of cylinder heads, valve train components, and engine blocks and related components. Also covers engine support systems, including lubrication, cooling, ignition, fuel, and exhaust systems.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121

Fuel Systems & Alternative Fuels

32412327 5 credits

Provides detailed coverage of the principles of operation as well as the components and diagnostic procedures for modern diesel engines. Emphasizes fuel injection and pump timing procedures.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121

Heating/AC-Diesel

32412303 3 credits

Introduces students to the theory and operation of the heating and air conditioning systems found in transportation, farm, and heavy equipment industries. Students learn how to inspect, diagnose, and repair heat and air conditioning systems found in their field. Students have the opportunity to acquire their state of Wisconsin HVAC certification through a written test and hands-on evaluation. Offers experience in installation, operation, and repair of auxiliary power units found on today's modern trucks. In addition to learning about heating and air conditioning for operator comfort, students also learn how to inspect, service, and repair refrigerated units found on today's semitrailers and shipping containers.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 and minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Intro to Electronics

10605108 2 credits

Presents a survey of electricity and electronics, including lab activities. Designed for persons required to learn some of the basics of electricity and electronics and an excellent refresher course to get back into electronics or improve a skills list. Intended for persons where electronics has become a critical core skill and/or a need exists to identify various electronic components and perform basic tests using test equipment such as multimeters. Covers concepts and applications of DC and AC electricity and some semiconductor components using basic math skills. *Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 65*

Metal Fabrication

10462116 3 credits

An introduction to structural steel and plate fabrication, sheet metal fabrication, and basic electric arc and oxyacetylene welding. Presents fabrication techniques, metal selection, layout, cutting, bending, drilling, threading, and joining. Information is presented to the student followed by lab activities to provide a hands-on experience. Emphasizes developing an understanding of tools, techniques, and safe work habits as well as the application of metal fabrication skills.

Mobile Hydraulics Repair

10462121 3 credits

Designed for students required to take a course on hydraulics found in diesel technology and heavy equipment programs. Takes a practical approach to the understanding of fluid power/hydraulic systems. Instead of concentrating on the design issues of fluid power systems, this class approaches hydraulics more like a technician would approach a system that requires maintenance or troubleshooting. Nearly all aspiring technicians receive training in this subject, which is one of seven areas of study recognized by NATEF in diesel technology. Includes a study of terminology, industrial standards, symbols, and basic circuitry design as related to fluid power. Examples are drawn from actual equipment that are relevant to the program of study, whether it be heavy truck, earth-moving, or agricultural equipment.

Preventive Maintenance-Diesel

32412305 3 credits

Provides an introduction to vehicle preventive maintenance and inspection. Focuses on maintaining and inspecting the engine system, cab and hood, electrical and electronics, and frame and chassis components. Students learn how to properly service vehicle systems and perform a visual inspection of all vehicle components. Students also learn how to properly document all maintenance and inspection findings.

Service Practices in Transportation

32404375 1 credit

Introduces the student to common tools, terminology, and service practices in the transportation service field. Covers safety, environmental concerns, and basic customer relations. Service shop management practices and the use of automated work order, parts ordering, and time management concepts are included.

Prerequisite: Admission to Automotive Technician program 324042, Automotive Maintenance Technician program 314043, or Diesel & Heavy Equipment Technician program 324121

Suspension & Steering Systems

32412309 5 credits

Highlights an analysis of construction and working principles of chassis components. Includes frames, suspension systems, steering gears and linkages, wheels and tires, and wheel alignment. Special attention is given to products used in servicing chassis components.

Prerequisite: Admission to Diesel & Heavy Equipment Technician program 324121 and minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

EARLY CHILDHOOD EDUCATION

Associate in Applied Science (AAS)

Program Code: 10-307-1

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



EARLY CHILDHOOD EDUCATION



Graduates of the Early Childhood Education program have the hands-on knowledge and skills to work confidently with young children in a variety of settings. Mid-State's program lets you work directly with teachers in early childhood educational settings and develop creative and educational activities within the teaching cycle. You'll also learn of the physical, emotional, intellectual, and social development of children spanning infancy through school age as well as how to recognize typical and exceptional patterns of growth.

Associate in Applied Science

Total Credits: 69-70

Salary information:
mstc.edu/programsalaries

Careers: Child Care Center Teacher, Early Head Start Teacher, Family Day Care Provider, Preschool Teacher, Teacher Aide-Elementary School (4- and 5-year-old Kindergarten), Teacher Aide-Exceptional Education Program, Teacher Aide-Head Start, and Teacher or Teacher Aide in a Pre-School Program

In general, there is growing demand for these careers. Example: Preschool Teachers career has grown by 2% over the last two years and is expected to grow by 6% over the next 10 years. Currently 4,988 Preschool Teachers, Except Special Education are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

For estimated tuition and fees, visit mstc.edu/programcosts.

bachelor's degree opportunities

Ashford University, BA Early Childhood Education

Cardinal Stritch University, BS Early Childhood Education

Concordia University, BA Early Childhood

Lakeland University, BA Early Childhood Education and Teacher Certification

Northland College, BS Elementary Education

UW-LaCrosse, BS Early Childhood-Middle Childhood Education

UW-Milwaukee, BS Early Childhood Education

UW-Oshkosh, BSE Professional Education Early Childhood to Middle Childhood

UW-Stevens Point, BS Early Childhood Education

UW-Stout, BS Early Childhood Education

UW-Superior, BS Elementary Education with an Early Childhood Minor

UW-Whitewater, BS Early Childhood

For more information and additional opportunities, go to mstc.edu/transfer

PROGRAM OUTCOMES

Employers will expect you, as an Early Childhood Education graduate, to be able to:

- Apply child development theory to practice.
- Cultivate relationships with children, families, and the community.
- Assess child growth and development.
- Use best practices in teaching and learning.
- Demonstrate professionalism.
- Integrate health, safety, and nutrition practices.

Students enrolling in the Early Childhood Education program will have the opportunity to complete coursework toward specific registry credentials, including preschool, infant/toddler, inclusion, and administration.

Students enrolled in practicum courses will combine classroom learning experiences with eight to twelve hours per week of purposeful experience in local early childhood centers working with children from infancy through school age.

ADDITIONAL ENTRY CRITERIA

To apply to the Early Childhood Education program, please submit the following document to Mid-State Admissions:

Criminal Background
Statement of Understanding and
Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as an early childhood education provider is available at mstc.edu/programs/early-childhood-education. Contact the disability services coordinator in the Student Services Office to receive assistance.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		21 credits
10307148	Foundations of Early Childhood Education	3
10307167	Health, Safety, & Nutrition	3
10307174	Practicum 1	3
10307178	Art, Music, & Language Arts	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Term 15-16 credits		
10307179	Child Development	3
10307188	Guiding Children's Behavior	3
10307192	Practicum 2	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
10809122	Intro to American Government	3
Term 18 credits		
10307151	Infant & Toddler Development	3
10307187	Children with Differing Abilities	3
10307194	Math, Science, & Social Studies	3
10307197	Practicum 3	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
	Elective	3
Term 15 credits		
10307166	Curriculum Planning	3
10307195	Family & Community Relationships	3
10307198	Administering an Early Childhood Education Program	3
10307199	Practicum 4	3
10809166	Intro to Ethics: Theory & Application -or-	
10809195	Economics	3
Total Credits 69-70		

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10307178	Art, Music, and Language Arts	3
10307148	Foundations of Early Childhood Ed	3
Term 6 credits		
10307179	Child Development	3
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Term 6 credits		
10307151	Infant and Toddler Development	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term 6 credits		
10307188	Guiding Children's Behavior	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term 6-7 credits		
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Term 6 credits		
10307167	Health, Safety, & Nutrition	3
10809122	Intro to American Government	3
Term 6 credits		
10307174	Practicum 1	3
10307194	Math, Science, & Social Studies	3
Term 9 credits		
10307166	Curriculum Planning	3
10307192	Practicum 2	3
10809166	Intro to Ethics: Theory & Application -or-	
10809195	Economics	3
Term 9 credits		
10307197	Practicum 3	3
10307187	Children with Differing Abilities	3
	Elective	3
Term 9 credits		
10307195	Family & Community Relationships	3
10307198	Administering an Early Childhood Education Program	3
10307199	Practicum 4	3
Total credits 69-70		

Administering an Early Childhood Education Program 10307198..... 3 credits

Focuses on the administration of an early childhood education (ECE) program. Students learn to integrate strategies that support diversity and anti-bias perspectives, analyze the components of an ECE facility design an ECE program, analyze the aspects of personnel supervision, outline financial components of an ECE program, apply laws and regulations related to an ECE facility, and advocate for the early childhood profession.

Prerequisite: Completion of twelve Early Childhood Education (307) credits

Art, Music, & Language Arts

10307178..... 3 credits

Focuses on beginning-level curriculum development in the specific content areas of art, music, and language arts. Students learn to integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play as it relates to art, music, and language arts; establish a developmentally appropriate environment for art, music, and language arts; develop activity plans that promote child development and learning; analyze caregiving routines as curriculum; create developmentally appropriate language, literature, and literacy activities; create developmentally appropriate art activities; create developmentally appropriate music and movement activities.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Child Development

10307179..... 3 credits

Examines child development within the context of the early childhood education setting. Students learn to analyze social, cultural, and economic influences on child development; summarize child development theories; analyze development of children ages 3-8; summarize the methods and designs of child development research; analyze the role of heredity and the environment; and examine the role of brain development in early learning (ages 3-8).

Children with Differing Abilities

10307187..... 3 credits

Focuses on the child with differing abilities in an early childhood education setting. Students learn to integrate strategies that support diversity and anti-bias perspectives; provide inclusive programs for young children; apply legal and ethical requirements including but not limited to ADA and IDEA; work collaboratively through the consultation process to embed intervention in natural-based settings; differentiate between typical and exceptional development; analyze the differing abilities of children with physical, cognitive, health/medical, communication, and/or behavioral/emotional disorders; work collaboratively with community and professional resources; utilize an Individualized Education Program (IEP/IFSP) for children with developmental differences; adapt curriculum to meet the needs of children with developmental differences; and cultivate partnerships with families who have children with developmental differences.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Curriculum Planning

10307166..... 3 credits

Examines the components of curriculum planning in early childhood education. Students learn to integrate strategies that support diversity and anti-bias perspectives, examine the critical role of play as it relates to curriculum planning, establish a developmentally appropriate environment, integrate developmentally appropriate practice (DAP) into curriculum, develop activity plans that promote child development and learning, develop curriculum plans that promote child development and learning across all content areas, and analyze early childhood curriculum models.

Prerequisite: Art, Music, & Language Arts 10307178 or Math, Science, & Social Studies 10307194

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Economics

10809195 3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/ or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

Family & Community Relationships

10307195..... 3 credits

Examines the role of relationships with family and community in early childhood education. Students learn to implement strategies that support diversity and anti-bias perspectives when working with families and community; analyze contemporary family patterns, trends, and relationships; utilize effective communication strategies; establish ongoing relationships with families; advocate for children and families; and work collaboratively with community resources.

Foundations of Early Childhood Education

10307148..... 3 credits

An introduction to the early childhood profession. Students learn to integrate strategies that support diversity and anti-bias perspectives, investigate the history of early childhood education, examine regulatory requirements for early childhood education programs in Wisconsin, summarize types of early childhood education settings, identify the components of a quality early childhood education program, summarize responsibilities of early childhood education professionals, and explore early childhood curriculum models.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Guiding Children's Behavior

10307188..... 3 credits

Examines positive strategies to guide children's behavior in the early childhood education setting. Student learn to integrate strategies that support diversity and anti-bias perspectives, summarize early childhood guidance principles, analyze factors that affect the behavior of children, practice positive guidance strategies, develop guidance strategies to meet individual needs, and create a guidance philosophy. This course meets the requirements for the Pyramid Model training.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Health, Safety, & Nutrition

10307167..... 3 credits

Examines the topics of health, safety, and nutrition within the context of the early childhood educational setting. Students learn to integrate strategies that support diversity and anti-bias perspectives; follow governmental regulations and professional standards as they apply to health, safety, and nutrition; provide a safe early childhood program; provide a healthy early childhood program; provide a nutritionally sound early childhood program; adhere to child abuse and neglect mandates; apply sudden infant death syndrome (SIDS) risk reduction strategies; apply strategies to prevent shaken baby syndrome (SBS); and incorporate health, safety, and nutrition concepts into the children's curriculum.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Infant & Toddler Development

10307151..... 3 credits

A study of infant and toddler development as it applies to an early childhood education setting. Students learn to integrate strategies that support diversity and anti-bias perspectives, analyze development of infants and toddlers (conception to three years), correlate prenatal and postnatal conditions with development, summarize child development theories, analyze the role of heredity and the environment, examine culturally and developmentally appropriate environments for infants and toddlers, examine the role of brain development in early learning (conception through age three), and examine caregiving routines as curriculum.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of "C" or better, or College Math 10804107 with a grade of "C" or better. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Math, Science, & Social Studies

10307194..... 3 credits

Focuses on beginning-level curriculum development in the specific content areas of math, science, and social studies. Students learn to integrate strategies that support diversity and anti-bias perspectives; examine the critical role of play as it relates to math, science, and social studies; establish a developmentally appropriate environment for math, science, and social studies; develop activity plans that promote child development and learning; create developmentally appropriate science activities; and create developmentally appropriate math activities; create developmentally appropriate social studies activities.

Prerequisite: Art, Music, & Language Arts 10307178 or Child Development 10307179

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Practicum 1

10307174 3 credits

Presents and applies the following competencies: document children's behavior; explore the standards for quality early childhood education; explore strategies that support diversity and anti-bias perspectives; implement activities developed by the co-op teacher/instructor/student; demonstrate professional behaviors; practice caregiving routines as curriculum; practice positive interpersonal skills with children and adults; analyze how Wisconsin Early Learning Standards provide a framework of guiding principles, developmental expectations, and program and performance standards to delineate the five developmental domains that embody delivery of quality education and care to young children; incorporate Wisconsin Early Learning Standards with the principles of developmentally appropriate practice, intentionality, and the teaching cycle to examine child development; evaluate program integration of Wisconsin Early Learning Standards into the teaching cycle of ongoing assessment, planning and curriculum goals, and implementation; identify specific goals and learning and assessment activities to promote the development of a focus child utilizing the Wisconsin Early Learning Standards; and develop a plan for child learning utilizing the performance standards, developmental continuum, and developmental domains from the WMELS that is based on experiential learning.

Prerequisite: Admission to Early Childhood Education program 103071, students must meet the state administrative code requirements to be in an Early Childhood Education setting (including both prior coursework and Caregiver Background Check), and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34; Corequisite: Health, Safety, and Nutrition 10307167

Practicum 2

10307192..... 3 credits

Presents and applies the following course competencies in an actual child care setting: identify children's growth and development, maintain the standards for quality early childhood education, practice strategies that support diversity and anti-bias perspectives, implement student teacher-developed activity plans, identify the elements of a developmentally appropriate environment, implement positive guidance strategies, demonstrate professional behaviors, utilize caregiving routines as curriculum, utilize positive interpersonal skills with children, and utilize positive interpersonal skills with adults.

Prerequisites: Admission to Early Childhood Education program 103071 and Practicum 1 10307174; Corequisite: Foundations of Early Childhood Education 10307148

Practicum 3

10307197 3 credits

Presents and applies the following competencies in an actual child care setting: assess children's growth and development, implement the standards for quality early childhood education, integrate strategies that support diversity and anti-bias perspectives, build meaningful curriculum, provide a developmentally appropriate environment, facilitate positive guidance strategies, evaluate one's own professional behaviors and practices, lead caregiving routines as curriculum; utilize positive interpersonal skills with children, and utilize positive interpersonal skills with adults.

Prerequisite: Admission to Early Childhood Education program 103071 and Practicum 2 10307192. Students must meet the state administrative code requirements to be in an early childhood education setting (including both prior coursework and Caregiver Background Check).

Practicum 4

10307199 3 credits

Presents and applies the following competencies in an actual child care setting: analyze children's growth and development based on assessment; integrate strategies that support diversity and anti-bias perspectives; promote professional behaviors and practices; implement meaningful curriculum; create respectful, reciprocal relationships; evaluate early childhood education programs for quality; and explore professional options in early childhood education. Prerequisite: Practicum 3 10307197

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ELECTRICAL POWER ENGINEERING TECHNICIAN

Associate in Applied Science (AAS)

Program Code: 10-605-5

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



ELECTRICAL POWER ENGINEERING TECHNICIAN



Unique in the Wisconsin Technical College System, Mid-State's Electrical Power Engineering Technician program prepares graduates to maintain vital energy systems that harness fossil, hydro, and nuclear energy sources. You'll learn the principles of high-voltage energy transmission and how to analyze instrument readings. You also learn how to locate equipment, design wiring layouts, route new power lines, specify materials, troubleshoot equipment and systems, and much more. You'll gain hands-on experience operating a bucket truck and take field trips to electrical power generation facilities, dispatch centers, substations, and motor repair facilities.

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Associate in Applied Science

Total Credits: 67

Salary information:
mstc.edu/programsalaries

Careers: Distribution Estimator; Electrical and Electronics Repairers–Powerhouse, Substation, and Relay; Engineering Technician; First Class Meter Person; Instrument Technician; Nuclear Equipment Attendant; Power Plant Operator; and Transmission Design Technician

In general, there is growing demand for these careers. Example: Electrical and Electronics Repairers–Powerhouse, Substation, and Relay career has grown by 8% last two years but is expected to grow by 8% over the next 10 years. Currently 95 Electrical and Electronics Repairers, Powerhouse, Substation, and Relay are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAM

Civil Engineering Technology-Highway Technician and Industrial Automation & Controls Engineering Technology

RELATED APPRENTICESHIP

Metering Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

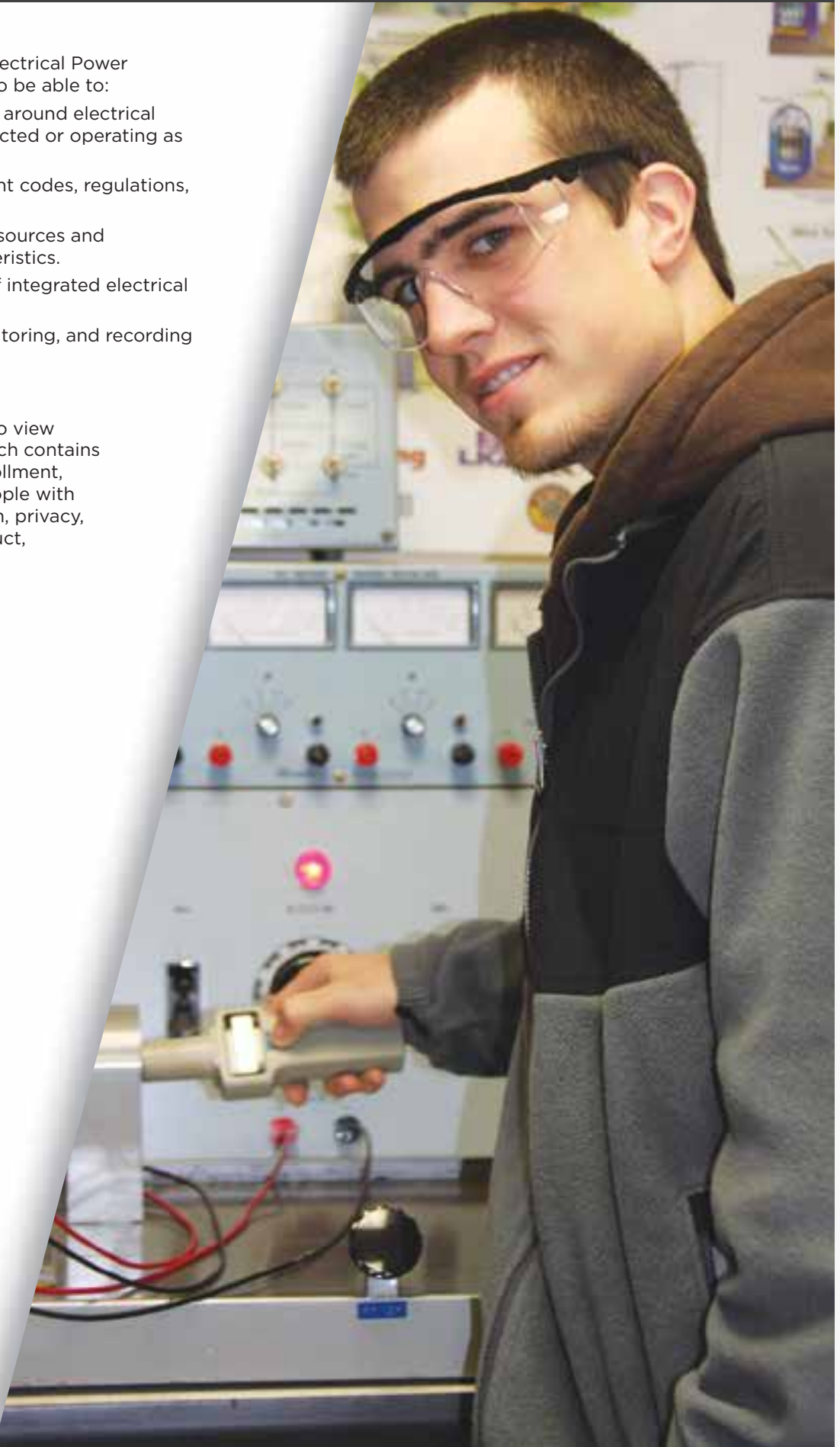
PROGRAM OUTCOMES

Employers will expect you, as an Electrical Power Engineering Technician graduate, to be able to:

- Demonstrate safe work practices around electrical power systems, whether self-directed or operating as part of a team.
- Interpret and comply with relevant codes, regulations, and standards.
- Identify various electrical power sources and differentiate operational characteristics.
- Assess and describe operation of integrated electrical power delivery systems.
- Apply power measurement, monitoring, and recording techniques, and explain output.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



Electrical Machines

10605127..... 3 credits

Teaches the fundamentals of generators and motors. Covers DC and AC generators and motors.

Prerequisite: Electrical Circuits I 10605105 or Intro to Electronics 10605108

Electrical Power Distribution

10605125..... 4 credits

Designed to teach the principles of distribution systems and substations. Covers wire capacity, sag, guying, supporting structures, troubleshooting, insulators, lightning arresters, switches, and recloser and power circuit breakers. Students apply distribution standards of an actual utility to the building and design of a power line on paper.

Prerequisites: Electrical Circuits I 10605105 and Electrical Power Generation 10605122

Electrical Power Generation

10605122..... 4 credits

A study of equipment and facilities used in the production of electricity. Topics include fuels, prime mover turbines, and generators. Emphasizes safety controls, efficient production, and operational procedures. Concludes with computer-simulated operation of a large power station boiler. It is recommended that students take Electrical Power Science 10605120 prior to taking this course.

Electrical Power Science

10605120 3 credits

An introduction to the field of electrical power technology. Covers the power generation process, transmission techniques, and networks. Topics include prime energy sources, converting raw energy into electrical energy, metering electricity, and disbursing electrical energy from generation plant to consumer.

Electrical Power System Protective Relaying

10605170 4 credits

A study of controlling devices and systems utilized in generation, distribution, and transmission of electricity. Students study instrument transformers, protective relays, protective systems, power system standards, drawing conventions, equipment rating terminology, insulation, circuit interrupting devices, grounding, and power system faults.

Prerequisite: Electrical Machines 10605127

Electrical Power Transmission

10605124 3 credits

Covers the basic principles of high-voltage transmission of electrical energy. Introduces students to the concepts of active, reactive, and apparent power in electric power technology. Discusses basic properties of single- and three-phase transformers and their importance to power transmission. The behavior of ideal and practical (or non-ideal) transformers are used as a building block to explain the electrical function of a transformer in many transmission circuits. Discusses basic mechanical (supporting structures, line sag, galloping and the effect of weather) and electrical (e.g., corona, pollution, insulation, lightning) requirements that must be met for successful power transmission over large distances. Approximately 50 percent of the course is spent in the laboratory working with equipment that simulates power transmission.

Prerequisites: Electrical Machines 10605127 and Electrical Power Distribution 10605125

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

General Physics 1

10806154 4 credits

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation, and applications. Topics include unit conversion and analysis, vectors, translational and rotational kinematics, translational and rotational dynamics, heat and temperature, and harmonic motion and waves.

Corequisite: Trigonometry with Applications 10804196

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to AutoCAD

10623106 **2 credits**

This introductory course in computer-aided drafting (CAD) using AutoCAD software provides foundation skills in using CAD software to create and print two-dimensional technical drawings. This course is available to students in any program. Computer skills and prior knowledge of drawing/drafting techniques is recommended.

Intro to Ethics: Theory & Application

10809166 **3 credits**

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology

10809198 **3 credits**

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Oral/Interpersonal Communication

10801196 **3 credits**

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Programmable Logic Controllers-Beginning

10605117 **3 credits**

An overview of programmable logic controllers (PLCs) that provides a foundation of knowledge of the

programming techniques, operation, and maintenance of PLCs used in typical industrial automation.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 65

Problem Solving & Critical Thinking

10623100 **1 credit**

Centers around logical approaches to problem solving through defining the problem, identifying contributing factors, creating and testing plans, and reviewing results. Includes problem solving from variety of perspectives and touches on approaches that are mathematical and logical and consider risk.

Semiconductor Technology

10605115 **3 credits**

Presents semi-conductor principles with emphasis on practical applications. After reviewing diode and transistor characteristics, studies bias stabilizing techniques followed by an introduction to transistor amplifiers.

Corequisite: Electrical Circuits II 10605110

Speech

10801198 **3 credits**

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a “C” or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a “C” or better or equivalent.

Trigonometry with Applications

10804196 **3 credits**

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles, complex numbers, DeMoivre's Theorem, polar coordinates, and vectors.

Prerequisite: Intermediate Algebra with Applications 10804118, with a grade of “C” or better

Written Communication

10801195 **3 credits**

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

EMERGENCY MEDICAL TECHNICIAN

Technical Diploma

Program Code: 30-531-3

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu

EMERGENCY MEDICAL TECHNICIAN



The Emergency Medical Technician (EMT) program at Mid-State prepares students with the knowledge and skills needed to work as an entry-level EMT. This hands-on 185-hour program consists of classroom lectures, practical skill labs, laboratory simulations, and pre-hospital clinical experiences. Successfully completing the program qualifies you to take the National Registry of EMT's certification exam required to apply for state licensure.

Graduates of the Emergency Medical Technician technical diploma may advance into either the EMT-Paramedic program or Paramedic Technician program.

Technical Diploma

Total Credits: 5

Salary information:
mstc.edu/programsalaries

Careers: Emergency Medical Technician

In general, there is growing demand for these careers. Example: career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 3,158 Emergency Medical Technicians and Paramedics are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

OTHER OPTION

RELATED PROGRAM

Fire Protection Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

paramedic technician career pathway

EMT-PARAMEDIC



Mid-State's EMT-Paramedic program provides the knowledge and skills needed to work competently as an entry-level EMT-paramedic. Students enter a joint core course cohort with Paramedic Technician degree students. Graduates earn a technical diploma upon successful completion of this program. This program consists of classroom lectures, practical skills lab, laboratory simulations, and hospital and pre-hospital clinical experiences. Upon successful completion, you will earn certifications in Advanced Cardiac Life Support, Prehospital Trauma Life Support, and Pediatric Advanced Life Support and be eligible to take the National Registry of Emergency Medical Technician written and practical examinations.

Technical Diploma

Total Credits: 38

Salary information:
mstc.edu/programsalaries

Careers: Emergency Medical Technician and Paramedic

In general, there is growing demand for these careers. Example: career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 3,158 Emergency Medical Technicians and Paramedics are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

PARAMEDIC TECHNICIAN



Mid-State's Paramedic Technician program prepares students with the knowledge and skills to work competently as an entry-level EMT-Paramedic. For this associate degree program students will complete two semesters of general and technical studies as well as two semesters of the core paramedic courses in a joint cohort with students in the EMT-Paramedic program. You will learn prehospital skills in the classroom, skills laboratory, hospital, and prehospital settings. Upon successful completion, you will earn certifications in Advanced Cardiac Life Support, Prehospital Trauma Life Support, and Pediatric Advanced Life Support and be eligible to take the National Registry written and practical examinations.

Associate in Applied Science

Total Credits: 66

Salary information:
mstc.edu/programsalaries

Careers: Emergency Medical Technician and Paramedic

In general, there is growing demand for these careers. Example: career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 3,158 Emergency Medical Technicians and Paramedics are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

bachelor's degree opportunities

UW-Oshkosh,
BAS Fire and
Emergency Response
Management

UW-Stevens Point
BS Health
Science-Health
Care Administration

For more
information
and additional
opportunities, go to
mstc.edu/transfer

PROGRAM OUTCOMES

Employers will expect you, as an Emergency Medical Technician graduate, to be able to:

- Demonstrate entry-level knowledge and skills required for State of Wisconsin EMT licensure.
- Accurately assess and provide appropriate pre-hospital basic life support treatment to ill and injured patients in a professional and competent manner.

ADDITIONAL ENTRY CRITERIA

To apply to the Emergency Medical Technician program, please submit the following document to Mid-State Admissions:

Criminal Background Statement of Understanding and Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as an emergency medical technician is available at mstc.edu/programs/emergency-medical-technician. Contact the disability services coordinator in the Student Services Office to receive assistance.

CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work and current health care provider level CPR certification to a private vendor. Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the course and will not be able to advance in the program.

Prior to beginning a clinical experience in a health care agency or ambulance service, students must:

- Provide evidence of completion of the required health work within one month following the start of EMT Foundations (10531940).
- Hold a Department of Health Services EMS Training Center Training Permit at the EMT level.
- Provide evidence of current CPR at the health care professional level by a CPR organization specified under s. DHS 110.17(1).
- Obtain the required uniform for clinical experiences.
- Assume responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

PROGRAM PROGRESSION

In order to be eligible to take the National Registry of Emergency Medical Technician's examination, students must:

- Receive a minimum grade of "C" in the Emergency Medical Technician program.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term	3 credits
10531940 EMT Foundations	3
Term	2 credits
10531941 EMT Applications	2
Total credits 5	

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

academic career plan

Term/Year	Credits

course descriptions

EMT Applications

10531941..... 2 credits
Course covers the bulk of the Emergency Medical Technician certification course to include the handling of cervical and spine injuries, burn injuries, heart- and breathing-related problems, shock, and other trauma injuries. Includes several lab days to practice and perfect skills, clinical time, and extensive hands-on activities. Prepares students for national certification testing for EMT. To maintain National Registry certification eligibility this course must be finished the semester following the completion of EMT Foundations.
Prerequisite: EMT Foundations 10531940

EMT Foundations

10531940 3 credits
Covers the basics of the Emergency Medical Technician certification course to include CPR, airways, anatomy, hazmat response requirements, lifting and moving patients, incident command, and other technical information. It is the first part of a two-course system to prepare students for national certification testing for EMT.
Prerequisite: Admission to Paramedic Technician 105311; OR Emergency Medical Technician program 305313 and recommended minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

EMERGENCY SERVICES MANAGEMENT

Associate in Applied Science (AAS)

Program Code: 10-503-3

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



EMERGENCY SERVICES MANAGEMENT



Mid-State's Emergency Services Management program will strengthen and advance the knowledge and skills needed for firefighters and paramedics to become supervisors. The program focuses on topics such as personnel management, risk management, OSHA, legal aspects, and community relations. Fire and EMS tracks are available to allow students an opportunity to pursue additional knowledge in their area of interest or career path. This program is online, thus the experiences will be different from a traditional course. Activities in class will strengthen collaboration, problem-solving, critical thinking, and research.

**bachelor's
degree
opportunities**

For more information, visit mstc.edu/transfer

Associate in Applied Science

Total Credits: 60

Salary information:
mstc.edu/programsalaries

Careers: Assistant Chief, Captain, Chief, Deputy Chief, EMS Supervisor, Fire Supervisor, Lieutenant, Municipal Fire Fighting and Prevention Supervisor, and Relief Officer

In general, there is growing demand for these careers. Example: Municipal Fire Fighting and Prevention Supervisor career has grown by 1% over the last two years and is expected to grow by 2% over the next 10 years. Currently 369 Municipal Fire Fighting and Prevention Supervisors are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

**approved transfer
college credit**

dual credit

**credit by
examination**

**credit for military or
work experience**

OTHER OPTIONS

RELATED PROGRAMS

Emergency Medical Technician, EMT Paramedic, Fire Protection Technician, and Paramedic Technician

**For estimated tuition and fees,
visit mstc.edu/programcosts.**

PROGRAM OUTCOMES

Employers will expect you, as an Emergency Services Management graduate, to be able to:

- Demonstrate the professional responsibilities of a fire or emergency services manager.
- Demonstrate critical and creative thinking in the problem-solving process.
- Apply research and best practices in the fire or emergency services professions.
- Demonstrate the professional attributes necessary for a fire or emergency services manager to lead effectively.
- Apply the legal, ethical, and regulatory standards that relate to the fire or emergency services.

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a fire protection technician is available at mstc.edu/programs/emergency-services-management. Contact the disability services coordinator in the Student Services Office to receive assistance.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		16 credits
10503102	Intro to Emergency Services	5
10503121	Emergency Services Safety and Survival	2
10503143	Building Construction for Fire Protection -or-	
10531170	Intro to Evidence-Based EMS	3
10546100	Essential Concepts for Health and Wellness	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3

Term		16 credits
10503122	Principles of Emergency Services Administration	4
10503123	Occupational Safety and Health for Emergency Services	3
10503195	Fire Behavior & Combustion -or-	
10531171	EMS Leadership Challenges	3
10804107	College Mathematics	3
10809166	Intro to Ethics: Theory & Application	3

Term		15 credits
10503124	Emergency Services Instructor	3
10503125	Personnel Management for Emergency Services	3
10503126	Legal Aspects of Emergency Services	3
10503127	Community Risk Reduction	3
10809198	Intro to Psychology	3

Term		13 credits
10503128	Public Information and Community Relations	3
10503156	Strategies, Tactics, & Incident Management -or-	
10531172	Supervision of EMS Special Operations	4
10801197	Technical Reporting	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3

Total credits 60

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

SAMPLE PART-TIME CURRICULUM OPTION

Term		11 credits
10503102	Intro to Emergency Services	5
10503143	Building Construction for Fire Protection -or-	
10531170	Intro to Evidence-Based EMS	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3

Term		7 credits
10503122	Principles of Emergency Services Administration	4
10503195	Fire Behavior & Combustion -or-	
10531171	EMS Leadership Challenges	3

Term		5 credits
10503121	Emergency Services Safety and Survival	2
10546100	Essential Concepts for Health and Wellness	3

Term		9 credits
10503123	Occupational Safety and Health for Emergency Services	3
10804107	College Mathematics	3
10809166	Intro to Ethics: Theory & Application	3

Term		9 credits
10503124	Emergency Services Instructor	3
10503125	Personnel Management for Emergency Services	3
10809198	Intro to Psychology	3

Term		7 credits
10503156	Strategies, Tactics, & Incident Management -or-	
10531172	Supervision of EMS Special Operations	4
10801197	Technical Reporting	3

Term		6 credits
10503126	Legal Aspects of Emergency Services	3
10503127	Community Risk Reduction	3

Term		6 credits
10503128	Public Information and Community Relations	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3

Total credits 60

Building Construction for Fire Protection

10503143..... 3 credits

Provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations, and operating at emergencies.

Prerequisite: Admission to Fire Protection Technician Program 105032 or Emergency Services Management Program 105035

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Community Risk Reduction

10503127..... 3 credits

Prepares the student to understand the assessment of community risk, the analysis of risk, risk communication, risk problem-solving, and mitigation efforts.

Prerequisite: Intro to Emergency Services 10503102

Emergency Services Instructor

10503124..... 3 credits

Introduces the emergency services professional to the education system as it relates to fire and EMS education. Students explore issues in curriculum development, teaching, program direction, and development.

Prerequisite: Intro to Emergency Services 10503102

Emergency Services Safety and Survival

10503121 2 credits

Broadens the scope of the national firefighter life safety initiatives and emphasizes their importance at the supervisory and managerial levels. The life safety initiatives are examined from firefighter and EMS provider perspectives.

Prerequisite: Admission to Emergency Services Management Program 105035

EMS Leadership Challenges

10531171..... 3 credits

Explores the unique challenges that face EMS leaders in today's environment. Emphasizes key issues such as recruitment, retention, education, and mental health.

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Essential Concepts for Health and Wellness

10546100 3 credits

An introductory course focusing on basic health and wellness promotion principles at the individual level. Basic principles include physical, mental, and spiritual. Students explore a holistic view of health and wellness concepts covering healthy lifestyle choices, managing stress, individual wellness perspective and how economics can positively and negatively impact the health and wellness of an individual.

Prerequisite: Admission to Health and Wellness Promotion program 105462 and minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Fire Behavior & Combustion

10503195..... 3 credits

Explores the theories and fundamentals of how and why fires start, spread, and are controlled.

Prerequisite: Building Construction for Fire Protection 10503143 or Intro to Emergency Services 10503102

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55-80 on their Accuplacer Reading Comprehension, or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Emergency Services

10503102 5 credits

This course is fulfilled only through credit transfer or credit for prior learning. In order to receive this credit, the student must possess either Wisconsin Firefighter 1 certification (or out-of-state equivalent) or certification as an emergency medical technician or higher.

Prerequisite: Admission to Emergency Services Management program 105035

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Evidence-Based EMS

10531170 3 credits

Examines evidence-based medicine and its application to EMS operations. Topics of study include airway management, cardiac resuscitation, prehospital ultrasound, dispatch policies, and others.

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Diversity Studies

10809172 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Legal Aspects of Emergency Services

10503126 3 credits

Addresses the federal, state, and local laws that regulate emergency services and includes a review of national standards, regulations, and consensus standards.

Prerequisite: Intro to Emergency Services 10503102

Occupational Safety and Health for Emergency Services

10503123 3 credits

Introduces the basic concepts of occupational health and safety as it relates to emergency services organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations.

Prerequisite: Intro to Emergency Services 10503102

Personnel Management for Emergency Services

10503125 3 credits

Examines personnel administration and the development of human resources. Topics of study include personnel management, organizational development, productivity, recruitment and selection, performance management systems, discipline, and collective bargaining.

Prerequisite: Intro to Emergency Services 10503102

**Principles of Emergency Services Administration
10503122..... 4 credits**

Demonstrates the importance of the following skills necessary to manage and lead a fire and emergency services department through the challenges and changes of the 21st century: persuasion and influence, accountable budgeting, anticipation of challenges and the need for change, and using specific management tools for analyzing and solving problems.

Prerequisite: Intro to Emergency Services 10503102

**Public Information and Community Relations
10503128..... 3 credits**

Introduces the emergency services professional to the benefits of community information and community relations. Students explore issues in marketing, developing the message, identifying the audience, developing programs, and creating press releases.

Prerequisite: Intro to Emergency Services 10503102

**Strategies, Tactics, & Incident Management
10503156..... 4 credits**

Provides the principles of fire ground control through use of personnel, equipment, and extinguishing agents.

Prerequisite: Firefighting Principles 10503142 or Intro to Emergency Services 10503102

**Supervision of EMS Special Operations
10531172 4 credits**

Explores the supervisor's role in special EMS operations, such as triage, mass casualty incidents, rehabilitation, and operating in tactical environments.

**Technical Reporting
10801197 3 credits**

The student prepares and presents oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course.

Prerequisite: Written Communication 10801195 with a grade of "C" or better, or English Composition I 10801136 with a grade of "C" or better. Proficiency in word processing skills recommended.

**Written Communication
10801195 3 credits**

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

EMT-PARAMEDIC

Technical Diploma

Program Code: 31-531-1

our graduates
INDEMAND

2017/2018

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EMT-PARAMEDIC



Mid-State's EMT-Paramedic program provides the knowledge and skills needed to work competently as an entry-level EMT-paramedic. Students enter a joint core course cohort with Paramedic Technician degree students. Graduates earn a technical diploma upon successful completion of this program. This program consists of classroom lectures, practical skills lab, laboratory simulations, and hospital and pre-hospital clinical experiences. Upon successful completion, you will earn certifications in Advanced Cardiac Life Support, Prehospital Trauma Life Support, and Pediatric Advanced Life Support and be eligible to take the National Registry of Emergency Medical Technician written and practical examinations.

Technical Diploma

Total Credits: 38

Salary information:
mstc.edu/programsalaries

Careers: Emergency Medical Technician and Paramedic

In general, there is growing demand for these careers. Example: career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 3,158 Emergency Medical Technicians and Paramedics are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

EMERGENCY MEDICAL TECHNICIAN



The Emergency Medical Technician (EMT) program at Mid-State prepares students with the knowledge and skills needed to work as an entry-level EMT. This hands-on 185-hour program consists of classroom lectures, practical skill labs, laboratory simulations, and pre-hospital clinical experiences. Successfully completing the program qualifies you to take the National Registry of EMT's certification exam required to apply for state licensure.

Graduates of the Emergency Medical Technician technical diploma may advance into either the EMT-Paramedic program or Paramedic Technician program.

Technical Diploma

Total Credits: 5

Salary information:
mstc.edu/programsalaries

Careers: Emergency Medical Technician

In general, there is growing demand for these careers. Example: career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 3,158 Emergency Medical Technicians and Paramedics are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

OTHER OPTIONS

RELATED PROGRAM

Fire Protection Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as an EMT-Paramedic graduate, to be able to:

- Prepare for incident response and EMS operations.
- Integrate pathophysiological principles and assessment findings for a variety of patient encounters.
- Demonstrate paramedic skills associated with established standards and procedures for a variety of patient encounters.
- Communicate effectively with others.
- Demonstrate professional behavior.
- Meet state and national competency requirements for paramedic credentialing.

The EMT-Paramedic program contains the same core courses (10-531) as the Associate Degree Paramedic Technician program. Completion of the Emergency Medical Technician program is required prior to beginning the Paramedic Technician core courses.

EMT-Paramedic is an 1,150-hour program based upon the US Department of Transportation Administration/Wisconsin Bureau Local Health Support and EMS curriculum.

ADDITIONAL ENTRY CRITERIA

To apply to the EMT-Paramedic program, please submit the following documents to Mid-State Admissions:

Criminal Background Statement of Understanding and Release of Information form

Submit a current Wisconsin EMT license

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as an EMT-paramedic is available at mstc.edu/programs/emergency-medical-technician. Contact the disability services coordinator in the Student Services Office to receive assistance.

CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work and current health care provider level CPR certification to a private vendor. Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the course and will not be able to advance in the program.

Prior to beginning a clinical experience in a health care agency or ambulance service, students must:

- a. Provide evidence of completion of the required health work within one month following the start of EMS Fundamental (10531911).
- b. Hold a current State of Wisconsin EMT license.
- c. Hold a Department of Health Services EMS Training Center Training Permit at the paramedic level.
- d. Provide evidence of current CPR at the health care professional level by a CPR organization specified under s. DHS 110.17(1).
- e. Obtain the required uniform for clinical experiences.
- f. Assume responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

PROGRAM PROGRESSION

In order to maintain a passing status and progress in the EMT-Paramedic program, students must receive a grade of "C" or better in each of the paramedic core courses.

Failure to obtain a grade of "C" in any core course will prevent a student from progressing onto the next course in the sequence until they have retaken the course and achieved a grade of "C" or better.

This requirement also applies to the last class in the sequence, as a grade of "C" or better is required in all courses in order to retain eligibility to take the National Registry exam.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		20 credits
10531911	EMS Fundamental	2
10531912	Paramedic Medical Principles	4
10531913	Patient Assessment Principles	3
10531914	Prehospital Pharmacology	3
10531915	Paramedic Respiratory Management	2
10531917	Paramedic Clinical/Field 1	3
10531918	Advanced Resuscitation	1
10531955	Paramedic Cardiology 1	2

Term		18 credits
10531919	Paramedic Medical Emergencies	4
10531920	Paramedic Trauma	3
10531921	Special Patient Populations	3
10531922	EMS Operations	1
10531923	Paramedic Capstone	1
10531956	Paramedic Cardiology 2	2
10531957	Paramedic Field Experience	3
10531958	Paramedic Field Leadership	1

Total credits 38

SAMPLE PART-TIME CURRICULUM OPTION

Term		9 credits
10531911	EMS Fundamental	2
10531912	Paramedic Medical Principles	4
10531913	Patient Assessment Principles	3

Term		10 credits
10531914	Prehospital Pharmacology	3
10531915	Paramedic Respiratory Management	2
10531955	Paramedic Cardiology 1	2
10531917	Paramedic Clinical/Field 1	3

Term		2 credits
10531956	Paramedic Cardiology 2	2

Term		11 credits
10531918	Advanced Resuscitation	1
10531919	Paramedic Medical Emergencies	4
10531920	Paramedic Trauma	3
10531957	Paramedic Field Experience	3

Term		6 credits
10531921	Special Patient Populations	3
10531922	EMS Operations	1
10531923	Paramedic Capstone	1
10531958	Paramedic Field Leadership	1

Total credits 38

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.



academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Advanced Resuscitation

10531918.....1 credit

By teaching advanced cardiac life support (ACLS) and pediatric advanced life support (PALS) methodologies and protocols, this course prepares the paramedic student to integrate comprehensive knowledge of causes and pathophysiology into the management of shock, respiratory failure, respiratory arrest, cardiac arrest, and peri-arrest states. Emphasizes early intervention to prevent respiratory and/or cardiac arrest if possible.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

EMS Fundamental

10531911 2 credits

Provides the paramedic student with comprehensive knowledge of EMS systems, safety, well-being, legal issues, and ethical issues, with the intended outcome of improving the health of EMS personnel, patients, and the community. Students obtain fundamental knowledge of public health principles and epidemiology as related to public health emergencies, health promotion, and illness/injury prevention. Introduces students to comprehensive anatomical and medical terminology and abbreviations with the aim of fostering the development of effective written and oral communications with colleagues and other healthcare professionals.

Prerequisites: Admission to Paramedic Technician 105311 or EMT-Paramedic 315311 and Wisconsin Emergency Medical Technician (or higher) license or a current National Registry of EMTs certification at the Emergency Medical Technician level or higher

EMS Operations

10531922.....1 credit

Provides paramedic students with the knowledge of operational roles and responsibilities to ensure patient,

public, and EMS personnel safety.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Capstone

105319231 credit

Provides students with a final opportunity to incorporate their cognitive knowledge and psychomotor skills through labs and scenario-based practice and evaluations prior to taking the National Registry written and practical examinations.

Technical skills attainment (TSA) for each student will be compiled and/or documented within this course as required by the DHS-approved paramedic curriculum.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Cardiology 1

10531955..... 2 credits

Provides basic knowledge to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment for the patient with cardiovascular disease.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Cardiology 2

10531956..... 2 credits

Teaches the paramedic student knowledge and skills to integrate assessment findings with principles of cardiovascular anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a variety of cardiovascular complaints.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Clinical/Field 1

10531917..... 3 credits

Enhances student learning through the practice of paramedicine in field and healthcare environment experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course.

Prerequisite: Admission to Paramedic Technician 105311 or EMT-Paramedic 315311, Advanced Prehospital Pharmacology 10531914, and a current Wisconsin license at the Emergency Medical Technician (or higher) level

Paramedic Field Experience

10531957 3 credits

Provides the opportunity to enhance learning through the practice of paramedicine in a field environment and through experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course. Successful completion of this course requires the student to meet all clinical and field competency requirements at the paramedic level as defined by WI DHS EMS.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Field Leadership

10531958 1 credit

Provides the opportunity to act as the field team leader in a field environment and through experiences with actual patients under the supervision of instructors or approved preceptors. Successful completion of this course requires the student to meet all team leader competency requirements at the paramedic level as defined by WI DHS EMS and the CoAEMSP.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Medical Emergencies

10531919..... 4 credits

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a medical complaint.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Medical Principles

10531912..... 4 credits

Addresses the complex depth of anatomy, physiology, and pathophysiology of major human systems while also introducing paramedic students to the topics of shock, immunology, and bleeding.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Respiratory Management

10531915..... 2 credits

Teaches the paramedic student to integrate complex knowledge of anatomy, physiology, and pathophysiology

into the assessment to develop and implement a treatment plan with the goal of assuring a patient airway, adequate mechanical ventilation, and respiration for patients of all ages. Also provides specific knowledge pertaining to the respiratory system to ensure the student is prepared to formulate a field impression and implement a comprehensive treatment plan for a patient with a respiratory complaint.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Trauma

10531920..... 3 credits

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for an acutely injured patient.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Patient Assessment Principles

10531913..... 3 credits

Teaches the paramedic student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. Uses a structured and organized assessment process that draws on knowledge of anatomy, physiology, pathophysiology, life span development, and changes that occur to the human body with time. Using this process students learn to develop a list of differential diagnoses through clinical reasoning and modify the assessment as necessary to formulate a treatment plan for their patients.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Prehospital Pharmacology

10531914 3 credits

Provides the paramedic student with the comprehensive knowledge of pharmacology required to formulate and administer a pharmacological treatment plan intended to mitigate emergencies and improve the overall health of the patient.

Prerequisite: Admission to Paramedic Technician 105311 or EMT-Paramedic 315311

Special Patient Populations

10531921..... 3 credits

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for patients with special needs. Also includes gynecological emergencies, along with special considerations in trauma.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

FARM BUSINESS & PRODUCTION MANAGEMENT

Technical Diploma

Program Code: 30-090-1

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



FARM BUSINESS & PRODUCTION MANAGEMENT



Mid-State's Farm Business & Production Management program teaches the skills needed to be competitive in agriculture and maximize profits. You'll learn how to identify your farm's strengths and weaknesses, analyze farm records to uncover hidden opportunities, apply proven marketing techniques, and more. Classes are offered fall and winter and include instruction in the classroom, on the farm, and via group tours. Topics include crop production, soil management, and financial planning and analysis as well as the feeding, breeding, and management of livestock.

Graduates of the Farm Business & Production Management technical diploma may advance into the Agribusiness and Science Technology program.

Technical Diploma

Total Credits: 19

Salary information:
mstc.edu/programsalaries

Careers: Agricultural Manager, Dairy Equipment Service Technician, Farm Assistant, Farm Manager, Feed Sales, First Line Supervisors of Agricultural Crop and Horticulture Worker, Grain Operator, Mill Production Operator, and Plant Manager

Though there are fewer farmers in the region, the opportunity for today's farmers to benefit from more profitable techniques and strategies has never been greater.

FARM OPERATION



The Farm Operation program at Mid-State prepares graduates to confidently run the day-to-day operations on a dairy farm. You'll learn about livestock and their products, livestock diseases and prevention, quality milk and meat production, soils, crop production, and more. This hands-on program features agribusiness professionals who share their knowledge directly through presentations, demonstrations, and tours. Course topics include best practices for farming, such as how to manage farm records, farm computerization, and critical facts about financial credit, income tax law, and marketing.

Graduates of the Farm Operation technical diploma may advance into the Agribusiness and Science Technology program.

Technical Diploma

Total Credits: 27

Salary information:
mstc.edu/programsalaries

Careers: A.I. Technician, Agricultural Manager, Dairy Equipment Service Technician, Dairy Herdsman, Farmer, Farm Assistant, and Farm and Ranch Manager

Though there are fewer farmers in the region, the opportunity for today's farmers to benefit from more profitable techniques and strategies has never been greater.

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

OTHER OPTIONS

RELATED PROGRAMS

Urban Forestry Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

AGRIBUSINESS AND SCIENCE TECHNOLOGY



Mid-State's Agribusiness and Science Technology program prepares students to be owners or employees of a farm business in all sectors of the agriculture industry or work in businesses that support the agriculture industry. The program focuses on dairy and livestock, crops, and financials. You'll learn to develop a nutrient management plan, calculate cost of production, and develop a long-term facility and equipment plan as well as a farm business plan. Hands-on experiences include taking soil samples; identifying diseases, insects, and weeds that impact profitability; working with livestock nutrition and management; and artificial insemination of cattle. Graduates obtain a private pesticide applicators certificate.

Associate in Applied Science

Total Credits: 60-61

Salary information:
mstc.edu/programsalaries

Careers: A.I. Technician, Agricultural Manager, Agronomist, Dairy Equipment Service Technician, Dairy Herdsman, Farmer, Farm Assistant, Farm Manager, Feed Sales, First Line Supervisors of Agricultural Crop and Horticulture Worker, Grain Operator, Livestock Nutritionist, Mill Production Operator, and Plant Manager

Though there are fewer farmers in the region, the opportunity for today's farmers to benefit from more profitable techniques and strategies has never been greater.

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

PROGRAM OUTCOMES

Employers will expect you, as a Farm Business & Production Management graduate, to be able to:

- Develop a land and nutrient use plan.
- Develop a crop management plan.
- Identify economic principles and family/business goals.
- Identify and plan for emerging farm and agricultural issues and practices.
- Implement appropriate farm safety practices.
- Develop a farm marketing plan.
- Balance rations for farm livestock.
- Develop a livestock breeding health and management plan.
- Prepare and analyze farm business records.

Students should be able to operate a calculator and understand basic math skills such as percentage, addition, subtraction, multiplication, and division. Students will be asked to draft budgets and calculate costs and returns on different farming enterprises.

The Farm Business & Production Management program runs from August through July annually. Courses in the program are offered at Mid-State's campuses in Marshfield, Stevens Point, and Wisconsin Rapids, as well as at our center in Adams-Friendship.

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function in farm business and production management is available in the Student Services Office. It is the student's responsibility to notify the disability services coordinator in the Student Services Office to receive assistance.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term	19 credits
10080105 Intro to Soil Science	3
10080140 Farm Financial Analysis	3
10090101 Agriculture Business Management	3
10091102 Intro to Animal Science	3
10091103 Animal Nutrition	4
10093104 Principles of Crop Management	3

Total credits 19

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

academic career plan

Term/Year	Credits

course descriptions

Agriculture Business Management

10090101..... 3 credits

Examines the farm business as a complex set of enterprises that all need to be managed effectively to be successful and sustainable. Students learn to develop a business plan, set short- and long-term goals, identify and implement alternatives for reaching goals. Includes strategies and tools to monitor success. Students also learn to organize and maintain farm business records as well as how to interpret and analyze the records to make sound farm management decisions.

Animal Nutrition

10091103..... 4 credits

Students demonstrate how to formulate and balance rations for several species of livestock. Includes knowledge of the nutritional needs of various species and ability to identify different feedstuffs. Students become familiar with the laws and regulations on livestock feeding along with reading, interpreting, and making recommendations from feed test reports/tags. They are also able to successfully understand the digestive systems of mono-gastric and ruminant animals. Prerequisite: Intro to Animal Science 10091102

Farm Financial Analysis

10080140..... 3 credits

This course identifies farm record-keeping skills and provides opportunities to develop these necessary business skills for operating a successful farm business. These skills include recording livestock and crop information, calculating depreciation and capital gains, gathering federal and state tax form information, calculating inventories, developing budgets, formulating yearly credit needs, and conducting a financial farm business analysis.

Intro to Animal Science

10091102..... 3 credits

Introduces the basics of livestock management. Examines management of dairy, beef, sheep, and other common livestock with concentration on nutrition, feedstuff's classification, reproduction, genetics, animal behavior, animal health, and sustainable agriculture practices. Includes basic husbandry and care procedures for animals.

Intro to Soil Science

10080105..... 3 credits

Designed to provide students with fundamental knowledge of soil and soil composition. Includes study of soil types, formation factors, physical properties, biological properties, and basic soil chemistry. Units covering tillage, conservation, pH, soil management, plant nutrients, and fertilizer sources are also included. Students gain the skills required to interpret soil test reports and soil survey maps and recognize qualities of various soil types. Students perform soil sampling, residue measurements, compaction assessments, and soil loss determinations per crop rotation guidelines.

Principles of Crop Management

10093104..... 3 credits

The basic principles and concepts of sound agronomic practices are discussed for corn, soybeans, small grains, and forage crops grown in Wisconsin. All sound agronomy practices are emphasized for each crop area as it relates to cultural and other specific inputs of crop production, environmental factors, and sustainable systems.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

FARM OPERATION

Technical Diploma

Program Code: 31-080-4

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

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FARM OPERATION



The Farm Operation program at Mid-State prepares graduates to confidently run the day-to-day operations on a dairy farm. You'll learn about livestock and their products, livestock diseases and prevention, quality milk and meat production, soils, crop production, and more. This hands-on program features agribusiness professionals who share their knowledge directly through presentations, demonstrations, and tours. Course topics include best practices for farming, such as how to manage farm records, farm computerization, and critical facts about financial credit, income tax law, and marketing.

Graduates of the Farm Operation technical diploma may advance into the Agribusiness and Science Technology program.

Technical Diploma

Total Credits: 27

Salary information:
mstc.edu/programsalaries

Careers: A.I. Technician, Agricultural Manager, Dairy Equipment Service Technician, Dairy Herdsman, Farmer, Farm Assistant, and Farm and Ranch Manager

Though there are fewer farmers in the region, the opportunity for today's farmers to benefit from more profitable techniques and strategies has never been greater.

FARM BUSINESS & PRODUCTION MANAGEMENT



Mid-State's Farm Business & Production Management program teaches the skills needed to be competitive in agriculture and maximize profits. You'll learn how to identify your farm's strengths and weaknesses, analyze farm records to uncover hidden opportunities, apply proven marketing techniques, and more. Classes are offered fall and winter and include instruction in the classroom, on the farm, and via group tours. Topics include crop production, soil management, and financial planning and analysis as well as the feeding, breeding, and management of livestock.

Graduates of the Farm Business & Production Management technical diploma may advance into the Agribusiness and Science Technology program.

Technical Diploma

Total Credits: 19

Salary information:
mstc.edu/programsalaries

Careers: Agricultural Manager, Dairy Equipment Service Technician, Farm Assistant, Farm Manager, Feed Sales, First Line Supervisors of Agricultural Crop and Horticulture Worker, Grain Operator, Mill Production Operator, and Plant Manager

Though there are fewer farmers in the region, the opportunity for today's farmers to benefit from more profitable techniques and strategies has never been greater.

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

OTHER OPTIONS

RELATED PROGRAMS

Urban Forestry Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

FIRE PROTECTION TECHNICIAN

Associate in Applied Science (AAS)

Program Code: 10-503-2

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



fire protection technician career pathway

FIRE PROTECTION TECHNICIAN



Firefighters are known for taking quick action and performing under pressure, and Mid-State's Fire Protection Technician program prepares students to be successful in this challenging role. Graduates learn the knowledge and techniques needed to save life and property during fires, medical emergencies, and other hazards. This program will expose you to realistic simulations, inside and outside the classroom. You will train on our state-of-the-art burn tower, fire engines, and other high-tech equipment. Developed in partnership with local fire departments, this program ensures you have a competitive edge when starting your career, and local demand for highly skilled firefighters is rising.

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Associate in Applied Science

Total Credits: 70

Salary information:
mstc.edu/programsalaries

Careers: Firefighter, Firefighter/EMT, Firefighter/Paramedic, Fire Inspector, and Special Hazards Technician

In general, there is growing demand for these careers. Example: Firefighter career has grown by 1% over the last two years and is expected to grow by 2% over the next 10 years. Currently 4,803 Municipal Firefighters are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

EMT-Paramedic and Paramedic Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

PROGRAM OUTCOMES

Employers will expect you, as a Fire Protection Technician graduate, to be able to:

- Demonstrate professional conduct by displaying personal code of ethics, positive work ethic, flexibility, teamwork skills, physical fitness, safe procedures, and sensitivity to diverse cultures and individuals.
- Perform fire prevention activities, including pre-planning, public education, inspection, and investigation.
- Apply incident management and mitigation skills to emergency incidents.
- Meet professional fire and EMS credentialing standards.
- Communicate clearly and effectively both verbally and through written documentation with clients, coworkers, other agencies, and supervisors.
- Apply critical thinking skills to both emergency and non-emergency situations.

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a fire protection technician is available at mstc.edu/programs/fire-protection-technician. Contact the disability services coordinator in the Student Services Office to receive assistance.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term	17 credits
10503143 Building Construction for Fire Protection	3
10503191 Principles of Emergency Services	2
10503192 Principles of Emergency Services Safety and Survival	3
10531940 EMT Foundations	3
10801136 English Composition 1 -or-	
10801195 Written Communication	3
10804107 College Mathematics	3

Term	17 credits
10503142 Fire Fighting Principles	4
10503153 Hazardous Materials Awareness & Operations	1
10503195 Fire Behavior & Combustion	3
10531941 EMT Applications	2
10806134 General Chemistry	4
10809198 Intro to Psychology	3

Term	17 credits
10503103 Hazardous Materials Applications	2
10503112 Advanced Firefighting	3
10503151 Fire Prevention	4
10503154 Hazardous Materials Chemistry	2
10809122 Intro to American Government -or-	
10809172 Introduction to Diversity Studies -or-	
10809196 Intro to Sociology	3
10809166 Intro to Ethics: Theory & Application	3

Term	19 credits
10503101 Technical Rescue Principles	3
10503156 Strategies, Tactics, & Incident Management	4
10503157 Fire Investigation	3
10503193 Fire Protection Systems	3
10503194 Fire Protection Hydraulics	3
10801197 Technical Reporting	3

Total credits 70

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term	8 credits
10531940 EMT Foundations	3
10503191 Principles of Emergency Services	2
10801136 English Composition 1 -or-	
10801195 Written Communication	3

Term	9 credits
10531941 EMT Applications	2
10804107 College Mathematics	3
10806134 General Chemistry	4

Term	9 credits
10503143 Building Construction for Fire Protection	3
10503192 Principles of Emergency Services Safety and Survival	3
10809198 Intro to Psychology	3

Term	8 credits
10503142 Fire Fighting Principles	4
10503153 Hazardous Materials Awareness & Operations	1
10809172 Introduction to Diversity Studies -or-	
10809196 Intro to Sociology	3

Term	7 credits
10503103 Hazardous Materials Applications	2
10503112 Advanced Firefighting	3
10503154 Hazardous Materials Chemistry	2

Term	9 credits
10503101 Technical Rescue Principles	3
10503157 Fire Investigation	3
10503195 Fire Behavior & Combustion	3

Term	10 credits
10503151 Fire Prevention	4
10801197 Technical Reporting	3
10809122 Intro to American Government -or-	
10809166 Intro to Ethics: Theory & Application	3

Term	10 credits
10503156 Strategies, Tactics, & Incident Management	4
10503193 Fire Protection Systems	3
10503194 Fire Protection Hydraulics	3

Total credits 70

NOTES:

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Advanced Firefighting

10503112 **3 credits**

Explores advanced firefighting skills, including rapid intervention and firefighter self-survival and rescue. Fulfills job performance requirements for Wisconsin Firefighter 2 certification eligibility.

Prerequisite: Fire Fighting Principles 10503142

Building Construction for Fire Protection

10503143..... **3 credits**

Provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, pre-planning fire operations, and operating at emergencies.

Corequisite: Principles of Emergency Services Safety and Survival 10503192 or Intro to Emergency Services 10503102

College Mathematics

10804107 **3 credits**

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and

between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

EMT Applications

10531941..... **2 credits**

Course covers the bulk of the Emergency Medical Technician certification course to include the handling of cervical and spine injuries, burn injuries, heart- and breathing-related problems, shock, and other trauma injuries. Includes several lab days to practice and perfect skills, clinical time, and extensive hands-on activities. Prepares students for national certification testing for EMT. To maintain National Registry certification eligibility this course must be finished the semester following the completion of EMT Foundations.

Prerequisite: EMT Foundations 10531940

EMT Foundations

10531940 **3 credits**

Covers the basics of the Emergency Medical Technician certification course to include CPR, airways, anatomy, hazmat response requirements, lifting and moving patients, incident command, and other technical information. It is the first part of a two-course system to prepare students for national certification testing for EMT.

Prerequisite: Admission to Paramedic Technician 105311 or Emergency Medical Technician program 305313 and recommended minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Fire Behavior & Combustion

10503195..... 3 credits

Explores the theories and fundamentals of how and why fires start, spread, and are controlled.

Prerequisite: Fire Fighting Principles 10503142

Fire Investigation

10503157 3 credits

Provides the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes.

Prerequisite: Fire Fighting Principles 10503142

Fire Prevention

10503151 4 credits

Provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, plans review, fire inspections, fire and life safety education, and fire investigation.

Prerequisite: Fire Fighting Principles 10503142

Fire Protection Hydraulics

10503194 3 credits

Provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

Prerequisite: 10503142 Fire Fighting Principles

Fire Protection Systems

10503193..... 3 credits

Provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection, and portable fire extinguishers.

Prerequisite: Fire Fighting Principles 10503142

Fire Fighting Principles

10503142..... 4 credits

Describes basic fire behavior, techniques used to control structural and related fire emergencies, and life safety practices. Students perform all practical evolutions necessary to control and extinguish fires and otherwise meet all requirements for Firefighter I certification in the State of Wisconsin.

Prerequisite: Admission to Fire Protection Technician program 105032

General Chemistry

10806134 4 credits

Covers the fundamentals of chemistry. Topics include the metric system; problem solving; periodic relationships; chemical reactions, chemical equilibrium; properties of water; acids, bases, and salts; and gas laws.

Prerequisite: College Mathematics 10804107 with a "C" or better, or Intermediate Algebra with Applications 10804118 with a "C" or better, or Accuplacer Algebra score of 57 or greater

Hazardous Materials Applications

10503103 2 credits

Provides the knowledge and skills needed to apply hazardous materials theory. In combination with the other hazardous materials courses in the curriculum fulfills the requirements for Hazardous Materials Technician.

Prerequisite: Hazardous Materials Awareness & Operations 10503153; Corequisite: Hazardous Materials Chemistry 10503154

Hazardous Materials Awareness & Operations

10503153..... 1 credit

Examines characteristics relating to hazardous materials, including problems of recognition and mitigation. Prepares students to advance toward the Hazardous Materials Technician Level.

Prerequisite: General Chemistry 10806134

Hazardous Materials Chemistry

10503154..... 2 credits

Provides basic chemistry relating to the categories of hazardous materials, including recognition, identification, reactivity, and health hazards encountered by emergency services.

Prerequisite: General Chemistry 10806134

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading

Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Diversity Studies

10809172 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Principles of Emergency Services

10503191 2 credits

Introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasizes fire and emergency service, ethics, and leadership from the perspective of the company officer.

Prerequisite: Admission to Fire Protection Technician program 105032

Principles of Emergency Services Safety and Survival

10503192 3 credits

Introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

Prerequisite: Admission to Fire Protection Technician program 105032

Strategies, Tactics, & Incident Management

10503156 4 credits

Provides the principles of fire ground control through use of personnel, equipment, and extinguishing agents.

Prerequisite: General Chemistry 10806134

Technical Reporting

10801197 3 credits

The student prepares and presents oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course.

Prerequisite: Written Communication 10801195 with a grade of “C” or better, or English Composition I 10801136 with a grade of “C” or better. Proficiency in word processing skills recommended.

Technical Rescue Principles

10503101 3 credits

Exposes students to labor-intensive requirements in team-based technical rescue. Students are trained in auto extrication and technician-level rope rescue and confined space rescue.

Prerequisite: Fire Fighting Principles 10503142

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

GERONTOLOGY

Associate in Applied Science (AAS)

Program Code: 10-544-1

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



PROGRAM OUTCOMES

Employers will expect you, as a Gerontology graduate, to be able to:

- Distinguish the role of the gerontology professional in the coordination of service delivery.
- Evaluate the physical, social, psychological, and spiritual aspects of aging throughout the lifespan.
- Exhibit ethical and legal practice consistent with a gerontology professional.
- Cultivate an age-friendly community.
- Advocate in the area of aging public policy.

ADDITIONAL ENTRY CRITERIA

To apply to the Gerontology program, please submit the following documents to Mid-State Admissions:

Criminal Background Statement of Understanding and Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a Gerontology graduate is available at mstc.edu/programs/gerontology. Contact the disability services coordinator in the Student Services Office to receive assistance.

INTERNSHIP-RELATED REQUIREMENTS

Prior to placement at a internship site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the internship course and will not be able to advance in the program.



PROGRAM PROGRESSION AND COMPLETION

In order to progress in and successfully complete the program, students must:

- Repeat courses not completed with a “C” or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of “C” or better in all courses required for graduation.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		15 credits
10103106	Microsoft Office-Introduction	3
10544104	Intro to Social Gerontology	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10809166	Intro to Ethics: Theory & Application	3
10809198	Intro to Psychology	3
Term		17 credits
10501111	Basic Health Care Skills	3
10543139	Introduction to Dementia	2
10544103	Healthy Aging	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10804107	College Mathematics -or-	
10804189	Introductory Statistics	3
10809188	Developmental Psychology	3
Term		15 credits
10544106	Death and Dying	3
10544107	Legal & Financial Issues of Aging	3
10544108	Developing the Gerontology Professional	3
10809172	Introduction to Diversity Studies	3
	Elective	3
Term		14 credits
10102101	Intro to Business	3
10544109	Programs & Services in Aging	3
10544110	Generations & Diversity in Aging	3
10544111	Gerontology Internship	2
	Elective	3
Total credits		61

Please Note:

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- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10809130	Intro to Social Gerontology	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		9 credits
10103106	Microsoft Office-Introduction	3
10809166	Intro to Ethics: Theory & Application	3
10809198	Intro to Psychology	3
Term		6 credits
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10804107	College Mathematics -or-	
10804189	Introductory Statistics	3
Term		8 credits
10501111	Basic Health Care Skills	3
10543139	Introduction to Dementia	2
10544103	Healthy Aging	3
Term		9 credits
10544106	Death and Dying	3
10544107	Legal & Financial Issues of Aging	3
10809172	Introduction to Diversity Studies	3
Term		9 credits
10809132	Generations & Diversity in Aging	3
10809188	Developmental Psychology	3
	Elective	3
Term		6 credits
10544108	Developing the Gerontology Professional	3
	Elective	3
Term		8 credits
10102101	Intro to Business	3
10544109	Programs & Services in Aging	3
10544111	Gerontology Internship	2
Total credits		61

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Basic Health Care Skills

1050111..... 3 credits

Students review basic health care concepts and demonstrate skills in preparation for entry-level direct patient care. Emphasizes infection control, personal hygiene, safety, body mechanics, and meeting client holistic personal and health care needs.

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Death and Dying

10544106 3 credits

Studies losses during the aging process beyond the physical and emotional process of death and dying. Explores societal and personal views of death, dying, and cultural practices. Stages of bereavement and recommendations for healthy transitions in coping with loss are integrated into practical applications. Discussion of various topics related to death and dying include treatment for terminally ill people, euthanasia, and suicide.

Developing the Gerontology Professional

10544108 3 credits

Explores effective communication styles and interview techniques for developing rapport and relationships with aging populations. Other topics include ethics and boundaries, self-determination, case management, documentation skills, and research and grant funding.

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Generations & Diversity in Aging

10544110 3 credits

Generational study of experience and history on the value and societal expectations of each generation. Also covers diversity trends among older adults including but not limited to race; ethnicity; culture; sexual orientation; and physical, cognitive, and developmental disabilities.

Gerontology Internship

10544111 2 credits

Students integrate concepts from completed coursework through supervised work experiences in appropriate settings.

Prerequisites: Intro to Social Gerontology 10809130, Healthy Aging 10544103, Basic Health Care Skills 10501111, Intro to Dementia 10543139, Legal and Financial Issues of Aging 10544107, and Developing the Gerontology Professional 10544108; Corequisites: Programs & Services in Aging 10544109 and Generations & Diversity in Aging 10809132

Healthy Aging

10544103 3 credits

Provides an overview of practices to promote healthy aging. Addresses nutrition, physical activity, and prevention practices as well as medications commonly prescribed for the older adult. Emphasis is on practices to address current aging trends.

Intro to Business

10102101 3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Social Gerontology

10544104 3 credits

Reviews aging in respect to social roles and processes. Topics include history of aging, demographics, family relationships, social supports, economics, retirement, widowhood, poverty, and politics of aging.

Introduction to Dementia

10543139 2 credits

Introduces the different types of dementia, the changes in physiology, and the signs and symptoms associated with the onset of dementia. Focuses on the principles of communicating and providing care to individuals with memory loss and confusion while learning the best practices for dealing with behavior changes, challenges with the activities of daily living, and strategies to assist caregivers.

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of "C" or better, or College Math 10804107 with a grade of "C" or better. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Legal & Financial Issues of Aging

10544107 3 credits

Covers concepts and structures involved in the legal and financial realm of gerontology including Power of Attorney for Health Care/Finance, guardianships, trusts, reallocation of assets, spending down, Medicare/Medicaid benefits, supplemental insurance, Social Security, financial exploitation, and relevant governmental policy. Students apply knowledge by learning advocacy techniques to benefit senior populations on a community, local, and federal level.

Microsoft Office-Introduction

10103106..... 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

Programs & Services in Aging

10544109 3 credits

Students learn resources available in the community, eligibility criteria, and how to access and coordinate services for seniors. Also discusses supplementing social networking and enhancing mental health functioning for the aging population. Students explore different career fields within gerontology.

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

HEALTH & WELLNESS PROMOTION

Associate in Applied Science (AAS)

Program Code: 10-546-2

our graduates
INDEMAND

2017/2018



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mstc.edu



PROGRAM OUTCOMES

Employers will expect you, as a Health & Wellness Promotion graduate, to be able to:

- Provide evidence-based health and wellness direction to individuals and organizations.
- Design, develop, and implement health and wellness promotion activities and campaigns.
- Champion behavior modification interventions to promote sustainable health and wellness.
- Support the maintenance of health and wellness promotion for individuals and organizations.

ADDITIONAL ENTRY CRITERIA

To apply to the Health & Wellness Promotion program, please submit the following documents to Mid-State Admissions:

Criminal Background Statement of Understanding and Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a Health and Wellness Promotion graduate is available at mstc.edu/programs/health-wellness-promotion. Contact the disability services coordinator in the Student Services Office to receive assistance.

PRACTICUM-RELATED REQUIREMENTS

Prior to placement at a practicum site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Practicum sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate practicum experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the practicum course and will not be able to advance in the program.



PROGRAM PROGRESSION AND COMPLETION

In order to maintain a passing status and progress in the program, students must:

- Repeat courses not completed with a “C” or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of “C” or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability in courses. Students may be required to apply for program re-entry in order to repeat courses within the program’s instructional area.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		15 credits
10103106	Microsoft Office-Introduction	3
10509102	Human Body in Health and Disease	3
10544103	Healthy Aging	3
10546100	Essential Concepts for Health and Wellness	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		16 credits
10546101	Nutrition for Healthy Living	3
10546102	Behavior Change for Wellness	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10806177	General Anatomy & Physiology	4
10809198	Intro to Psychology	3
Term		16 credits
10102101	Intro to Business	3
10104102	Marketing Principles	4
10546103	Principles of Physical Conditioning	3
10546104	Population Health & Wellness	3
10809166	Intro to Ethics: Theory & Application	3
Term		14 credits
10544102	Physical Aspects of Aging -or-	
10546107	Health Coaching for the Wellness Professional	3
10546105	Program Development, Implementation, & Evaluation	3
10546106	Health & Wellness Practicum	2
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
10809188	Developmental Psychology	3
Total credits		61

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10546100	Essential Concepts for Health and Wellness	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		9 credits
10103106	Microsoft Office-Introduction	3
10509102	Human Body in Health and Disease	3
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Term		6 credits
10546101	Nutrition for Healthy Living	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term		7 credits
10806177	General Anatomy & Physiology	4
10544103	Healthy Aging	3
Term		9 credits
10102101	Intro to Business	3
10546103	Principles of Physical Conditioning	3
10809198	Intro to Psychology	3
Term		6 credits
10546102	Behavior Change for Wellness	3
10809188	Developmental Psychology	3
Term		10 credits
10104102	Marketing Principles	4
10809166	Intro to Ethics: Theory & Application	3
10546104	Population Health & Wellness	3
Term		8 credits
10544102	Physical Aspects of Aging -or-	
10546107	Health Coaching for the Wellness Professional	3
10546105	Program Development, Implementation, & Evaluation	3
10546106	Health & Wellness Practicum	2
Total credits		61

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Behavior Change for Wellness

10546102 **3 credits**

Examines the importance of understanding the theory of behavior change to assist others in overcoming barriers so they may achieve sustainable behavior change. Refines a beginning skill set including how to advise individuals on goal setting, strategy planning, and encouraging maintenance of health and wellness goals.

Prerequisite: Essential Concepts of Health and Wellness 10546100

Developmental Psychology

10809188..... **3 credits**

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

English Composition 1

10801136 **3 credits**

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use

elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

Essential Concepts for Health and Wellness

10546100 **3 credits**

An introductory course focusing on basic health and wellness promotion principles at the individual level. Basic principles include physical, mental, and spiritual. Students explore a holistic view of health and wellness concepts covering healthy lifestyle choices, managing stress, individual wellness perspective and how economics can positively and negatively impact the health and wellness of an individual.

Prerequisite: Admission to Health and Wellness Promotion program 105462 and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

General Anatomy & Physiology

10806177..... **4 credits**

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: Minimum Accuplacer score for Reading is 55 (Students scoring between 55–80 are encouraged to enroll in Introduction to College Reading) and one semester of

college-level biology or chemistry with a “C” or better, or Human Body in Health & Disease 10509102 with a “C” or better, or Emergency Medical Technician-Basic 10531168 with a “C” or better

Health & Wellness Practicum

10546106 2 credits

Provides practical experience and the opportunity to apply concepts from previous coursework to help students transition to the role of community health promoter. The practicum location is chosen in collaboration with faculty based on student interest and site availability. Students work closely with an approved preceptor and faculty to accomplish individualized learning goals.

Prerequisites: Essential Concepts for Health & Wellness 10546100, Behavior Change for Wellness 10546102, Principles of Physical Conditioning 10546103, and Nutrition for Healthy Living 10546101; Corequisites: Population Health & Wellness 10546104 and Program Development, Implementation & Evaluation 10546105

Health Coaching for the Wellness Professional

10546107..... 3 credits

Builds on the Behavior Change for Wellness class to introduce and practice techniques for lifestyle health coaching. Analyzes the relationships between exercise, nutrition, and weight control and how to effectively and sustainably promote lifelong positive behavior change in individual clients.

Prerequisites: Behavior Change for Wellness 10546102 and Principles of Physical Conditioning 10546103

Healthy Aging

10544103 3 credits

Provides an overview of practices to promote healthy aging. Addresses nutrition, physical activity, and prevention practices as well as medications commonly prescribed for the older adult. Emphasis is on practices to address current aging trends.

Human Body in Health and Disease

10509102 3 credits

Focuses on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis, and prevention of common diseases.

Intro to Business

10102101..... 3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a

systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Marketing Principles

10104102 4 credits

Students study the practices and methods of manufacturers and distributors in the marketing of goods and services. Also emphasized are product planning, pricing strategies, distribution systems, channel activities, and the role of government as well as other factors influencing marketing today.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Microsoft Office-Introduction

10103106 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Nutrition for Healthy Living

10546101 3 credits

Students learn concepts of healthy eating to facilitate the journey of good health across the lifespan. Healthy eating concepts focus on individual decision making and behavior change with sustainable interventions rooted in evidenced-based practice. Students investigate nutrition myth versus fact and explore how policy and environment impact nutritional choice.

Prerequisite: Essential Concepts of Health and Wellness 10546100

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Physical Aspects of Aging

10544102 3 credits

Study of normal and pathological changes occurring in the aging human body, with a special emphasis on age-related chronic disease. Includes analysis of biological theories of aging and cultural and ethnic influence on aging pathologies. Recommended minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Population Health & Wellness

10546104 3 credits

Examines the components and attributes of population health, including economic and policy implications for population-based health promotion activities. Students take a closer look at measures including interventions and programming that support the health of the community.

Prerequisite: Essential Concepts of Health and Wellness 10546100

Principles of Physical Conditioning

10546103 3 credits

Emphasizes quality of life improvement and encouraging others to maximize health and wellness potential through physical conditioning. Explores the effects of physical exercise on body systems and functioning, including specific exercises for balance, endurance, strength, and weight loss. Special populations and considerations are highlighted throughout the course.

Prerequisites: General Anatomy & Physiology 10806177 and Essential Concepts of Health and Wellness 10546100

Program Development, Implementation, & Evaluation

10546105 3 credits

Students acquire the skill set to develop, implement, and evaluate a health and wellness promotion project at the individual or community level. Explores components of health and wellness promotion program building, including the needs assessment, marketing principles, role of leadership, continuous quality improvement, economics, and collaborations to ensure success.

Prerequisites: Essential Concepts for Health & Wellness 10546100, Behavior Change for Wellness 10546102, Principles of Physical Conditioning 10546103, and Nutrition for Healthy Living 10546101; Corequisite: Population Health & Wellness 10546104

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

HEALTH INFORMATION MANAGEMENT

Associate in Applied Science (AAS)

Program Code: 10-530-4

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu

HEALTH INFORMATION MANAGEMENT



Mid-State's Health Information Management program prepares individuals to enter the emerging field of electronic health record management. Students learn to use computer programs and established methods to securely process, compile, maintain, and report electronic health information data for patient care. In this program you'll learn to abstract and code clinical data using classifications systems as well as analyze health records according to industry protocols. You'll build knowledge about reimbursement, facility planning, marketing, risk management, and more. Graduates are eligible to take the AHIMA national certification exam for Registered Health Information Technician (RHIT).



bachelor's degree opportunities

UW-Stevens Point, B.S. Health Information Management and Technology Degree (HIMT)

UW-Stevens Point, Health Science-Health Care Administration or Health Care Informatics

College of St. Scholastica, BA Health Information

For more information and additional opportunities, go to mstc.edu/transfer

Associate in Applied Science

Total Credits: 70

Salary information:
mstc.edu/programsalaries

Careers: Data Quality Analyst, Diagnosis Related Group (DRG) Coordinator, Health Information Supervisor, Health Information Technician, Medical Records Analyst, Patient Account Representative, Patient Financial Services Specialist, and Quality Improvement Analyst

In general, there is growing demand for these careers. Example: Health Information Technician career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 2,101 Medical Records and Health Information Technicians are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

MEDICAL CODER



The Medical Coder program at Mid-State prepares students for entry-level work as medical coders in health care settings, such as hospitals, physician offices, long-term care facilities, and more. Medical coders review medical documentation and assign diagnosis and procedure codes for the purposes of billing, quality improvement, statistical reporting, and medical research. In this program, you'll be introduced to reimbursement principles and build proficiency in assigning codes across all settings. After program completion, graduates may qualify to take the Certified Coding Associate (CCA) credentialing exam through American Health Information Management Association (AHIMA).

Graduates of the Medical Coder technical diploma may advance into the Health Information Management program.

Technical Diploma

Total Credits: 29

Salary information:
mstc.edu/programsalaries

Careers: Chargemaster Coordinator, Coding Specialist, Coding Support Specialist, Health Information Technician, and Medical Coder

In general, there is growing demand for these careers. Example: Health Information Technician career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 2,101 Medical Records and Health Information Technicians are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Nursing, Nursing Assistant, and Respiratory Therapist

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Health Information Management graduate, to be able to:

- Demonstrate principles of integrity, ethics, and respect.
- Use information technology to securely process, compile, maintain, and report electronic health information data.
- Plan for the exchange of health care information by assisting providers in the use of portable and other devices for data entry/retrieval or medical decision making.
- Abstract and code clinical data using proper classification systems.
- Analyze health records according to established protocols and standards.
- Supervise various components of the health information system.
- Support data collection and reimbursement systems.

The Health Information Management program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) under the Associate Degree HIM standards. Graduates are eligible to take the national certification exam offered by the American Health Information Management Association (AHIMA) for the Registered Health Information Technician (RHIT) credential.

ADDITIONAL ENTRY CRITERIA

To apply to the Health Information Management program, please submit the following documents to Mid-State Admissions:

Criminal Background Statement of Understanding and Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a Health Information Management graduate is available at mstc.edu/programs/health-information-management. Contact the disability services coordinator in the Student Services Office to receive assistance.



CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

PROGRAM PROGRESSION AND COMPLETION

In order to progress in and successfully complete the program, students must:

- Repeat courses not completed with a "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability in courses. Students may be required to apply for program re-entry in order to repeat courses within the program's instructional area.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



This ACT program is 100 percent funded with a TAACCCT Round IV \$19.9 million grant awarded by the US Department of Labor's Employment and Training Administration. This program is an equal opportunity program, and auxiliary aids and services are available upon request to individuals with disabilities. This workforce product was funded by a grant awarded by the US Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the US Department of Labor. The US Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

academic career plan

Term/Year	Credits	Term/Year	Credits

SAMPLE FULL-TIME CURRICULUM OPTION

Term		18 credits
10103106	Microsoft Office-Introduction	3
10501101	Medical Terminology	3
10530111	Introduction to Health Records	3
10530125	Organization of Healthcare	2
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10806177	General Anatomy & Physiology	4

Term		18 credits
10530122	Electronic Health Records	3
10530144	CPT Coding	3
10530161	Legal Aspects of HIM	2
10530182	Human Disease for the Health Professions	3
10530197	ICD Diagnosis Coding	3
10806179	Advanced Anatomy & Physiology	4

Term		17 credits
10530132	Health Data Analysis	3
10530160	Performance Improvement for Health Professions	3
10530199	ICD Procedure Coding	2
10156101	Database Concepts and Design	3
10801197	Technical Reporting	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Term		17 credits
10530146	Private and Government Reimbursement	3
10530148	Advanced Coding	2
10530163	Health Information Clinical	2
10530164	RHIT Test Prep	1
10530167	Management of Health Information Services	3
10809166	Intro to Ethics: Theory & Application	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3

Total credits 70

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10501101	Medical Terminology	3
10530111	Introduction to Health Records	3

Term		6 credits
10530125	Organization of Healthcare	2
10806177	General Anatomy & Physiology	4

Term		6 credits
10103106	Microsoft Office-Introduction	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3

Term		6 credits
10806179	Advanced Anatomy & Physiology	4
10530161	Legal Aspects of HIM	2

Term		6 credits
10530122	Electronic Health Records	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3

Term		6 credits
10530182	Human Disease for the Health Professions	3
10530197	ICD Diagnosis Coding	3

Term		6 credits
10156101	Database Concepts and Design	3
10530132	Health Data Analysis	3

Term		6 credits
10530144	CPT Coding	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Term		6 credits
10530160	Performance Improvement for Health Professions	3
10801197	Technical Reporting	3

Term		5 credits
10809166	Intro to Ethics: Theory & Application	3
10530199	ICD Procedure Coding	2

Term		5 credits
10530167	Management of Health Information Services	3
10530148	Advanced Coding	2

Term		6 credits
10530146	Private and Government Reimbursement	3
10530163	Health Information Clinical	2
10530164	RHIT Test Prep	1

Total credits 70

Advanced Anatomy & Physiology

10806179..... 4 credits

The second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body system approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery is within a classroom and laboratory setting. Experimentation within a science lab includes analysis of cellular metabolism and the individual components of body systems such as the nervous, neuromuscular, cardiovascular, and urinary. Continued examination of homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance, and blood. Integration of genetics to human reproduction and development are also included in this course.

Prerequisite: General Anatomy & Physiology 10806177 with a grade of "C" or better

Advanced Coding

10530148..... 2 credits

Builds on basic coding knowledge and skills through the coding of clinical case studies and actual medical records. Students access, review, and code electronic medical records from the Academic EHR System; perform data quality reviews to validate code assignment and compliance with reporting requirements; and assign diagnosis related groups (DRGs) and ambulatory payment classifications (APCs) with entry-level proficiency using computerized encoding and grouping software.

Prerequisites: ICD Diagnosis Coding 10530197 and CPT Coding 10530144; Corequisite: Private & Government Reimbursement 10530146 and ICD Procedure Coding 10530199

CPT Coding

10530144 3 credits

Prepares learners to assign current procedural terminology (CPT) codes supported by medical documentation with entry-level proficiency. Students are familiar with and use standard coding references. Emphasizes accuracy, CPT instructional notations, conventions, rules, and official coding guidelines when assigning CPT codes to case studies and actual medical record documentation. Also covers application of modifiers to services and relationship to financial impact.

Prerequisites: Medical Terminology 10501101, General Anatomy & Physiology 10806177, and Intro to Health Records 10530111; Corequisite: Human Diseases for Health Professions 10530182

Database Concepts and Design

10156101..... 3 credits

Introduces the concepts of relational database design, development, and maintenance. Topics include relational normalization, referential integrity, and SQL.

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to

co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Electronic Health Records

10530122..... 3 credits

Introduces students to the electronic health record (EHR) as a technology-based representation of healthcare data integration from a participating collection of varied systems for a single patient. Course covers emerging use of the electronic health record, an overview of EHR, applications, benefits and barriers to its use, vocabularies, principles of implementation, health information exchange, standards, privacy, security, information retrieval, digital libraries, and image management.

Prerequisites: Medical Terminology 10501101, General Anatomy & Physiology 10806177, and Intro to Health Records 10530111

English Composition I

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

General Anatomy & Physiology

10806177..... 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: Minimum Accuplacer score for Reading is 55 (Students scoring between 55–80 are encouraged to enroll in Introduction to College Reading) and one semester of college-level biology or chemistry with a "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better, or Emergency Medical Technician-Basic 10531168 with a "C" or better

Health Data Analysis

10530132..... 3 credits

Focuses on the collection, computation, analysis, and presentation of healthcare statistical data. Examines data analytics, registries, vital statistics, mandatory reporting, and research.

Prerequisites: Intro Health Records 10530111, Organization of Healthcare 10530125, and Electronic Health Records 10530122

Health Information Clinical

10530163..... 2 credits

Provides a blend of supervised clinical experience in a health-care facility with online classroom activities. Students apply skills and knowledge gained from previous courses in the health information management setting.

Classroom activity includes discussion of clinical situations.

Prerequisite: Health Data Analysis 10530132, Performance Improvement for Health Professions 10530160, CPT Coding 10530144, ICD Diagnosis Coding 10530197, and ICD Procedure Coding 10530199; Corequisites: Private and Government Reimbursement 10530146 and Advanced Coding 10530148

Human Disease for the Health Professions

10530182..... 3 credits

Focuses on the common diseases of each body system as encountered in all types of healthcare settings by health information professionals. Emphasizes understanding the etiology (causes), signs and symptoms, diagnostic tests, and treatment (including pharmacologic) of each disease.

Prerequisites: Medical Terminology 10501101 and General Anatomy & Physiology 10806177

ICD Diagnosis Coding

10530197..... 3 credits

Prepares students to assign ICD diagnosis codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation.

Prerequisites: Medical Terminology 10501101, Intro to Health Records 10530111, and General Anatomy & Physiology 10806177; Corequisite: Human Disease for the Health Professions 10530182

ICD Procedure Coding

10530199..... 2 credits

Prepares students to assign ICD procedure codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation.

Prerequisites: Medical Terminology 10501101, Intro to Health Records 10530111, General Anatomy & Physiology 10806177, and Human Disease for the Health Professions 10530182

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social,

and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

course descriptions

Introduction to Health Records

10530111 **3 credits**

Focuses on the purpose, format, content, use, confidentiality, and administrative issues of a patient's medical history and care. Students study the use of the patient's medical record as a basis for planning patient care, documenting communication between the health care provider and any other health professional contributing to the patient's care, assisting in protecting the legal interest of the patient and the health care providers responsible for the patient's care, and documenting the care and services provided to the patient. Emphasizes accuracy, organization, and confidentiality. Students are introduced to electronic medical record (EMR) concepts.

Minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34; Corequisite: Medical Terminology 10501101

Legal Aspects of HIM

10530161 **2 credits**

Focuses on regulations for the content, access, disclosure, privacy, confidentiality, security, retention, and destruction of health information. Includes an overview of the US legal system.

Corequisite: Intro to Health Records 10530111

Management of Health Information Services

10530167 **3 credits**

Examines the principles of management to include planning, organizing, human resource management, directing, and controlling as related to the health information department.

Prerequisites: Organization of Healthcare 10530125, Health Data Analysis 10530132, and Performance Improvement for Health Professions 10530160

Medical Terminology

10501101 **3 credits**

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

Microsoft Office-Introduction

10103106 **3 credits**

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Organization of Healthcare

10530125 **2 credits**

Examines the organization and delivery of health-care services, external standards, regulations, initiatives, payment and reimbursement systems, and healthcare providers and disciplines.

Performance Improvement for Health Professions

10530160 **3 credits**

Examines healthcare performance improvement systems. Includes performance assessment, measurement, and improvement as well as patient safety, risk management, utilization management, and medical staff credentialing.

Prerequisites: Intro to Health Records 10530111, Organization of Healthcare 10530125, and Electronic Health Records 10530122

Private and Government Reimbursement

10530146 **3 credits**

Introduces students to the vocabulary of private or voluntary-based healthcare reimbursement. Students will identify and compare the varieties of private healthcare insurance including the advantages and disadvantages of each for the provider and for the policyholder. HIPAA guidelines are utilized throughout.

Prerequisites: ICD Diagnosis Coding 10530197, ICD Procedure Coding 10530199, and CPT Coding 10530144

RHIT Test Prep

10530164 **1 credit**

Explores strategies for preparing for the Registered Health Information Technician (RHIT) examination, including study skills, test-preparation skills, and test-taking skills. Includes a basic review of content related to the examination.

Prerequisite: Health Data Analysis 10530132, Performance Improvement for Health Professions 10530160, CPT Coding 10530144, ICD Diagnosis Coding 10530197, and ICD Procedure Coding 10530199; Corequisites: Private and Government Reimbursement 10530146 and Advanced Coding 10530148

Technical Reporting

10801197 **3 credits**

The student prepares and presents oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course.

Prerequisite: Written Communication 10801195 with a grade of "C" or better, or English Composition I 10801136 with a grade of "C" or better. Proficiency in word processing skills recommended.

Written Communication

10801195 **3 credits**

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)

Technical Diploma

Program Code: 30-401-4

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)



Mid-State's Heating, Ventilation, and Air Conditioning program provides the hands-on foundation needed for an entry-level position in the heating, ventilation, air conditioning (HVAC) fields. Graduates will understand the various components of heating, ventilation, air-conditioning, and refrigeration systems, including furnaces, ductwork, boilers, hydronic piping, HRVs (heat recovery ventilators), evaporators, condensers, circuits, and controls. Students will also explore geothermal, biomass, and solar heating systems. Through hands-on classroom lab activities, students will join various piping types, design and construct ductwork, and install a complete residential HVAC system. They will also learn the electrical skills necessary to read wiring diagrams and troubleshoot mechanical control systems. Graduates are prepared to take the EPA 608 Technician Certification exam for refrigerants.

Graduates of the Heating, Ventilation, and Air Conditioning technical diploma may advance into the Renewable Energy Technician program.

Technical Diploma

Total Credits: 24

Salary information:
mstc.edu/programsalaries

Careers: Building Controls Technician; Heating, Ventilation, and Air Conditioning Installer; Heating, Ventilation, and Air Conditioning Service Technician; and Heating and Air Conditioning Mechanic

In general, there is growing demand for these careers. Example: Heating and Air Conditioning Mechanic career has grown by 3% over the last two years and is expected to grow by 8% over the next 14 years. Currently 2,505 Energy Auditors are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

RENEWABLE ENERGY TECHNICIAN



Mid-State's Renewable Energy Technician program prepares students to design an integrated portfolio of renewable and traditional energy-producing systems. Graduates develop a working knowledge of "green" building concepts and energy-efficient design principles as well as the foundation needed for an entry-level position in the heating, ventilation, and air conditioning (HVAC) fields. In this program you'll learn to perform site assessments and recommend appropriate renewable energy technologies, sell and market renewable energy technologies, and manage renewable energy installation projects. Mid-State's unique facilities, a variety of brands of equipment and software for training, experienced faculty, and off-campus design opportunities make this program one-of-a-kind.

Associate in Applied Science

Total Credits: 60-61

Salary information:
mstc.edu/programsalaries

Careers: Building Controls Technician; Heating, Ventilation, and Air Conditioning Installer; Heating, Ventilation, and Air Conditioning Service Technician; and Heating and Air Conditioning Mechanic

In general, there is growing demand for these careers. Example: Heating and Air Conditioning Mechanic career has grown by 3% over the last two years and is expected to grow by 8% over the next 14 years. Currently 2,505 Energy Auditors are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

bachelor's degree opportunities

UW-River Falls, BS Sustainable Management

UW-Stout, BS Sustainable Management

For more information and additional opportunities, go to mstc.edu/transfer

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Heating, Ventilation, and Air Conditioning (HVAC) graduate, to be able to:

- Join pipes or tubing to equipment and to fuel, water, or refrigerant source to form complete circuit.
- Test pipe or tubing joints or connections for leaks, using pressure gauge or soap-and-water solution.
- Lay out and connect electrical wiring between controls and equipment, according to wiring diagrams, using electrician's hand tools.
- Install, connect, and adjust thermostats, humidistats, and timers using hand tools.
- Test electrical circuits or components for continuity using electrical test equipment.
- Repair or replace defective equipment, components, or wiring.
- Obtain and maintain required certifications.
- Install ductwork and test for leaks.
- Size and lay out ductwork.
- Comply with all applicable standards, policies, and procedures, including safety procedures and the maintenance of a clean work area.
- Inspect and test systems to verify system compliance with plans and specifications or to detect and locate malfunctions.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



Blueprint Reading for Construction Trades

10601130..... 2 credits

Develops the ability to read blueprints for commercial and non-commercial structures. Emphasizes blueprints drawn by licensed architects, covering plumbing, electrical wiring, structural framing, millwork, interior and exterior details, and basic information.

Construction Fundamentals

10482107..... 2 credits

Studies the concepts associated with the theory, materials, and methods used in construction, including footings and foundations, walls, floors, roofs and roof materials, exterior finishes, interior walls, ceiling and floor finishes, insulation types, vapor and air infiltration, and sound protection. Students also become familiar with blueprint reading and examine all trades associated with construction, including, electrical, HVAC, and plumbing. Safe use of the appropriate tools for each trade is covered.

Electrical Controls & Systems for Buildings

10483130..... 3 credits

Topics include an introduction to AC/DC electricity and the physical laws that apply to electronic circuits. Direct current (DC) covers basic definitions of voltage, current, and resistance and analysis of series and parallel resistive circuits. Alternating current (AC) includes an introduction to AC generation, capacitors, inductors, and transformers and their applications in electronic circuits. Additional topics include control circuits, symbols, diagrams, protection devices, relays, thermostats, single-phase motors, control components, and troubleshooting ACR system wiring diagrams.

Corequisite: Electrical Circuits I 10605105 or Intro to Electronics 10605108

Heat Load Estimation & Modeling

10483115..... 3 credits

Develops the skills to do residential heating and cooling heat loads. Students calculate heat loss and losses or gains due to infiltration, sun loads, etc. Includes performing calculations on actual buildings using ACCA industry standard form J-1 as well as estimating energy upgrades such as insulation, window improvements, etc., and calculating payback and fuel savings. Also covers a variety of computer programs available for analyzing buildings.

HVAC Air Conditioning Fundamentals

10601120..... 2 credits

Topics include air conditioning principles and terms, physical principles of air movement, air filtering and humidity, and methods of conditioning air for comfort and health. Also covers the proper use of psychrometers, dry bulb thermometers, hygrometers, and reading and interpretation of psychrometric charts and scales as well as ASHRAE and BPI ventilation standards for residential units. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

HVAC Heating Fundamentals

10601110..... 2 credits

Provides an introduction to how homes and buildings are heated. Topics include introduction to heat principles, temperature measurement, fuels and other sources of heat, combustion, basic heating systems, basic furnace design, boiler design and operation, venting of furnaces, chimney or exhaust gases, and system controls. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

Intro to Electronics

10605108..... 2 credits

Presents a survey of electricity and electronics, including lab activities. Designed for persons required to learn some of the basics of electricity and electronics and an excellent refresher course to get back into electronics or improve a skills list. Intended for persons where electronics has become a critical core skill and/or a need exists to identify various electronic components and perform basic tests using test equipment such as multimeters. Covers concepts and applications of DC and AC electricity and some semiconductor components using basic math skills. *Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 65*

INDUSTRIAL AUTOMATION & CONTROLS ENGINEERING TECHNOLOGY

Associate in Applied Science (AAS)

Program Code: 10-605-4

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



INDUSTRIAL AUTOMATION & CONTROLS ENGINEERING TECHNOLOGY



The Industrial Automation & Controls Engineering Technology program at Mid-State prepares graduates to measure and control industrial processes in today's high-tech manufacturing environments. In this program you'll apply mathematical skill and basic laws of physical sciences to design, install, calibrate, maintain, troubleshoot, and repair industrial control systems. You'll learn to use a variety of different forms of instrumentation and have access to state-of-the-art equipment. Field trips to businesses that have process control systems as an integral part of operations extend your hands-on experience into the real world.

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Associate in Applied Science

Total Credits: 64

Salary information:
mstc.edu/programsalaries

Careers: Controls Technician; Electrical and Electronics Repairers-Commercial and Industrial Equipment; Instrument Technician; Plant Maintenance Technician; and Apprenticeship Programs: Instrumentation, Electrician, Pipefitter

In general, there is growing demand for these careers. Example: Electrical and Electronics Repairers, Commercial and Industrial Equipment career has grown by 1% over the last two years and is expected to grow by 4% over the next 10 years. Currently 456 Electrical and Electronics Repairers, Commercial and Industrial Equipment are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Civil Engineering Technology-Highway Technician and Electrical Power Engineering Technician

RELATED CERTIFICATE

Advanced Industrial Process Control

RELATED APPRENTICESHIPS

Electrician (ABC) and Metering Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

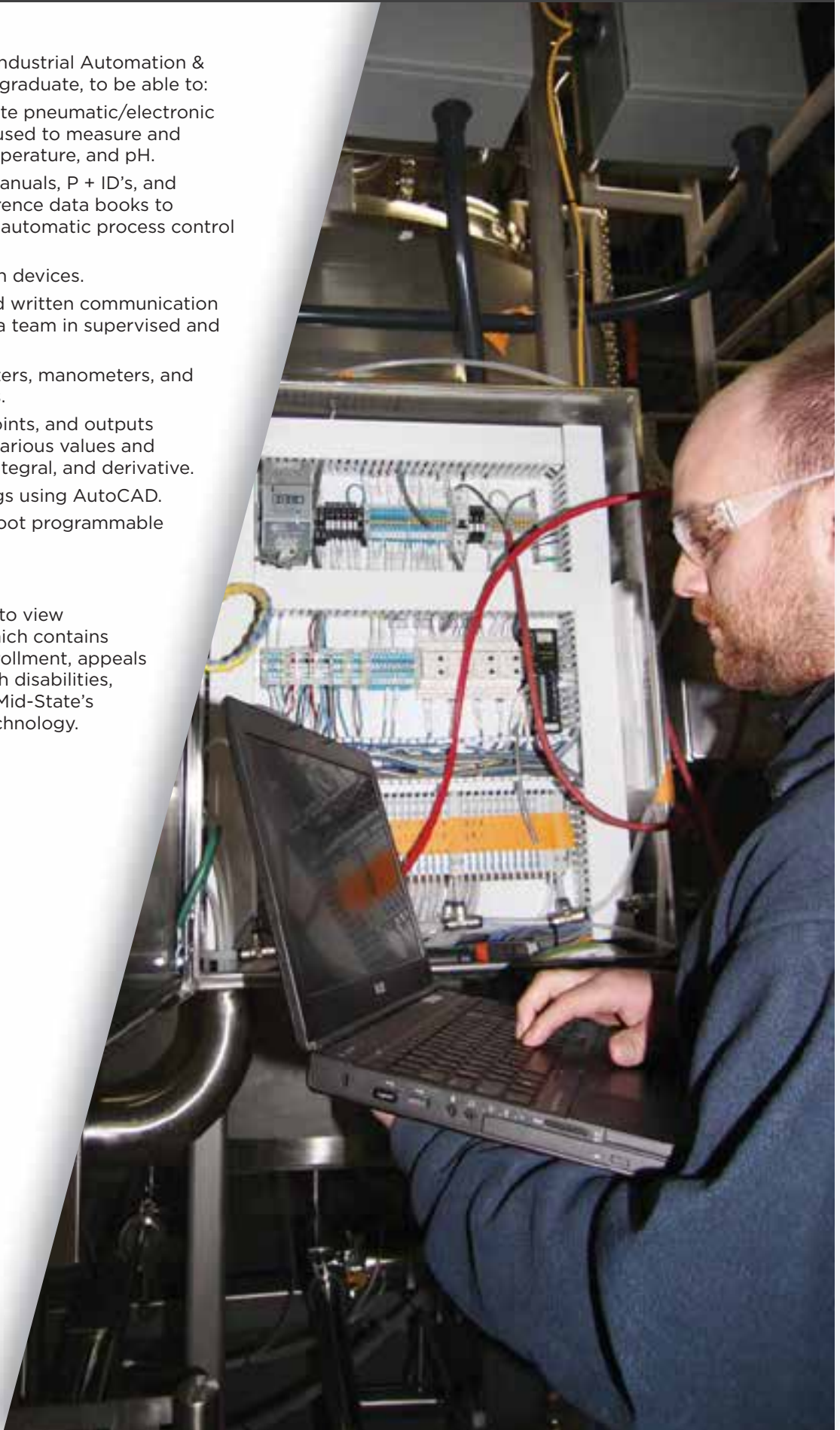
PROGRAM OUTCOMES

Employers will expect you, as an Industrial Automation & Controls Engineering Technology graduate, to be able to:

- Troubleshoot, repair, and calibrate pneumatic/electronic and analog/digital instruments used to measure and control pressure, level, flow, temperature, and pH.
- Effectively interpret technical manuals, P + ID's, and loopsheets as well as cross reference data books to analyze, troubleshoot, and tune automatic process control loops.
- Configure digital communication devices.
- Solve problems using verbal and written communication skills as an individual or part of a team in supervised and unsupervised conditions.
- Operate oscilloscopes, multimeters, manometers, and other related measuring devices.
- Calculate values of inputs, setpoints, and outputs of open and closed loops with various values and combinations of proportional, integral, and derivative.
- Create two-dimensional drawings using AutoCAD.
- Design, program, and troubleshoot programmable logic control (PLC) programs.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

College Algebra with Applications

10804195 **3 credits**

Covers the skills needed for success in calculus and many application areas on a baccalaureate level. Topics include the real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinatorics, and the binomial theorem.

Prerequisite: Trigonometry with Applications 10804196 with a grade of "C" or better

Developmental Psychology

10809188..... **3 credits**

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Electrical Circuits I

10605105 **3 credits**

An introduction to AC/DC electricity and the physical laws that apply to electronic circuits. Direct current (DC) covers basic definitions of voltage, current, and resistance and analysis of series and parallel resistive circuits.

Alternating current (AC) includes an introduction to AC

generation, capacitors, inductors, and transformers and their applications in electronic circuits. Approximately 50 percent of the course is spent in the laboratory applying the principles and theory presented in the classroom.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 65 Corequisite: Intermediate Algebra with Applications 10804118

Electrical Circuits II

10605110 **3 credits**

Continues the study of AC/DC circuits started in Electrical Circuits I. Introduces advanced DC circuit analysis techniques such as Thevenin's Theorem and nodal analysis. Includes discussion of voltage and power theorems used in the analysis of AC circuits consisting of both resistance and reactance. The complex plane and construction of phasor diagrams are also discussed. Concludes with an introduction to electronic filter circuits used in transmission and communication equipment. Approximately 50 percent of the course is spent in the laboratory, applying the principles and theory presented in the classroom.

Prerequisite: Electrical Circuits I 10605105 with a "C" or better; Corequisite: Trigonometry with Applications 10804196

Employment Strategies

10801199 **3 credits**

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation.

NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

English Composition 1

10801136 **3 credits**

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

General Physics 1

10806154 **4 credits**

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation, and applications. Topics include unit conversion and analysis, vectors, translational and rotational kinematics, translational and rotational dynamics, heat and temperature, and harmonic motion and waves.

Corequisite: Trigonometry with Applications 10804196

Instrument Mechanics

10605102 **3 credits**

This introductory course on instrumentation emphasizes a functional and mathematical approach to the use and study of various pneumatic instruments and principles. Identifies the duties and functions of instruments and their components. Includes calculations of springs, force balance, moment balance, and an introduction to pressure measurement and controllers.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 65; Corequisite: Intermediate Algebra with Applications 10804118

Instrumentation Electronics

10605116 **4 credits**

A basic course in industrial electronics involving devices and circuits that relate to the field of instrumentation. Includes a basic review of electronic and electrical fundamentals. Additional topics include power supplies; operational amplifiers; servo mechanisms; relay ladder logic; programmable logic controllers (PLCs); motor control devices; variable frequency drive; single- and three-phase power; and generation and usage of 110, 220, and 480 voltages.

Prerequisite: Basic Electronics 10605115 with a "C" or better

Intermediate Algebra with Applications

10804118 **4 credits**

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to AutoCAD

10623106 **2 credits**

This introductory course in computer-aided drafting (CAD) using AutoCAD software provides foundation skills in using CAD software to create and print two-dimensional technical drawings. This course is available to students in any program. Computer skills and prior knowledge of drawing/drafting techniques is recommended.

Intro to Ethics: Theory & Application

10809166 **3 credits**

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Psychology

10809198 **3 credits**

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better*

Metal Fabrication

10462116 **3 credits**

An introduction to structural steel and plate fabrication, sheet metal fabrication, and basic electric arc and oxyacetylene welding. Presents fabrication techniques, metal selection, layout, cutting, bending, drilling, threading, and joining. Information is presented to the student followed by lab activities to provide a hands-on experience. Emphasizes developing an understanding of tools, techniques, and safe work habits as well as the application of metal fabrication skills.

Metals & Machining

10462114 **3 credits**

A two-part class that introduces the basics of metal science and machine shop practice. Introduces metallurgical concepts of steel and iron production, properties of metals, testing of metals, carbon and its role, heat-treating, steel designations, and cast iron and non-ferrous metals. Students participate in lab exercises examining the properties of metal, an introduction to machine shop practices of safety, measurement,

and machining through the use of hand tools, drilling machines, saws, and engine lathes. Students are introduced to concepts by both classroom presentation and hands-on shop experiences.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Process Control

10605171 4 credits

Introduces the concept of automatic process control on the instrument technician level. Reviews principles of force/moment balance and feedback concepts. Studies two position control, feedback/feedforward control, and process characteristics related to process gain, dead time, time constants, and process capacity. Also includes controller functions and effects such as proportional, integral, and derivative and how different combinations of each cause controller outputs and inputs to respond in open and closed loops. Practices digital controller configuration and loop tuning for level, pressure, flow, and temperature.

Prerequisites: Instrument Mechanics 10605102 and Process Measurements I 10605100

Process Measurements I

10605100 4 credits

Reviews basic principles and calibration standards and practices developed in instrument mechanics. Studies common sensing devices and components employed for the measurement of pressure, temperature, flow, level, and related phenomena.

Prerequisite: Instrument Mechanics 10605102 with a "C" or better and minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 65

Process Measurements II

10605104 3 credits

Covers analog and digital electronic transmitters and controllers, pulp and papermaking, pH, conductivity, and ORP. Concludes with a study of basic nuclear theory.

Prerequisites: Process Measurements I 10605100 and Instrument Mechanics 10605102

Programmable Logic Controllers-Advanced

10605118 3 credits

This lab-intensive course is a continuation of the beginning PLC course designed to build advanced PLC skills. May include activities in advanced programming techniques, motor control, and operator interfaces. This course may be offered for 1–3 credits. Check with the course instructor for specific competencies to be covered each semester.

Prerequisite: Programmable Logic Controllers-Beginning 10605117 or consent of instructor

Programmable Logic Controllers-Beginning

10605117 3 credits

An overview of programmable logic controllers (PLCs) that provides a foundation of knowledge of the programming techniques, operation, and maintenance of PLCs used in typical industrial automation.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 65

Semiconductor Technology

10605115 3 credits

Presents semi-conductor principles with emphasis on practical applications. After reviewing diode and transistor characteristics, studies bias stabilizing techniques followed by an introduction to transistor amplifiers.

Corequisite: Electrical Circuits II 10605110

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent

Trigonometry with Applications

10804196 3 credits

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles, complex numbers, DeMoivre's Theorem, polar coordinates, and vectors.

Prerequisite: Intermediate Algebra with Applications 10804118, with a grade of "C" or better

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended

INDUSTRIAL MECHANICAL TECHNICIAN

Associate in Applied Science (AAS)

Program Code: 10-462-1

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



PROGRAM OUTCOMES

Employers will expect you, as an Industrial Mechanical Technician graduate, to be able to:

- Execute the services of an effective preventive maintenance program for complex manufacturing processes and industrial machinery.
- Use industry accepted and standardized terminology and methods to communicate effectively with coworkers, supervisors, subordinates, engineers, and vendors.
- Diagnose, service, and repair industrial machinery and manufacturing equipment using appropriate tools, materials, and methods.
- Select appropriate mathematic and scientific principles to solve complex problems.
- Display an ability to work safely and effectively as individuals and as members of cooperative teams.
- Plan, specify, and execute the proper installation of new mechanical, hydraulic, and pneumatic equipment into an industrial system.
- Choose suitable methods and proper technology to move and position industrial equipment and materials in a safe and effective manner.

PROTECTIVE CLOTHING

Students are required to wear safety glasses at all times in the lab. Acquiring safety glasses is the responsibility of the student. Proper clothing is discussed in safety lectures.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Bearings & Lubrication Systems

10462102 **2 credits**

Students are presented with information pertaining to the basic functions of bearing surfaces, bearing inspections, analysis of bearing failures and the importance of preventative maintenance.

Developmental Psychology

10809188..... **3 credits**

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Electrical Circuits I

10605105 **3 credits**

An introduction to AC/DC electricity and the physical laws that apply to electronic circuits. Direct current (DC) covers basic definitions of voltage, current, and resistance and analysis of series and parallel resistive circuits.

Alternating current (AC) includes an introduction to AC generation, capacitors, inductors, and transformers and their applications in electronic circuits. Approximately 50

percent of the course is spent in the laboratory applying the principles and theory presented in the classroom.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 65 Corequisite: Intermediate Algebra with Applications 10804118

Electrical Machines

10605127..... **3 credits**

Teaches the fundamentals of generators and motors.

Covers DC and AC generators and motors.

Prerequisite: Electrical Circuits I 10605105 or Intro to Electronics 10605108

English Composition 1

10801136 **3 credits**

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

Fluid Process Systems

10462104 **3 credits**

Provides a “hands-on” approach to the study of fluid handling systems. A wide variety of system components, including pumps, piping, seals and packing, flow control devices, flow measuring devices, and pressure vessels, are studied. System design considerations for fluid media temperature, pressure, specific gravity, viscosity, solids

concentrations, and volume requirements are analyzed. An introduction to refrigeration and air conditioning provides the student with a basic understanding of these systems.

General Physics 1

10806154 4 credits

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation, and applications. Topics include unit conversion and analysis, vectors, translational and rotational kinematics, translational and rotational dynamics, heat and temperature, and harmonic motion and waves.

Corequisite: Trigonometry with Applications 10804196

Industrial Automation

10462108 3 credits

Introduces the fundamentals of industrial motor controls, relay logic, ladder diagrams, industrial automation, and integrated manufacturing systems. The purpose of the course is to familiarize students with the terminology, capabilities, applications, and limitations of automated industrial equipment and systems.

Industrial Hydraulics & Pneumatics

10462120 3 credits

Studies basic principles of hydraulics and pneumatics. Covers the advantages, disadvantages, and inherent problems with these systems. Includes the principles of operation and the constructional features of pumps, motors, valves, seals, packing, and conductors as well as the physical properties of liquids. Students learn to identify various parts of a circuit and analyze them for their use.

Prerequisite: Intermediate Algebra with Applications 10804118

Industrial Safety

10462107 2 credits

Provides an overview of safety, health, and environmental issues as they relate to industry. Various types of hazards and the controls and equipment used to reduce risks from hazards are discussed. Focuses on understanding the Occupational Safety and Health Administration (OSHA) and its function as well as other regulatory and enforcement agencies associated with industrial safety, health, and the environment.

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to AutoCAD

10623106 2 credits

This introductory course in computer-aided drafting (CAD) using AutoCAD software provides foundation skills in using CAD software to create and print two-dimensional technical drawings. This course is available to students in any program. Computer skills and prior knowledge of drawing/drafting techniques is recommended.

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better*

Material Handling

10462110 2 credits

Introduces the concepts and equipment that transport solid materials in the industrial production process. Various types of equipment, including rigging, cranes, mechanical conveyors, pneumatic conveyors, elevators, and lift trucks, are discussed. Practical applications and use guidelines are presented to promote the safe and efficient use of this type of material handling equipment.

Mechanical Power Transmission

10462106 3 credits

A study of the systems and components that transmit power from the prime mover through the system. Gear trains, linkages, clutches, couplings, and flexible drives are evaluated mathematically in lab situations.

Metal Fabrication

10462116 3 credits

An introduction to structural steel and plate fabrication, sheet metal fabrication, and basic electric arc and oxyacetylene welding. Presents fabrication techniques, metal selection, layout, cutting, bending, drilling, threading, and joining. Information is presented to the student followed by lab activities to provide a hands-on experience. Emphasizes developing an understanding of tools, techniques, and safe work habits as well as the application of metal fabrication skills.

Metals & Machining

10462114 3 credits

A two-part class that introduces the basics of metal science and machine shop practice. Introduces metallurgical concepts of steel and iron production, properties of metals, testing of metals, carbon and its rule, heat-treating, steel designations, and cast iron and non-ferrous metals. Students participate in lab exercises examining the properties of metal, an introduction to machine shop practices of safety, measurement, and machining through the use of hand tools, drilling machines, saws, and engine lathes. Students are introduced to concepts by both classroom presentation and hands-on shop experiences.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

Programmable Logic Controllers-Advanced

10605118 3 credits

This lab-intensive course is a continuation of the beginning PLC course designed to build advanced PLC skills. May include activities in advanced programming techniques, motor control, and operator interfaces. This course may be offered for 1-3 credits. Check with the course instructor for specific competencies to be covered each semester.

Prerequisite: Programmable Logic Controllers-Beginning 10605117 or consent of instructor

Programmable Logic Controllers-Beginning

10605117 3 credits

An overview of programmable logic controllers (PLCs) that provides a foundation of knowledge of the programming techniques, operation, and maintenance of PLCs used in typical industrial automation.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 65

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent

Trigonometry with Applications

10804196 3 credits

Topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles, complex numbers, DeMoivre's Theorem, polar coordinates, and vectors.

Prerequisite: Intermediate Algebra with Applications 10804118, with a grade of "C" or better

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended

INFORMATION SECURITY SPECIALIST

Associate in Applied Science (AAS) or
Technical Diploma

Program Code: ?

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



?



bachelor's degree opportunities
?
mstc.edu/transfer

Associate in Applied Science

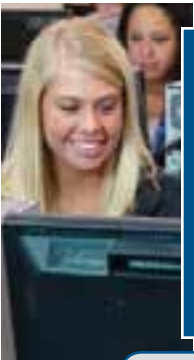
Total Credits: ?

Salary information:
mstc.edu/programsalaries

Careers: ?

In general, there is growing demand for these careers. Example: ? (EMSI data within 100-mile radius of Wisconsin Rapids).

?



Graduates of the Office Support Specialist technical diploma may advance into the Administrative Professional program.

Technical Diploma

Total Credits: ?

Salary information:
mstc.edu/programsalaries

Careers: ?

In general, there is growing demand for these careers. Example: ? (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

?

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a ? graduate, to be able to:

- ?
- ?

?

ADDITIONAL ENTRY CRITERIA

To apply to the ? program, please submit the following documents to Mid-State Admissions:

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

PROGRAM PROGRESSION

In order to maintain a passing status and progress in the program, students must:

- Receive a grade of “C” or better in Administrative Office Procedures and Supervised Field Experience.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

?

SAMPLE PART-TIME CURRICULUM OPTION

?

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

IT NETWORK SPECIALIST

Associate in Applied Science (AAS)

Program Code: 10-150-2

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



it network specialist career pathway

IT NETWORK SPECIALIST



The IT Network Specialist program at Mid-State prepares students to administer and support personal computer and network environments. Graduates are able to install, troubleshoot, analyze, and repair networks as well as maximize network efficiency. In this program you will follow guided instructions for setting up and managing multiple computers in a networking environment. You'll also apply concepts in hands-on activities both in and outside the classroom. Past students have repaired and imaged laptops for a local school district, completed a network upgrade for a non-profit organization, and fixed computers at the PC Clinic.



bachelor's degree opportunities

Lakeland University,
BA Specialized Administration

UW-Stout,
BS Information and Communication Technologies

University of Phoenix,
BS Management

For more information and additional opportunities, go to mstc.edu/transfer

Associate in Applied Science

Total Credits: 67-68

Salary information:
mstc.edu/programsalaries

Careers: Computer Network Support Specialist, Network Administrator, Network Infrastructure Architect, Hardware Support Specialist, Help Desk Specialist, and PC Troubleshooter

In general, there is growing demand for these careers. Example: Computer Network Support Specialist career has grown by 1% over the last two years and is expected to grow by 6% over the next 10 years. Currently 2,075 Computer Network Support Specialists are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

MICROSOFT SYSTEM ADMINISTRATOR



Managing and troubleshooting network environments based on the Windows Server operating system is a growing field of expertise in IT. Mid-State's Microsoft System Administrator program covers some of the newest and most rapidly expanding technologies in this area. We seek feedback from local employers to ensure course content is always up to date. As a result, you will have the skills and knowledge employers are looking for.

Graduates of the Microsoft System Administrator technical diploma may advance into the IT Network Specialist program.

Technical Diploma

Total Credits: 12

Salary information:
mstc.edu/programsalaries

Careers: BYOD Technician, IT Help Desk Specialist, Network Operations Specialist, Mobile Security Specialist, Server Deployment Specialist, Technology Support Specialist, and Telecommunications Technician

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Accounting, Administrative Professional, Business Management, Court Reporting, IT Software Developer, Marketing, and Office Support Specialist

For estimated tuition and fees, visit mstc.edu/programcosts.

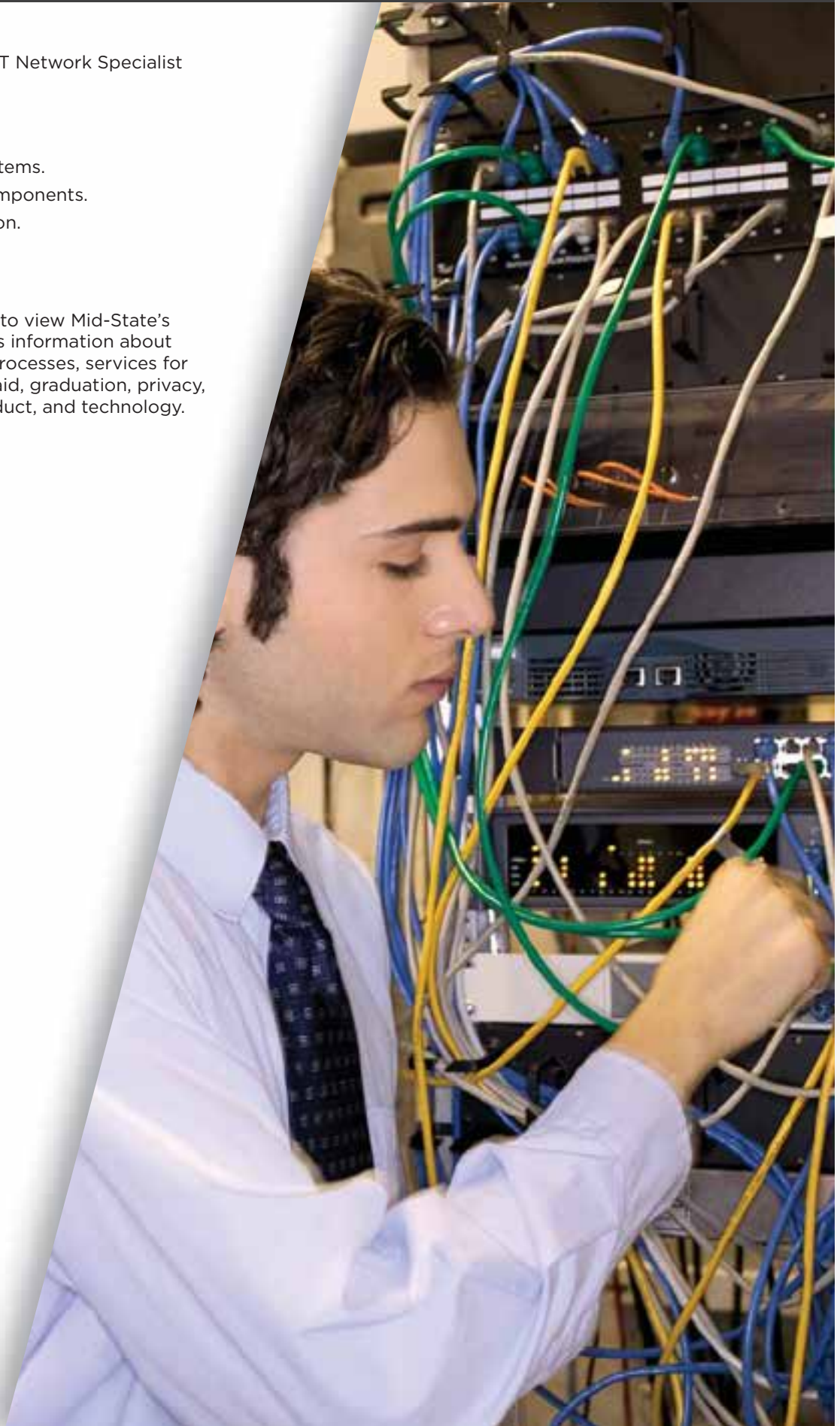
PROGRAM OUTCOMES

Employers will expect you, as an IT Network Specialist graduate, to be able to:

- Implement computer networks.
- Implement client systems.
- Implement server operating systems.
- Implement network security components.
- Develop technical documentation.
- Troubleshoot network systems.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		15-16 credits
10150110	Networking I	3
10152101	Intro to Programming	3
10154102	Hardware Essentials I	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		18 credits
10102213	Requirements Analysis	3
10150111	Networking II	3
10150120	Server Administration-Beginning	3
10150165	Network Server Scripting	3
10151110	Information Security I	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term		17 credits
10102130	Career Development -or-	
10801199	Employment Strategies	3
10150112	Networking III	3
10150121	Server Administration-Intermediate	3
10150130	Virtualization	3
10154101	IT Customer Support	2
10809195	Economics	3
Term		17 credits
10150113	Networking IV	3
10150141	Supervised Field Experience	2
10150161	Advanced Networking Projects	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
10809166	Intro to Ethics: Theory & Application	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Total Credits 67-68		

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		9 credits
10150110	Networking I	3
10152101	Intro to Programming	3
10154102	Hardware Essentials I	3
Term		9 credits
10150111	Networking II	3
10150120	Server Administration-Beginning	3
10151110	Information Security I	3
Term		6 credits
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term		8 credits
10150121	Server Administration-Intermediate	3
10150112	Networking III	3
10154101	IT Customer Support	2
Term		9 credits
10102213	Requirements Analysis	3
10150165	Network Server Scripting	3
10809166	Intro to Ethics: Theory & Application	3
Term		6-7 credits
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Term		6 credits
10150130	Virtualization	3
10809195	Economics	3
Term		8 credits
10150113	Networking IV	3
10150141	Supervised Field Experience	2
10150161	Advanced Networking Projects	3
Term		6 credits
10102130	Career Development -or-	
10801199	Employment Strategies	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Total Credits 67-68		

national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/ or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Employment Strategies

10801199 3 credits

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation.

NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

Hardware Essentials I

10154102 3 credits

The first in a two-course series that aligns with the CompTIA A+ certification. This class is designed to teach students how to build, configure, secure, network, and troubleshoot PCs. The course covers the objectives of the CompTIA A+ exams but is not designed or intended to be a “test prep” course.

Information Security I

10151110 3 credits

Introduces students to the fundamentals of information security. Topics include security terms and concepts, risk assessment, cryptography, monitoring and auditing, attacks and techniques, and the legal and ethical issues associated with information security.

Prerequisites: Networking I 10150110 and Hardware Essentials I 10154102 or equivalent work experience with consent of instructor

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications.

Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of “C” or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to American Government

10809122 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/ or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/ or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/ or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Programming

10152101 3 credits

Applies the basic concepts of computer programming using JavaScript, with an emphasis on structured programming, exception handling, debugging, testing and writing event handlers. Learners will create JavaScript applications using Microsoft Visual Studio. Additional topics include online software development resources, programming and documentation standards, variable lifetime/scope, data types, control structures, and mathematical calculations.

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of

human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better*

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better*

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively. *Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better*

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course. *Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of “C” or better, or College Math 10804107 with a grade of “C” or better. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)*

IT Customer Support

10154101..... 2 credits

Introduces learners to the field of user support professionals. Focuses on providing quality customer support, problem solving while exploring software quality assurance, information technology project development methodologies, and strategies for keeping current in an ever-changing field. *Prerequisite: Written Communication 10801195 or consent of instructor*

Network Server Scripting

10150165 3 credits

Provides best practices and techniques in Linux and Windows shell and command line scripting using PowerShell and BASH. *Corequisite: Server Administration-Beginning 10150120*

Networking I

10150110..... 3 credits

Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, participants will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course is the first of four courses that align with CCNA certification. Covers the objectives of the first CCNA exam but is not designed or intended to be a “test prep” course. *Corequisite: Hardware Essentials I 10154102*

Networking II

10150111..... 3 credits

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This course is the second of four courses that align with CCNA certification. Covers the objectives of the first CCNA exam but is not designed or intended to be a “test prep” course. *Prerequisites: Networking I 10150110 and Hardware Essentials I 10154102*

Networking III

10150112 3 credits

Describes the architecture, components, and operations of routers and switches in a large and complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students are able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Also develops the knowledge and skills needed to implement DHCP and DNS operations in a network. This course is the third of four courses that aligns with the CCNA certification. The course covers the objectives of the second CCNA exam but is not designed or intended to be

course descriptions

a “test prep” course.

Prerequisite: Networking II 1015011

Networking IV

10150113 3 credits

Discusses the WAN technologies and network services required by converged applications in a complex network. The course allows students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students will learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Also develops the knowledge and skills needed to implement IPsec and virtual private network (VPN) operations in a complex network. This course is the final course in a series of four courses that aligns with the CCNA certification. The course covers the objectives of the second CCNA exam but is not designed or intended to be a “test prep” course.

Prerequisite: Networking III 10150112

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Requirements Analysis

10102213 3 credits

A practical course that provides an overview of the systems development life cycle and then focuses on the analysis phase of real-world computer and manual systems. Students learn concepts, techniques, and tools to aid in the analysis of existing systems, the identification of user requirements, and the design of database files. Both written and oral communications are emphasized. Most of the work is done in groups.

Server Administration-Beginning

10150120 3 credits

Develops skill in the design, installation, administration, and management of computer networks. Topics include network design; installation and configuration of a commonly used network operating system; service packs and updated drivers; user accounts, groups, profiles, and policies; file system security; printer management; and application software installation, backup, and recovery.

Prerequisite: Network Fundamentals 10150101

Server Administration-Intermediate

10150121 3 credits

Expands on the administration skills needed for successful

management of a network operating system in a business environment. Topics include installation and configuration of a network operating system, monitoring and performance tuning, monitoring and analyzing network traffic, licensing, network devices, DNS, FTP, web services, and directory services.

Prerequisite: Server Administration-Beginning 10150120

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a “C” or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a “C” or better or equivalent.

Supervised Field Experience

10150141 2 credits

Integrates networking skill developed in classroom study with specific occupational experiences at local employment sites. Develops work behavior appropriate to the computer information systems environment.

Prerequisite: Completion of at least 20 credits in occupational-specific IT Network Specialist courses or consent of instructor.

Virtualization

10150130 3 credits

Develops skill in the installation, setup, management, usage, and comparison of various network operating systems and network devices.

Prerequisite: Server Administration-Beginning 10150120

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

IT SOFTWARE DEVELOPER

Associate in Applied Science (AAS)

Program Code: 10-152-1

our graduates
INDEMAND

2017/2018



mstc.edu

it software developer career pathway

IT SOFTWARE DEVELOPER



Graduates of Mid-State's IT Software Developer program have the skills needed to design, develop, and maintain software and software systems on a wide variety of computing devices and to meet the spectrum of business needs. You'll learn to create software to run on all platforms including network servers, desktop workstations, web pages, and Android and iOS mobile devices. You will use state-of-the-art equipment and work in teams to design, develop, test, and implement small-scale software systems for nonprofit organizations or simulated clients.



bachelor's degree opportunities

Lakeland University, BA Computer Science

UW-Stout, BS Information and Communication Technologies

For more information and additional opportunities, go to mstc.edu/transfer

Associate in Applied Science

Total Credits: 66-67

Salary information:
mstc.edu/programsalaries

Careers: Application Engineer, Data Analyst, Database Programmer, Mobile Applications Developer, Software Developer, Software Technician, Systems Programmer, Web Designer, and Web Developer

In general, there is growing demand for these careers. Example: Software Developer career has grown by 10% over the last two years and is expected to grow by 25% over the next 10 years. Currently 5,313 Software Developers, Applications are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Accounting, Administrative Professional, Business Management, Court Reporting, IT Network Specialist, Marketing, Microsoft System Administrator, and Office Support Specialist

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

PROGRAM OUTCOMES

Employers will expect you, as an IT Software Developer graduate, to be able to:

- Design software systems.
- Integrate database systems.
- Develop software applications.
- Develop technical documentation.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

SAMPLE FULL-TIME CURRICULUM OPTION

Term		15-16 credits
10152101	Intro to Programming	3
10152121	Object-Oriented Programming 1	3
10152150	Web Design 1	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3

Term		15 credits
10152122	Object-Oriented Programming 2	3
10152159	User Experience Design	3
10152174	Collaborate Application Development	3
10156101	Database Concepts and Design	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3

Term		18 credits
10152123	Object-Oriented Programming 3	3
10152155	Web Programming 1	3
10152160	Introductory Mobile Application Development	3
10152175	Software Architecture	3
10154102	Hardware Essentials I	3
10156102	SQL Development	3

Term		18 credits
10102130	Career Development -or-	
10152177	Software Developer Internship -or-	
10801199	Employment Strategies	3
10152158	Web Programming 2	3
10152161	Intermediate Mobile Application Development	3
10152176	Application Development Capstone	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology -or-	
10809166	Intro to Ethics: Theory & Application -or-	
10809195	Economics	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Total credits 66-67

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		9 credits
10152101	Intro to Programming	3
10152121	Object-Oriented Programming 1	3
10152150	Web Design 1	3

Term		9 credits
10152122	Object-Oriented Programming 2	3
10152174	Collaborate Application Development	3
10156101	Database Concepts and Design	3

Term		6-7 credits
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3

Term		9 credits
10152123	Object-Oriented Programming 3	3
10152155	Web Programming 1	3
10156102	SQL Development	3

Term		9 credits
10152158	Web Programming 2	3
10152159	User Experience Design	3
10154102	Hardware Essentials I	3

Term		6 credits
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology -or-	
10809166	Intro to Ethics: Theory & Application -or-	
10809195	Economics	3

Term		9 credits
10152160	Introductory Mobile Application Development	3
10152175	Software Architecture	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3

Term		9 credits
10102130	Career Development -or-	
10152177	Software Developer Internship -or-	
10801199	Employment Strategies	3
10152161	Intermediate Mobile Application Development	3
10152176	Application Development Capstone	3

Total credits 66-67

Application Development Capstone

10152176 **3 credits**

Builds team software development and communication skills. Learners form small teams, each identifying, designing, and implementing an attractive and usable software application. Project teams each use Agile software development principles to manage their projects, communicate project status, adapt to changing requirements, and overcome technical challenges. Additional topics include a review of the Agile software development methodology.

Prerequisite: Software Architecture 10152175

Career Development

10102130 **3 credits**

Prepares students for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment. NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

Collaborate Application Development

10152174 **3 credits**

Introduces the Agile software development methodology and applies it to managing a software development project. Learners work in small teams, taking an application through its entire lifecycle including the phases of requirements gathering, analysis, design, development, testing, deployment and maintenance. Additional topics include an introduction to the following disciplines and related tools: project management, version control, issue tracking, unit/regression testing, and automated build/deployment.

Prerequisite: Web Design 1 10152150

College Mathematics

10804107 **3 credits**

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Database Concepts and Design

10156101 **3 credits**

Introduces the concepts of relational database design, development, and maintenance. Topics include relational normalization, referential integrity, and SQL.

Developmental Psychology

10809188 **3 credits**

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better*

Economics

10809195 **3 credits**

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Employment Strategies

10801199 **3 credits**

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation. NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Hardware Essentials I

10154102 3 credits

The first in a two-course series that aligns with the CompTIA A+ certification. This class is designed to teach students how to build, configure, secure, network, and troubleshoot PCs. The course covers the objectives of the CompTIA A+ exams but is not designed or intended to be a "test prep" course.

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intermediate Mobile Application Development

10152161 3 credits

Provides instruction in developing software applications for mobile devices using the Android operating system.

Prerequisite: Introductory Mobile Application Development 10152160

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Programming

10152101 3 credits

Applies the basic concepts of computer programming using JavaScript, with an emphasis on structured programming, exception handling, debugging, testing and writing event handlers. Learners will create JavaScript applications using Microsoft Visual Studio. Additional topics include online software development resources, programming and documentation standards, variable lifetime/scope, data types, control structures, and mathematical calculations.

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introductory Mobile Application Development

10152160 3 credits

Provides instruction in developing software applications for mobile devices using the Android operating system.

Prerequisite: 10152102 Programming Logic Intermediate or consent of instructor

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of "C" or better, or College Math 10804107 with a grade of "C" or better. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Object-Oriented Programming 1

10152121..... 3 credits

Introduces object-oriented programming and design, with a focus on building the conceptual framework necessary to understand and build object-oriented programs. This course uses C# .NET, the Unified Modeling Language (UML), and other tools to present concepts from a variety of perspectives. Learners will create UML diagrams and write/debug C# .NET applications, applying the object-oriented basics of abstraction, encapsulation, inheritance, and polymorphism. Additional topics include object instantiation/lifetime/scope, methods, properties, visibility modifiers, and collections/multiplicity.

Corequisite: Intro to Programming 10152101

Object-Oriented Programming 2

10152122..... 3 credits

Builds upon the object-oriented concepts learned in Object-Oriented Programming 1, continuing with an in-depth application of object-oriented design principles and patterns. Learners will translate design patterns from Java and implement them in C# .NET. Additional topics include delegates, iterators, and data structures.

Prerequisite: Object-Oriented Programming 1 10152121

Object-Oriented Programming 3

10152123..... 3 credits

Builds upon the object-oriented concepts learned in earlier courses, continuing with an in-depth application of object-oriented design principles and patterns. Learners will translate design patterns from Java and implement them in C# .NET. Additional topics include delegates, iterators, and data structures.

Prerequisite: Object-Oriented Programming 2 10152122

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

Software Architecture

10152175..... 3 credits

Introduces N-tier software architecture through the exploration of various data access methodologies. Learners work in teams to create a C# .NET application comprised of data access, business, and presentation layers using MVVM architecture. The application will access data from Microsoft SQL Server using a variety of object-relational mapping (ORM) frameworks. Additional topics include ADO.NET, LINQ, Entity Framework, and object-oriented databases.

Prerequisites: Collaborative Application Development 10152174, Object-Oriented Programming 2 10152122, and Database Concepts and Design 10152156

Software Developer Internship

10152177 3 credits

Integrates software development skills developed in classroom study with specific occupational experiences at local employment sites. Develops work behavior appropriate to the computer information systems environment.

Prerequisite: Completion of at least 18 credits in IT Software Developer courses or consent of instructor

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores – Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent

SQL Development

10156102 3 credits

Expands upon earlier courses with advanced SQL syntax (indexes, views, stored procedures, and triggers), database design, and data transformation. Additional topics include alternate database technologies, emerging database trends, and database administration and security. Data Warehousing concepts are discussed.

Prerequisite: Database Concepts and Design 10156101

User Experience Design

10152159 3 credits

Examines the design, prototyping, and evaluation of user interfaces. Learners will apply user experience standards in the development of web and software interfaces to provide a quality user experience. Topics include psychological and interaction principles, requirements analysis, designing for different devices, style guides, usability testing, and visual design principles.

Prerequisite: Web Design 1 10152150

Web Design 1

10152150 3 credits

Introduces HTML and Cascading Style Sheets (CSS) coding techniques. Learners will create/modify web pages using HTML tags and style the web pages with CSS. For the final course project, learners will create a personal website portfolio. Additional topics include copyright considerations, text editors, image optimization, FTP utilities, and browser tools.

Web Programming 1

10152155 3 credits

Using server-side technologies, the student creates and demonstrates data connectivity to the web. Tools may include elements of the following languages: HTML, JavaScript, SQL, and PHP. Students retrieve data for display to the web browser and capture data for storage from a web-based form.

Prerequisites: Web Design 1 10152150, Intro to Programming 10152101, and Database Concepts and Design 10156101

Web Programming 2

10152158 3 credits

Builds on the prior Web Design 1 and Web Programming 1. Introduces advanced topics of jQuery DOM manipulations, jQuery events, call backs and chaining, hierarchy, and AJAX calls. Also includes AngularJS, modules using type script, imports/exports, templates and binding, and form controls.

Prerequisite: Web Programming 1 10152155

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

LIBERAL ARTS-AS- SOCIATE OF ARTS

Associate in Applied Science (AAS) or
Technical Diploma

Program Code: ?

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



?



bachelor's degree opportunities
?
mstc.edu/transfer

Associate in Applied Science

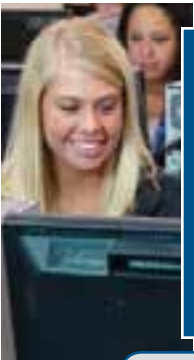
Total Credits: ?

Salary information:
mstc.edu/programsalaries

Careers: ?

In general, there is growing demand for these careers. Example: ? (EMSI data within 100-mile radius of Wisconsin Rapids).

?



Graduates of the Office Support Specialist technical diploma may advance into the Administrative Professional program.

Technical Diploma

Total Credits: ?

Salary information:
mstc.edu/programsalaries

Careers: ?

In general, there is growing demand for these careers. Example: ? (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

?

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a ? graduate, to be able to:

- ?
- ?

?

ADDITIONAL ENTRY CRITERIA

To apply to the ? program, please submit the following documents to Mid-State Admissions:

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

PROGRAM PROGRESSION

In order to maintain a passing status and progress in the program, students must:

- Receive a grade of “C” or better in Administrative Office Procedures and Supervised Field Experience.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

?

SAMPLE PART-TIME CURRICULUM OPTION

?

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

3
3
3
3





LIBERAL ARTS-AS- SOCIATE OF SCI- ENCE

Associate in Applied Science (AAS) or
Technical Diploma

Program Code: ?

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



?



bachelor's degree opportunities
?
mstc.edu/transfer

Associate in Applied Science

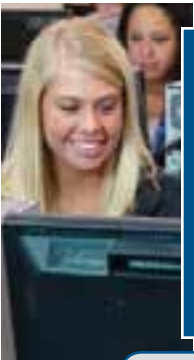
Total Credits: ?

Salary information:
mstc.edu/programsalaries

Careers: ?

In general, there is growing demand for these careers. Example: ? (EMSI data within 100-mile radius of Wisconsin Rapids).

?



Graduates of the Office Support Specialist technical diploma may advance into the Administrative Professional program.

Technical Diploma

Total Credits: ?

Salary information:
mstc.edu/programsalaries

Careers: ?

In general, there is growing demand for these careers. Example: ? (EMSI data within 100-mile radius of Wisconsin Rapids).

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dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

?

For estimated tuition and fees, visit mstc.edu/programcosts.

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Employers will expect you, as a ? graduate, to be able to:

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- ?

?

ADDITIONAL ENTRY CRITERIA

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Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

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SAMPLE FULL-TIME CURRICULUM OPTION

?

SAMPLE PART-TIME CURRICULUM OPTION

?

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- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

3
3
3
3





MACHINE TOOL TECHNICIAN

Technical Diploma

Program Code: 32-420-1

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



MACHINE TOOL TECHNICIAN



The Machine Tool Technician program prepares graduates for machining positions, an in-demand skill set at the heart of industrial production. Additional training and experience often lead to supervisory, quality assurance, and tool maker positions. In this program you will learn to shape various materials into intricate, precise, usable parts. You'll also work from blueprints and written specifications to select the proper machinery, materials, and tools, and you'll gain proficiency with machine tools such as lathes, mills, grinders, computers, and computerized numerical control (CNC) machines.

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Technical Diploma

Total Credits: 59-60

Salary information:
mstc.edu/programsalaries

Careers: Advanced Machine Operator, CNC Operator, Engineering Prototype Machinist, Job Shop Machinist, Machine Assembler, Machine Maintenance, Machine Operator, Machine Tool Supplies Salesperson, Machinist, Machinist Apprentice, Tool and Die Apprentice, Tool and Die Repairer, and Tool Room Machinist

In general, there is growing demand for these careers. Example: Machinist career has grown by 4% over the last two years and is expected to grow by 15% over the next 10 years. Currently 5,529 Machinists are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Industrial Mechanical Technician and Welding

For estimated tuition and fees, visit mstc.edu/programcosts.

NOTES:

PROGRAM OUTCOMES

Employers will expect you, as a Machine Tool Technician graduate, to be able to:

- Demonstrate the ability to work safely and cooperatively as an individual and in teams in a classroom/industrial setting.
- Use various manual machine tools, construct parts to required specifications following instructions and interpreting blueprints.
- Analyze the various programming methods, software, and equipment to machine parts to specifications using CNC machines.
- Demonstrate proper machine care while producing precision parts within time estimates.
- Use terminology associated with machine tool technology to communicate effectively with co-workers, supervisors, customers, and vendors.
- Analyze prints to create parts to specifications using computational skills, proper process planning, and equipment.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



academic career plan

Term/Year	Credits	Term/Year	Credits

course descriptions

Advanced Lathes

32420305 4 credits

Students receive further insight into lathe concepts. Includes safety review and covers advanced cutting tool materials such as carbides, ceramics, cubic boron nitride (CBN), and polycrystalline diamonds (PCD). Tooling, speeds and feeds, cutting tool selection, and advanced machine practices such as multi-operations and process planning are also covered.

Prerequisite: Threads & Mills Cutting 32420304

Advanced Mills

32420306 4 credits

Provides greater insight into milling machine concepts. Places major emphasis on milling machine terminology, work-holding methods, location principles, tooling, and cutting tool selection, in addition to operations and process planning. Includes rotary tables and indexing methods such as direct, simple, and angular.

Prerequisite: Threads & Mills Cutting 32420304

CAD/CAM

32420368 3 credits

Introduces students to computer-aided drafting/design (CAD) and computer-aided machining/manufacturing (CAM). Consists of demonstrations and hands-on use of CAD/CAM software and hardware. Places major emphasis on geometry creation and editing functions, process planning, proper cutter selection, feed and speed selection, and tool path generation in addition to post processing to specific CNC machines. Includes some basic machine setup and operation to verify program operation. Students should have knowledge of drafting/design,

machining processes and procedures, and computer operating systems (MS Windows).

Prerequisites: CNC Lathes/Manual Programming 32420362 and CNC Mills/Manual Programming 32420364

Career Development

10102130 3 credits

Prepares students for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment.

NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

CNC Controls

32420366 3 credits

Provides the skills needed to navigate common CNC machine control panels. Students learn common methods to set tool offsets and work offsets as well as perform common part setup practices. Focuses on accuracy, repeatability, and efficiency in the operations of CNC machine tools.

Prerequisites: CNC Lathes/Manual Programming 32420362 and CNC Mills/Manual Programming 32420364

CNC Lathes/Manual Programming

32420362 2 credits

Covers NC/CNC terminology, and introduces students to computers and components of NC/CNC lathes. All

programming is manual word address (G+M Code) basics. Includes basic CNC lathe operation.
Corequisite: Advanced Lathes 32420305

CNC Mills/Manual Programming

32420364 2 credits

Covers NC/CNC terminology, and introduces students to computers and components of NC/CNC mills. All programming is manual word address (G+M code) basics. Includes basic CNC mill operation.

Prerequisite: Mechanical Drafting Concepts 10623104; Corequisite: Advanced Lathes 32420305

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Drilling Machines & Operations

32420302 2 credits

Emphasizes drill presses, drilling tools, drill press accessories, and drilling operations. Studies the fundamental parts and functions of the numerous types of drill presses. Includes the operation of presses, work holding, and the different cutting tools used in the drill press. Students use the drill press and cutting tools to complete projects and exercises.

Corequisite: Intro to Machine Tool 32420301

Employment Strategies

10801199 3 credits

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation.

NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

Geometric Dimensioning & Tolerancing

32420322 2 credits

Provides fundamentals of geometric dimensions and tolerancing per the ASME Y14.5 standard. Focuses on developing the technical knowledge and skills required for application and interpretation of GD&T.

Prerequisite: Admission to Machine Tool program 324201 or consent of instructor

Intro to CNC Machining

32420360 2 credits

Introduces students to the world of CNC (computerized numerical control) machining. Students explore the general terminology associated with automated machine tools, accompanied by an introduction to programming and operations of CNC mills and lathes. Gives learners a hands-on understanding of the importance of the use of CNC machinery in modern manufacturing.

Intro to Machine Tool

32420301 2 credits

Teaches the concepts, terms, and basic information relevant and common to all facets of machine tool technology. Emphasizes safety, safe work environment, and developing safe work habits. Introduces students to cutting speeds and setting feeds on the lathe and drill press. Builds knowledge of precision and non-precision measuring tools, and basic lathe operations. Students are also introduced to common manual machines and machining operations while completing exercises and projects.

Intro to Machine Tool - Safety

32420314 1 credit

Teaches the concepts, terms, and basic information relevant and common to all facets of machine tool technology. Emphasizes safety, safe work environment, and developing safe work habits. Introduces students to machining principles and machine setup.

Introduction to Solid Modeling

32420310 2 credits

Introduces students creating computer-aided drafting (CAD) represented solid models for use in the manufacturing arena. As an introductory course in three-dimensional modeling, learners use computer software to develop two-dimensional sketches and use modeling tools to create solid models on the computer. Students also use the models to create and detail two-dimensional engineering drawings for use on the manufacturing floor. Computer knowledge and prior knowledge of drawing/drafting techniques is recommended.

Lathe Basics

32420315 2 credits

Develops understanding of new concepts, terms, and operations of machine tool while reviewing and further developing skills from previously covered operations. Places strong emphasis on safety, which must be practiced continuously. Expands and enhances the working skills on the lathe through exercises and projects. Classroom instruction emphasizes the parts and accessories of the engine lathe. Also includes the use and

benefit of cutting fluids, the theory behind metal cutting, and practice of cutting speeds and feeds.

Corequisite: Intro to Machine Tool-Safety 32420314

Lathe Operations

32420317 2 credits

Helps the learner understand new concepts, terms, and operations of machines common to the machine shop. Focuses on shop safety guidelines and becoming familiar with common machine shop equipment. The classroom topics will center around lathe operations. Topics include: work holding, cutting and forming tools, dial manipulation, and cutting times. This course will expand and enhance the learner's working skills on the individual machine tools through exercises and projects.

Corequisite: Intro to Machine Tool-Safety 32420314

Layouts and Sawing Operations

32420316 3 credits

Teaches the concepts, terms, and basic information relevant and common to all facets of machine tool technology. Focuses on the various types of cut-off machines, saws, and precision- and non- precision layout. Students create layouts per print specification and use the different saws to complete projects and exercises.

Corequisite: Intro to Machine Tool - Safety 32420314

Math for Manufacturing

32420320 2 credits

Studies machine tool problems involving calculations with fractions, decimals, and percentage. Includes work with the metric system, measurement conversion, geometry, trigonometry of right triangles, and use of a scientific calculator. Formulas with application to the trades are also studied.

Prerequisite: Admission into Machine Tool Technician program 324201, Welding program 314421, Gas Metal Arc Welding (GMAW) certificate 144422, or consent of instructor

Manufacturing Practices

10623112 3 credits

As competition for market share continues to increase, manufacturers rely on innovations in technology, methods, and practices to give them the edge they need. To remain competitive globally in manufacturing, the watchwords are productivity, efficiency, and quality. In this course, students examine some of the practices that many manufacturing operations have come to rely on to make their operations competitive, efficient, and cost-effective. Topics covered in this class include the principles of lean manufacturing, value versus non-value added waste, 5S methodology, value stream mapping, setup reduction and quick changeover, cellular flow, building a lean culture, total productive maintenance, and statistical process control (SPC).

Mechanical Drafting Concepts

10623104 3 credits

Includes drafting media, drafting standards, reproduction processes, geometric construction, isometric and oblique pictorial drawings, dimensioning, tolerancing, parts drawing and part identification.

Metal Fabrication

10462116 3 credits

An introduction to structural steel and plate fabrication, sheet metal fabrication, and basic electric arc and oxyacetylene welding. Presents fabrication techniques, metal selection, layout, cutting, bending, drilling, threading, and joining. Information is presented to the student followed by lab activities to provide a hands-on experience. Emphasizes developing an understanding of tools, techniques, and safe work habits as well as the application of metal fabrication skills.

Metals Science

32420312 2 credits

Introduces the field of metallurgy. Covers sources of common metals, including both ferrous and non-ferrous methods of ore extraction, and refining and classification of these metals and the alloy systems. The heat treatment of various metals and properties of metals are studied, including lab work on shear, compression, tensile strength, and corrosion.

Non-Traditional Machine Operations

32420307 3 credits

Students explore a variety non-traditional machining operations and gain knowledge of the theory and operation of electrical discharge machining (EDM) and use of a coordinate measuring machine. Focuses on the cutting-edge processes that are becoming the mainstream of modern machining.

Prerequisites: Advanced Lathes 32420305 and Advanced Mills 32420306

Threads & Mills Cutting

32420304 5 credits

Learners are presented with new concepts, terms, and operations of machine tools while reviewing and further developing skills from previously covered operations. Emphasizes safety and the development of safe work habits. The learner's working skills on the individual machine tools through exercises and projects are expanded. Classroom instruction places emphasis on threads, thread terminology, thread measuring, and thread cutting. The student will use formulas to calculate thread depth, pitch, lead, and the compound rest infeed for cutting threads to depth.

Prerequisite: Intro to Machine Tool-Safety 324203014

Vertical Mill Basics and Operations

32420313 2 credits

Emphasizes safety and the development of safe work habits. Classroom instruction discusses the parts and operations of the vertical mill. Places major emphasis on vertical milling machine terminology, work-holding, location principles, tooling, and cutting-tool selection as well as operations and process planning. Expands the learner's working skills through exercises and projects.

Corequisite: Intro to Machine Tool-Safety 32420314

MARKETING

Associate in Applied Science (AAS)

Program Code: 10-104-3

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



PROGRAM OUTCOMES

Employers will expect you, as a Marketing graduate, to be able to:

- Develop strategies to anticipate and satisfy market needs.
- Promote products, services, images, and/or ideas to achieve a desired outcome.
- Evaluate information through the market research process to make business decisions.
- Prepare selling strategies.

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Marketing program outcomes are measured in the TSA-designated course Marketing Management.

PROGRAM PROGRESSION

In order to maintain a passing status and progress in the program, students must:

- Receive a grade of “C” or better in Marketing Management.

MOBILE DEVICE ENHANCEMENT

To support your hands-on learning and give you an edge in today’s digital workplace, Marketing program students are required to purchase an iPad device. Students accepted into the program will receive specific details about purchasing the mobile device (financial aid available).

STUDENT HANDBOOK

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SAMPLE FULL-TIME CURRICULUM OPTION

Term		16 credits
10102101	Intro to Business	3
10103106	Microsoft Office-Introduction	3
10104102	Marketing Principles	4
10104108	Adobe Creative Cloud-Marketing Fundamentals	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term 17-18 credits		
10101111	Accounting I	4
10103124	Excel-Intermediate	1
10104105	Selling Principles	3
10104107	Social Media Marketing	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term 19 credits		
10102104	Business Law	3
10102130	Career Development -or-	
10801199	Employment Strategies	3
10102180	International Business	3
10104125	Promotion Principles	4
10104174	Marketing Research	3
10809195	Economics	3
Term 16 credits		
10104160	Marketing Management	4
10104180	E-Commerce Principles	3
10809166	Intro to Ethics: Theory & Application	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Total credits 68-69		

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		10 credits
10103106	Microsoft Office-Introduction	3
10104102	Marketing Principles	4
10809166	Intro to Ethics: Theory & Application	3
Term 9-10 credits		
10102101	Intro to Business	3
10104105	Selling Principles	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term 7 credits		
10103124	Excel-Intermediate	1
10104108	Adobe Creative Cloud-Marketing Fundamentals	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term 9 credits		
10102104	Business Law	3
10104107	Social Media Marketing	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term 7 credits		
10102180	International Business	3
10104125	Promotion Principles	4
Term 10 credits		
10101111	Accounting I	4
10104180	E-Commerce Principles	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Term 9 credits		
10102130	Career Development -or-	
10801199	Employment Strategies	3
10104174	Marketing Research	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Term 7 credits		
10104160	Marketing Management	4
10809195	Economics	3
Total credits 68-69		

Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores – Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

E-Commerce Principles

10104180..... 3 credits

Provides an overview of electronic commerce. Business models underlying these electronic commerce applications are studied from both operational and strategic perspectives. A review is made of World Wide Web technology trends including electronic payments and related issues of authentication, security, privacy, intellectual property rights, and tax implications.

Minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Economics

10809195..... 3 credits

Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Employment Strategies

10801199..... 3 credits

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of

various business letters, interviewing skills, and job offer evaluation. NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

English Composition 1

10801136..... 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Excel-Intermediate

10103124..... 1 credit

Develop charts, PivotTables, and manage multiple worksheets/workbooks.

Prerequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

Intermediate Algebra with Applications

10804118..... 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

International Business

10102180..... 3 credits

Introduces topics concerning international business while illustrating its scope and importance. Topics include the impact of geography, trade protectionism, culture, legal structure, politics, and currency on business dealings. Students also research a particular country in depth.

Recommended Accuplacer scores – Reading 55 or completion of Intro to Reading & Study Skills 10838105 with a "C" or better, Sentence Skills 60 or completion of Intro to College Writing 10831103 with a "C" or better, Arithmetic 34 or completion of Pre-Algebra 10834109 with a "C" or better

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on

their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.
Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Business

10102101..... 3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended

to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of “C” or better, or College Math 10804107 with a grade of “C” or better. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Marketing Management

10104160..... 4 credit

Examines the marketing function from the manager’s perspective. Topics include management functions, decision making in regard to the customer, product planning, pricing strategies, evaluation of distribution channels, and promotional tactics.

Prerequisite: Twelve Marketing 10-104 credits

Marketing Principles

10104102..... 4 credit

Students study the practices and methods of manufacturers and distributors in the marketing of goods and services. Also emphasized are product planning, pricing strategies, distribution systems, channel activities, and the role of government as well as other factors influencing marketing today.

Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

course descriptions

Marketing Research

10104174 3 credits

Primarily for students with previous business courses or work experience. Introduces techniques of research and research reporting. The study of market behavior is pursued as students undertake several well-ordered research projects in their career fields.

Prerequisite: Marketing Principles 10104102

Microsoft Office-Introduction

10103106 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

Promotion Principles

10104125 4 credits

Focuses on non-personal communication about product services, image, or ideas to influence customer behavior. Topics include advertising, sales and visual promotion, public relations, and managing the promotion function.

Corequisite: Adobe Creative Cloud-Marketing Fundamentals 10104108 or Media Strategies 10104120

Selling Principles

10104105 3 credits

Students develop the kind of sales techniques that encourage customers to believe in the integrity of the salesperson and the product. Subjects include handling customers' tangible and intangible needs, attitude conversion, sales strategies for a variety of conditions, and the changing form of selling techniques. Focuses on the need for a sales personality and the importance of psychology and creativity in selling.

Social Media Marketing

10104107 3 credits

Addresses how social media has transformed marketing communications from traditional mass media to individualized marketing. Using social media tools such as Facebook, YouTube, Twitter, LinkedIn, and more, this class explores the different methodologies for social media marketing. Topics include creating social media, integrating social media as part of a marketing campaign, the concept of viral marketing, ethical and potential legal concerns that have arisen over these forms of communication, and how organizations and individuals have successfully applied social media marketing.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

MEDICAL ASSISTANT

Technical Diploma

Program Code: 31-509-1

our graduates
INDEMAND

2017/2018



mstc.edu



PROGRAM OUTCOMES

Employers will expect you, as a Medical Assistant graduate, to be able to:

- Perform medical office administrative functions.
- Provide patient care in accordance with regulations, policies, laws, and patient rights.
- Perform medical laboratory procedures.
- Demonstrate professionalism in a health care setting.
- Demonstrate safety and emergency practices in a health care setting.

This program prepares competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. This program is accredited by the Commission on Accreditation of Allied Health Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs

25400 US Highway 19 North, Suite 158
Clearwater, FL 33763
Phone: 727.210.2350 • www.caahep.org

ADDITIONAL ENTRY CRITERIA

To apply to the Medical Assistant program, please submit the following documents to Mid-State Admissions:

Criminal Background Statement of Understanding and Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494



FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a medical assistant is available at mstc.edu/programs/medical-assistant. Contact the disability services coordinator in the Student Services Office to receive assistance.

CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		17 credits
10103106	Microsoft Office-Introduction	3
10501101	Medical Terminology	3
10501108	Pharmacology for Allied Health	2
10509102	Human Body in Health and Disease	3
31509303	Medical Assistant Laboratory Procedures 1	2
31509304	Medical Assistant Clinical Procedures 1	4
Term		17 credits
10501109	Medical Law, Ethics, and Professionalism	2
10801136	English Composition I -or-	
10801195	Written Communication	3
31509301	Medical Assistant Administrative Procedures	2
31509305	Medical Assistant Laboratory Procedures 2	2
31509306	Medical Assistant Clinical Procedures 2	3
31509307	Medical Office Insurance and Finance	2
31509310	Medical Assistant Practicum	3
Total credits		34

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

PROGRAM PROGRESSION AND COMPLETION

In order to maintain a passing status and progress in the program, students must:

- Repeat courses not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of "C" or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability in courses. Students may be required to apply for program re-entry in order to repeat courses within the program's instructional area.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10501101	Medical Terminology	3
10509102	Human Body in Health and Disease	3
Term		8 credits
10103106	Microsoft Office-Introduction	3
10801136	English Composition I -or-	
10801195	Written Communication	3
10501109	Medical Law, Ethics, and Professionalism	2
Term		8 credits
31509303	Medical Assistant Laboratory Procedures 1	2
31509304	Medical Assistant Clinical Procedures 1	4
10501108	Pharmacology for Allied Health	2
Term		12 credits
31509301	Medical Assistant Administrative Procedures	2
31509305	Medical Assistant Laboratory Procedures 2	2
31509306	Medical Assistant Clinical Procedures 2	3
31509307	Medical Office Insurance and Finance	2
31509310	Medical Assistant Practicum	3
Total credits		34

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended

Human Body in Health and Disease

10509102 3 credits

Focuses on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis, and prevention of common diseases.

Medical Assistant Administrative Procedures

31509301..... 2 credits

Introduces medical assistant students to office management and business administration in the medical office. Students learn to schedule appointments; perform filing, record keeping, telephone and reception duties; communicate effectively with patients and other medical staff; and keep inventory of supplies. Students apply introductory medical coding skills and managed care terminology.

Prerequisite: Admission to Medical Assistant program 315091

Medical Assistant Clinical Procedures 1

31509304..... 4 credits

Introduces medical assistant students to clinical procedures performed in the medical office setting. Students perform basic examining room skills, including screening, vital signs, patient history, minor surgery, and patient preparation for routine and specialty exams in the ambulatory setting.

Prerequisite: Admission into Medical Assistant program 315091; Corequisite: Medical Assistant Laboratory Procedures 1 31509303

Medical Assistant Clinical Procedures 2

31509306..... 3 credits

Prepares medical assistant students to perform patient care skills in the medical office setting. Students perform clinical procedures including administering medications, assisting with minor surgery, performing an electrocardiogram, assisting with respiratory testing, educating patients/community, and maintaining clinical equipment in an ambulatory setting.

Prerequisites: Medical Assistant Clinical Procedures 1 31509304, Medical Assistant Laboratory Procedures 1 31509303, Medical Terminology 10501101, and Human Body in Health and Disease 10509102; Corequisite: Medical Assistant Laboratory Procedures 2 31509305

Medical Assistant Laboratory Procedures 1

31509303 2 credits

Introduces medical assistant students to laboratory procedures commonly performed by medical assistants in a medical office setting. Students perform routine laboratory procedures commonly performed in the ambulatory care setting under the supervision of a physician. Students also follow laboratory safety requirements and federal regulations while performing specimen collection and processing, microbiology, and urinalysis testing.

Prerequisite: Admission to Medical Assistant program 315091; Corequisite: Medical Assistant Clinical Procedures 1 31509304

Medical Assistant Laboratory Procedures 2

31509305 2 credits

Prepares students to perform laboratory procedures commonly performed by medical assistants in the ambulatory care setting under the supervision of a physician. Students perform phlebotomy, immunology, hematology, and chemistry laboratory procedures.

Prerequisite: Medical Assistant Laboratory Procedures 1; Corequisite: Medical Assistant Clinical Procedures 2 31509306

Medical Assistant Practicum

31509310..... 3 credits

Requires medical assistant students to integrate and apply knowledge and skills from all previous medical assistant courses in actual patient settings. Learners perform medical assistant administrative, clinical, and laboratory duties under the supervision of trained mentors to effectively transition to the role of a medical assistant. There is no remuneration for students enrolled in this course.

Prerequisites: Medical Assistant Administrative Procedures 10509130, Human Body in Health and Disease 10509102, Medical Terminology 10501101, Medical Assistant Laboratory Procedures 1 31509303, Medical Assistant Clinical Procedures 1 31509304, Microsoft Office Introduction 10103106; Medical Assistant Clinical Procedures 2 31509306; Medical Assistant Laboratory Procedures 2 31509305; Medical Office, Insurance, and Finance 10509131; Medical Law, Ethics, and Professionalism 10501109; and Written Communication 10801195

Medical Law, Ethics, and Professionalism

10501109 2 credits

Prepares students to display professionalism and perform within ethical boundaries in the healthcare setting. Students maintain confidentiality, examine legal aspects of the medical record, perform risk management procedures, and examine legal and bioethical issues.

Medical Office Insurance and Finance

31509307 2 credits

Introduces medical assistant students to health insurance and finance in the medical office. Students perform bookkeeping procedures, apply managed care guidelines, and complete insurance claim forms. Students also use medical coding and managed care terminology to perform insurance-related duties.

Prerequisite: Admission to Medical Assistant program 315091; Corequisite: Medical Assistant Clinical Procedures 2 31509306.

Medical Terminology

10501101..... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

Microsoft Office-Introduction

10103106..... 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Pharmacology for Allied Health

10501108..... 2 credits

Introduces classifying medications into correct drug categories and applying basic pharmacology principles. Students apply basic pharmacodynamics to identifying common medications, medication preparation, and administration of medications used by the major body systems.

Written Communication

10801195..... 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

NOTES:

Lined area for student notes.

MEDICAL CODER

Technical Diploma

Program Code: 31-530-3

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu

health information management career pathway

MEDICAL CODER



The Medical Coder program at Mid-State prepares students for entry-level work as medical coders in health care settings such as hospitals, physician offices, long-term care facilities, and more. Medical coders review medical documentation and assign diagnosis and procedure codes for the purposes of billing, quality improvement, statistical reporting, and medical research. In this program, you'll be introduced to reimbursement principles and build proficiency in assigning codes across all settings. After program completion, graduates may qualify to take the Certified Coding Associate (CCA) credentialing exam through American Health Information Management Association (AHIMA).

Graduates of the Medical Coder technical diploma may advance into the Health Information Management program.

Technical Diploma

Total Credits: 29

Salary information:
mstc.edu/programsalaries

Careers: Chargemaster Coordinator, Coding Specialist, Coding Support Specialist, Health Information Technician, and Medical Coder

In general, there is growing demand for these careers. Example: Health Information Technician career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 2,101 Medical Records and Health Information Technicians are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

HEALTH INFORMATION MANAGEMENT



Mid-State's Health Information Management program prepares individuals to enter the emerging field of electronic health record management. Students learn to use computer programs and established methods to securely process, compile, maintain, and report electronic health information data for patient care. In this program you'll learn to abstract and code clinical data using classifications systems as well as analyze health records according to industry protocols. You'll build knowledge about reimbursement, facility planning, marketing, risk management, and more. Graduates are eligible to take the AHIMA national certification exam for Registered Health Information Technician (RHIT).

Associate in Applied Science

Total Credits: 70

Salary information:
mstc.edu/programsalaries

Careers: Data Quality Analyst, Diagnosis Related Group (DRG) Coordinator, Health Information Supervisor, Health Information Technician, Medical Records Analyst, Patient Account Representative, Patient Financial Services Specialist, and Quality Improvement Analyst

In general, there is growing demand for these careers. Example: Health Information Technician career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 2,101 Medical Records and Health Information Technicians are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

bachelor's degree opportunities

UW-Stevens Point, Health Science-Health Care Administration or Health Care Informatics

College of St. Scholastica, BA Health Information

For more information and additional opportunities, go to mstc.edu/transfer

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Medical Coder graduate, to be able to:

- Review clinical documentation and diagnostic results to ensure accurate diagnostic and procedural coding.
- Extract and abstract data, and apply appropriate clinical codes using proper classification systems accurately.
- Provide charge validation.

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a medical coder is at mstc.edu/programs/medical-coder. Contact the disability services coordinator in the Student Services Office to receive assistance.

PROGRAM PROGRESSION AND COMPLETION

In order to progress in and successfully complete the program, students must:

- Repeat courses not completed with a grade of “C” or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of “C” or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability in courses. Students may be required to apply for program re-entry in order to repeat courses within the program’s instructional area.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.



This ACT program is 100 percent funded with a TAACCCT Round IV \$19.9 million grant awarded by the US Department of Labor’s Employment and Training Administration. This program is an equal opportunity program, and auxiliary aids and services are available upon request to individuals with disabilities. This workforce product was funded by a grant awarded by the US Department of Labor’s Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the US Department of Labor. The US Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.



Advanced Coding

10530148..... 2 credits

Builds on basic coding knowledge and skills through the coding of clinical case studies and actual medical records. Students access, review, and code electronic medical records from the Academic EHR System; perform data quality reviews to validate code assignment and compliance with reporting requirements; and assign diagnosis related groups (DRGs) and ambulatory payment classifications (APCs) with entry-level proficiency using computerized encoding and grouping software.

Prerequisites: ICD Diagnosis Coding 10530197 and CPT Coding 10530144; Corequisite: Private & Government Reimbursement 10530146 and ICD Procedure Coding 10530199

CPT Coding

10530144 3 credits

Prepares learners to assign current procedural terminology (CPT) codes supported by medical documentation with entry-level proficiency. Students are familiar with and use standard coding references. Emphasizes accuracy, CPT instructional notations, conventions, rules, and official coding guidelines when assigning CPT codes to case studies and actual medical record documentation. Also covers application of modifiers to services and relationship to financial impact.

Prerequisites: Medical Terminology 10501101, General Anatomy & Physiology 10806177, and Intro to Health Records 10530111; Corequisite: Human Diseases for Health Professions 10530182

Electronic Health Records

10530122..... 3 credits

Introduces students to the electronic health record (EHR) as a technology-based representation of healthcare data integration from a participating collection of varied systems for a single patient. Course covers emerging use of the electronic health record, an overview of EHR, applications, benefits and barriers to its use, vocabularies, principles of implementation, health information exchange, standards, privacy, security, information retrieval, digital libraries, and image management.

Prerequisites: Medical Terminology 10501101, General Anatomy & Physiology 10806177, and Intro to Health Records 10530111

General Anatomy & Physiology

10806177..... 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: Minimum Accuplacer score for Reading is 55 (Students scoring between 55-80 are encouraged to enroll in Introduction to College Reading) and one semester of college-level biology or chemistry with a "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better, or Emergency Medical Technician-Basic 10531168 with a "C" or better

Human Disease for the Health Professions

10530182..... 3 credits

Focuses on the common diseases of each body system as encountered in all types of healthcare settings by health information professionals. Emphasizes understanding the etiology (causes), signs and symptoms, diagnostic tests, and treatment (including pharmacologic) of each disease.

Prerequisites: Medical Terminology 10501101 and General Anatomy & Physiology 10806177

ICD Diagnosis Coding

10530197..... 3 credits

Prepares students to assign ICD diagnosis codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation.

Prerequisites: Medical Terminology 10501101, Intro to Health Records 10530111, and General Anatomy & Physiology 10806177; Corequisite: Human Disease for the Health Professions 10530182

ICD Procedure Coding

10530199..... 2 credits

Prepares students to assign ICD procedure codes supported by medical documentation with entry-level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation.

Prerequisites: Medical Terminology 10501101, Intro to Health Records 10530111, General Anatomy & Physiology 10806177, and Human Disease for the Health Professions 10530182

Introduction to Health Records

10530111 3 credits

Focuses on the purpose, format, content, use, confidentiality, and administrative issues of a patient's medical history and care. Students study the use of the patient's medical record as a basis for planning patient care, documenting communication between the health care provider and any other health professional contributing to the patient's care, assisting in protecting the legal interest of the patient and the health care providers responsible for the patient's care, and documenting the care and services provided to the patient. Emphasizes accuracy, organization, and confidentiality. Students are introduced to electronic medical record (EMR) concepts.

Minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34; Corequisite: Medical Terminology 10501101

Medical Terminology

10501101..... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

MEDICAL OFFICE SPECIALIST

Technical Diploma

Program Code: 31-160-3

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



MEDICAL OFFICE SPECIALIST



The Medical Office Specialist program at Mid-State prepares students to meet the needs of healthcare and related organizations by performing a variety of office support functions. The program includes medical terminology; medical law, ethics, and professionalism; and related coursework. In this program you will learn to communicate professionally while maintaining confidentiality, apply customer service skills, and use computer applications to prepare and maintain medical documents. You will also learn to prepare medical documents and correspondence and perform administrative procedures within the healthcare environment. Tours of local medical facilities will help you gain knowledge of possible employers in the community.

**bachelor's
degree
opportunities**

For more information, visit mstc.edu/transfer

Technical Diploma

Total Credits: 34

Salary information:
mstc.edu/programsalaries

Careers: Medical Secretary, Medical Administrative Assistant, Medical Assistant, and Medical Records & Health Information Technician

In general, there is growing demand for these careers. Example: Medical Secretary career has grown by 2% over the last two years and is expected to grow by 19% over the next 10 years. Currently 3,978 Medical Secretaries are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

**approved transfer
college credit**

dual credit

**credit by
examination**

**credit for military or
work experience**

OTHER OPTIONS

RELATED PROGRAMS

Administrative Professional and Customer Relationship Professional

**For estimated tuition and fees,
visit mstc.edu/programcosts.**

NOTES:

PROGRAM OUTCOMES

Employers will expect you, as a Medical Office Specialist graduate, to be able to:

- Utilize computer applications to prepare and maintain medical documents.
- Communicate professionally while maintaining confidentiality.
- Apply customer service skills.
- Prepare medical documents and correspondence.
- Perform administrative procedures within the healthcare environment.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		18 credits
10103106	Microsoft Office-Introduction	3
10501101	Medical Terminology	3
10501109	Medical Law, Ethics, and Professionalism	2
10509102	Human Body in Health and Disease	3
10530125	Organization of Healthcare	2
10530150	Introduction to Health Information Technology	2
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term		16 credits
10103114	Word-Intermediate	1
10103124	Excel-Intermediate	1
10106106	Quality Customer Service	3
10106160	Proofreading & Editing	3
10530149	Introduction to Healthcare Reimbursement	2
10106157	Document Formatting	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Total credits		34

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

SAMPLE PART-TIME CURRICULUM OPTION

Term		5 credits
10509102	Human Body in Health and Disease	3
10530150	Introduction to Health Information Technology	2
Term		5 credits
10501101	Medical Terminology	3
10501109	Medical Law, Ethics, and Professionalism	2
Term		6 credits
10103106	Microsoft Office-Introduction	3
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term		5 credits
10106157	Document Formatting	3
10530125	Organization of Healthcare	2
Term		2 credits
10103114	Word-Intermediate	1
10103124	Excel-Intermediate	1
Term		5 credits
10106160	Proofreading & Editing	3
10530149	Introduction to Healthcare Reimbursement	2
Term		6 credits
10106106	Quality Customer Service	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Total credits		34

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

?

MICROSOFT SYSTEM ADMINISTRATOR

Technical Diploma

Program Code: 30-150-5

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



MICROSOFT SYSTEM ADMINISTRATOR



Managing and troubleshooting network environments based on the Windows Server operating system is a growing field of expertise in IT. Mid-State's Microsoft System Administrator program covers some of the newest and most rapidly expanding technologies in this area. We seek feedback from local employers to ensure course content is always up to date. As a result, you will have the skills and knowledge employers are looking for.

Graduates of the Microsoft System Administrator technical diploma may advance into the IT Network Specialist program.

Technical Diploma

Total Credits: 12

Salary information:
mstc.edu/programsalaries

Careers: BYOD Technician, IT Help Desk Specialist, Network Operations Specialist, Mobile Security Specialist, Server Deployment Specialist, Technology Support Specialist, and Telecommunications Technician

IT NETWORK SPECIALIST



The IT Network Specialist program at Mid-State prepares students to administer and support personal computer and network environments. Graduates are able to install, troubleshoot, analyze, and repair networks as well as maximize network efficiency. In this program you will follow guided instructions for setting up and managing multiple computers in a networking environment. You'll also apply concepts in hands-on activities both in and outside the classroom. Past students have repaired and imaged laptops for a local school district, completed a network upgrade for a non-profit organization, and fixed computers at the PC Clinic.

Associate in Applied Science

Total Credits: 67-68

Salary information:
mstc.edu/programsalaries

Careers: Computer Network Support Specialist, Network Administrator, Network Infrastructure Architect, Hardware Support Specialist, Help Desk Specialist, and PC Troubleshooter

In general, there is growing demand for these careers. Example: Computer Network Support Specialist career has grown by 1% over the last two years and is expected to grow by 6% over the next 10 years. Currently 2,075 Computer Network Support Specialists are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

bachelor's degree opportunities

Lakeland University,
BA Specialized Administration

UW-Stout,
BS Information and Communication Technologies

University of Phoenix,
BS Management

For more information and additional opportunities, go to mstc.edu/transfer

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Microsoft System Administrator graduate, to be able to:

- Select mobile device hardware that will sync with network specifications.
- Diagnose and repair mobile device connectivity issues.
- Identify compatible mobile device OS.
- Troubleshoot mobile device issues.
- Configure mobile device email clients.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		3 credits
10154102	Hardware Essentials I	3
Term		6 credits
10150120	Server Administration-Beginning	3
10150165	Network Server Scripting	3
Term		3 credits
10150121	Server Administration-Intermediate	3
		Total credits 12

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
 - Program completion time may vary based on student scheduling and course availability.
- For details, go to mstc.edu/classfinder.



NURSING

Associate in Applied Science (AAS)

Program Code: 10-543-1

our graduates
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2017/2018

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NURSING



The Associate Degree Nursing (ADN) program at Mid-State prepares each graduate to work successfully as a registered nurse (RN). Students acquire a balance of knowledge and technical skills in physical and biological sciences, social sciences, and nursing. They also contribute to classroom discussion, independent learning projects, audio-tutorial labs, and hands-on clinical experiences at area healthcare agencies. After completing the first year (32 credits), you can opt to take the national licensing test for Licensed Practical Nurse. After 70 credits you will be eligible to take the licensing exam for Registered Nurse.



bachelor's degree opportunities

- Alverno
 - Marian
 - University of Phoenix
 - UW-Eau Claire
 - UW-Green Bay
 - UW-Madison
 - UW-Milwaukee
 - UW-Oshkosh
 - UW-Stevens Point
 - Viterbo
- For more information and additional opportunities, go to mstc.edu/transfer

Associate in Applied Science

Total Credits: 70

Salary information:
mstc.edu/programsalaries

Careers Upon successful completion of licensure examination:
Staff Nurse and Registered Nurse

In general, there is growing demand for these careers. Example: Registered Nurse career has grown by 2% over the last 2 years, and is expected to grow by 10% over the next 10 years. Currently 26,055 Registered Nurses are employed in the region. (EMSI data within 100-mile radius of Wisconsin Rapids).

NURSING ASSISTANT



The Nursing Assistant program at Mid-State provides hands-on learning that prepares students to assist in the care of patients in hospitals, extended care facilities, and home care situations. This 120-hour program includes online learning, campus lab experiences, and a 48-hour clinical practicum working with patients and residents. Skills labs ensure students have opportunities to practice skills under the supervision of experienced professionals. Personal care and emotional support of patients are always primary considerations. Upon completion of the course, students may choose to take the state certification exam.

Technical Diploma

Total Credits: 3

Salary information:
mstc.edu/programsalaries

Careers: CBRF Caregiver, Home Health Aide, and Nursing Assistant

In general, there is growing demand for these careers. Example: This career has grown by 1% over the last two years and is expected to grow by 10% over the next 10 years. Currently 16,154 Nursing Assistants are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Central Service Technician, Emergency Medical Technician, EMT-Paramedic, Health Information Management, Medical Assistant, Paramedic Technician, Pharmacy Technician, Phlebotomy Technician, Respiratory Therapist, and Surgical Technologist

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

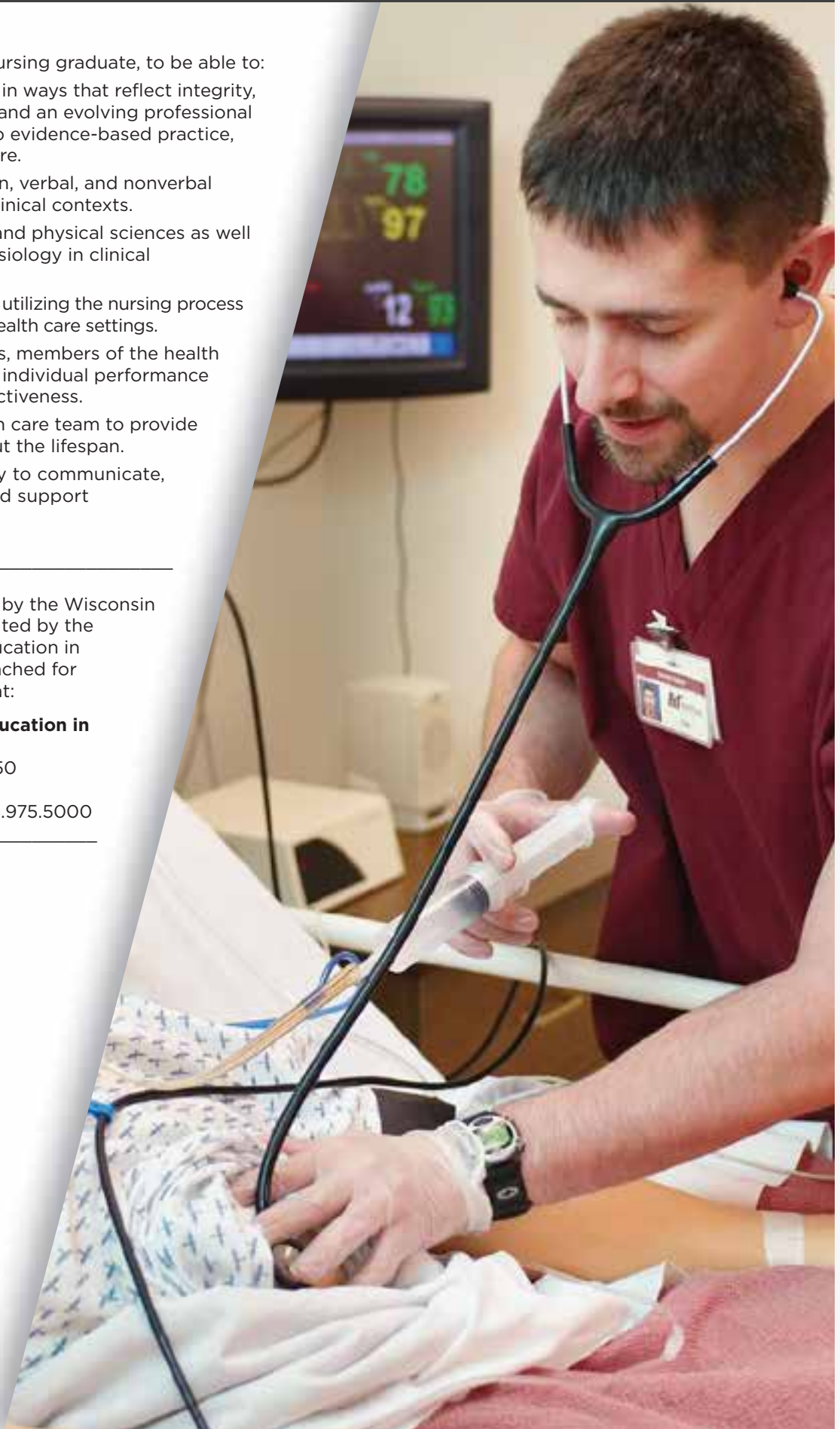
Employers will expect you, as a Nursing graduate, to be able to:

- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving professional identity as a nurse committed to evidence-based practice, caring, advocacy, and quality care.
- Demonstrate appropriate written, verbal, and nonverbal communication in a variety of clinical contexts.
- Integrate social, mathematical, and physical sciences as well as pharmacology and pathophysiology in clinical decision making.
- Provide patient-centered care by utilizing the nursing process across diverse populations and health care settings.
- Minimize risk of harm to patients, members of the health care team and self through safe individual performance and participation in system effectiveness.
- Lead the multidisciplinary health care team to provide effective patient care throughout the lifespan.
- Use information and technology to communicate, manage data, mitigate error, and support decision making.

The Nursing program is approved by the Wisconsin Board of Nursing and fully accredited by the Accreditation Commission for Education in Nursing (ACEN). ACEN can be reached for program verification information at:

Accreditation Commission for Education in Nursing (ACEN)

3343 Peachtree Road NE, Suite 850
Atlanta, GA 30326
www.acenursing.org • Phone: 404.975.5000





ADDITIONAL ENTRY CRITERIA

To apply to the Nursing program, please submit the following to Mid-State Admissions:

Step 1:

1. Complete a Mid-State Application form and return it with a \$30 non-refundable application fee.
2. Submit the Criminal Background Statement of Understanding and Release of Information form.
This form is available at mstc.edu/programsclasses.

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

Step 2:

1. Complete the Accuplacer or ACT test. Minimum scores required:
 - Reading – Accuplacer score of 95 (ACT 19)
 - Sentence Skills – Accuplacer score of 103 (ACT 18)
 - Arithmetic – Accuplacer score of 79 (ACT 18)
 2. Completion of the following course with a grade of “C” or better:
 - Advanced Anatomy & Physiology
 - Chemistry or Biology
 - Developmental Psychology
 - English Composition 1 or Written Communication
 - General Anatomy & Physiology
 3. Complete the Nursing Assistant prerequisite requirement if needed. Must have a total program GPA of 2.0 or higher.
 4. Submit Functional Abilities form. This form is available at mstc.edu/NursingFunctionalAbilities.
 5. Submit Intent to Enroll form. This form is available at mstc.edu/Intenttoenroll.
-

General Advising Note

Students are highly encouraged to complete the following courses with a grade of “C” or better prior to starting nursing courses:

- Five credits of electives
- Intro to Psychology
- Intro to Sociology or Introduction to Diversity Studies
- Microbiology
- Oral/Interpersonal Communication or Speech

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a nurse is available at mstc.edu/nursing-admission-procedures. Contact the disability services coordinator in the Student Services Office to receive assistance.

CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

Prior to beginning a clinical experience in a health care facility, students must:

- a) Submit evidence of completed health work.
- b) Provide evidence of current CPR.
- c) Obtain the required uniform for clinical experiences.
- d) Accept responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

PROGRAM PROGRESSION AND COMPLETION

In order to progress in and successfully complete the program, students must:

- Maintain a program GPA of 2.0 or higher.
- Receive a grade of "C" or better in all courses required for graduation.
- If a student is not successful in a Nursing 10543 core course, he/she will need to repeat that course prior to progressing in the program. Potential continuation is dependent upon availability in the course/program.

Students will receive two attempts to pass any Nursing 10543 course. If a passing grade is not achieved in two attempts, the student will be withdrawn from the program. A withdrawal grade of "W" counts as one attempt for the course.

ARTICULATION OPPORTUNITIES

Articulation opportunities are between Wisconsin technical colleges with the implementation of the system-wide nursing curriculum. Identical courses in nursing throughout the Wisconsin Technical College System (WTCS) make transfer and readmission to other WTCS colleges easier for nursing students throughout the state. This articulation is based on seat availability and college residency requirements.

Also, articulation opportunities in nursing are available with most private universities and all public universities in Wisconsin. Generally, a Mid-State graduate in the Nursing program can expect approximately 60–70 credits to transfer from Mid-State to a Wisconsin university.

ELIGIBILITY REQUIREMENTS FOR REGISTERED NURSE EXAMINATION

1. Graduated from high school or its equivalent as determined by the Wisconsin State Board of Nursing.
2. Wisconsin State Statutes require that the student DOES NOT have an arrest or conviction record for acts or circumstances that relate directly to the clinical practice of the license being requested (e.g., harm/injury; drug or alcohol impairment). Individuals cannot be discriminated against for arrest or conviction records if the precipitating actions do not directly relate to practice.
3. Graduated from a Wisconsin Board of Nursing approved program.
4. Payment of fees to Mid-State Technical College and the Wisconsin State Board of Nursing.

MAINTAINING A NURSING LICENSE

The Wisconsin State Board of Nursing may revoke, limit, suspend, or deny renewal of license if the person has committed any of the following:

1. Fraud in the procuring or renewal of the license.
2. One or more violations of the Nurse Practice Act (Chapter 441) or accompanying Administrative Rules.
3. Acts which show practitioner to be unfit or incompetent.
4. Misconduct or unprofessional conduct.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



This ACT program is 100 percent funded with a TAACCCT Round IV \$19.9 million grant awarded by the US Department of Labor's Employment and Training Administration. This program is an equal opportunity program, and auxiliary aids and services are available upon request to individuals with disabilities. This workforce product was funded by a grant awarded by the US Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the US Department of Labor. The US Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

SAMPLE FULL-TIME CURRICULUM OPTION

Required Prior to Beginning Nursing Courses		14 credits
10806177	General Anatomy & Physiology	4
10806179	Advanced Anatomy & Physiology	4
10809188	Developmental Psychology	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3

Term		16 credits
10543101	Nursing Fundamentals	2
10543102	Nursing Skills	3
10543103	Nursing Pharmacology	2
10543104	Nursing: Intro to Clinical Practice	2
10801196	Oral/Interpersonal Communication* -or-	
10801198	Speech*	3
10806197	Microbiology*	4

Term		12 credits
10543105	Nursing Health Alterations	3
10543106	Nursing Health Promotion	3
10543107	Nursing: Clinical Care Across the Lifespan	2
10543108	Nursing: Intro to Clinical Care Management Elective*	2

Term		14 credits
10543109	Nursing: Complex Health Alterations 1	3
10543110	Nursing: Mental Health and Community Concepts	2
10543111	Nursing: Intermediate Clinical Practice	3
10543112	Nursing Advanced Skills	1
10809198	Intro to Psychology* Elective*	3
		2

Term		14 credits
10543113	Nursing: Complex Health Alterations 2	3
10543114	Nursing: Management and Professional Concepts	2
10543115	Nursing: Advanced Clinical Practice	3
10543116	Nursing: Clinical Transition	2
10809172	Introduction to Diversity Studies* -or-	
10809196	Intro to Sociology* Elective*	3
		1

Total Credits 70

**Students are highly encouraged to have these courses completed with a grade of "C" or better prior to starting nursing courses*

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Required Prior to Beginning Nursing Courses		7 credits
10806177	General Anatomy & Physiology	4
10809188	Developmental Psychology	3

Term		7 credits
10806179	Advanced Anatomy & Physiology	4
10801136	English Composition 1 -or-	
10801195	Written Communication	3

Recommended Prior to Nursing Courses		10 credits
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10806197	Microbiology	4
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3

Term		8 credits
10809198	Intro to Psychology Electives	3
		5

Term		9 credits
10543101	Nursing Fundamentals	2
10543102	Nursing Skills	3
10543103	Nursing Pharmacology	2
10543104	Nursing: Intro to Clinical Practice	2

Term		10 credits
10543105	Nursing Health Alterations	3
10543106	Nursing Health Promotion	3
10543107	Nursing: Clinical Care Across the Lifespan	2
10543108	Nursing: Intro to Clinical Care Management	2

Term		9 credits
10543109	Nursing: Complex Health Alterations 1	3
10543110	Nursing: Mental Health and Community Concepts	2
10543111	Nursing: Intermediate Clinical Practice	3
10543112	Nursing Advanced Skills	1

Term		10 credits
10543113	Nursing: Complex Health Alterations 2	3
10543114	Nursing: Management and Professional Concepts	2
10543115	Nursing: Advanced Clinical Practice	3
10543116	Nursing: Clinical Transition	2

Total Credits 70

Advanced Anatomy & Physiology

10806179..... 4 credits

The second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body system approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery is within a classroom and laboratory setting. Experimentation within a science lab includes analysis of cellular metabolism and the individual components of body systems such as the nervous, neuromuscular, cardiovascular, and urinary. Continued examination of homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance, and blood. Integration of genetics to human reproduction and development are also included in this course.

Prerequisite: General Anatomy & Physiology 10806177 with a grade of "C" or better

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended

General Anatomy & Physiology

10806177..... 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: Minimum Accuplacer score for Reading is 55 (Students scoring between 55–80 are encouraged to enroll in Introduction to College Reading) and one semester of college-level biology or chemistry with a "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better, or Emergency Medical Technician-Basic 10531168 with a "C" or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Nursing: Advanced Clinical Practice

10543115..... 3 credits

This advanced clinical course requires the student to integrate concepts from all previous courses in the management of groups of clients facing complex health alterations. Students have the opportunity to further develop critical thinking skills using the nursing process in making clinical decisions. Emphasizes continuity of care through interdisciplinary collaboration.

Prerequisites: Complex Health Alterations 1 10543109, Mental Health & Community Concepts 10543110, Intermediate Clinical Practice 10543111, and Nursing Advanced Skills 10543112; Corequisites: Nursing: Complex Health Alterations 2 10543113 and Nursing: Management and Professional Concepts 10543114

Nursing Advanced Skills

10543112..... 1 credit

Focuses on the development of advanced clinical skills across the lifespan. Includes advanced intravenous skills, blood product administration, chest tube systems, basic electrocardiogram interpretation, and nasogastric/feeding tube insertion.

Prerequisites: Health Alterations 10543105, Nursing Health Promotion 10543106, Clinical Care Across the Lifespan 10543107, and Intro to Clinical Care Management 10543108; Corequisites: Nursing: Complex Health Alterations 10543109, Nursing: Mental Health and Community Concepts 10543110, Microbiology 10806197, and Intro to Psychology 10809198

Nursing: Clinical Care Across the Lifespan

10543107..... 2 credits

Applies nursing concepts and therapeutic interventions to clients across the lifespan. Provides an introduction to concepts of teaching and learning, and emphasizes extending care to include the family.

Prerequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, Nursing Pharmacology 10543103, and Intro to Clinical Practice 10543104; Corequisite: Nursing Health Promotion 10543106

Nursing: Clinical Transition

10543116 2 credits

This clinical experience integrates all knowledge learned in the previous courses in transitioning to the role of the graduate nurse. Promotes relatively independent clinical decisions, delegation, and working collaboratively with others to achieve client and organizational outcomes. Fosters continued professional development.

Corequisite: Advanced Clinical Practice 10543115

Nursing: Complex Health Alterations 1

10543109 3 credits

Prepares the student to provide and evaluate care for patients across the lifespan with alterations in cardiovascular, respiratory, endocrine, and hematologic systems. Also focuses on patients with fluid/electrolyte and acid-base imbalance as well as alterations in comfort.

Prerequisites: Health Alterations 10543105, Nursing Health Promotion 10543106, Clinical Care Across the Lifespan 10543107, and Intro to Clinical Care Management 10543108; Corequisite: Microbiology 10806197 and Intro to Psychology 10809198

Nursing: Complex Health Alterations 2

10543113..... 3 credits

Prepares students to provide and evaluate care for patients across the lifespan with alterations in the immune, neuro-sensory, musculoskeletal, gastrointestinal, hepatobiliary, renal/urinary, reproductive systems and shock, burns, and trauma. Includes a focus on managing care for patients with high-risk perinatal conditions and high-risk newborns.

Prerequisites: Complex Health Alterations 1 10543109, Mental Health & Community Concepts 10543110, Intermediate Clinical Practice 10543111, and Advanced Skills 10543112

Nursing Fundamentals

10543101 2 credits

Focuses on basic nursing concepts to provide evidenced-based care to diverse patient populations across the lifespan. Current and historical issues impacting nursing are explored within the scope of nursing practice. Introduces the nursing process as a framework for organizing the care of patients.

Prerequisite: Successful completion of all Step 3 Nursing program required courses and space availability. Corequisite: Microbiology 10806197 and Oral/Interpersonal Communication 10801196 or Speech 10801198

Nursing Health Alterations

10543105 3 credits

Elaborates on the basic concepts of health and illness as presented in Nursing Fundamentals. Applies theories of nursing in the care of patients through the lifespan, using problem solving and critical thinking. Provides an opportunity to study conditions affecting different body systems and apply evidence-based nursing interventions. Also introduces concepts of leadership and management.

Prerequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, Nursing Pharmacology 10543103, and Intro to Clinical 10543104

Nursing Health Promotion

10543106 3 credits

Focuses on topics related to health promotion for individuals and families throughout the lifespan. Covers nursing care of the developing family, including reproductive issues, pregnancy, labor and delivery, post-partum, the newborn, and the child. Recognizing the spectrum of healthy families, students discern patterns associated with adaptive and maladaptive behaviors applying mental health principles. Emphasizes teaching and supporting healthy lifestyle choices for individuals of all ages. Nutrition, exercise, stress management, empowerment, and risk reduction practices are highlighted. Study of the family covers dynamics, functions, discipline styles, and stages of development.
Prerequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, Nursing Pharmacology 10543103, Intro to Clinical Practice 10543104, and Developmental Psychology 10809188

Nursing: Intermediate Clinical Practice

10543111 3 credits

This intermediate-level clinical course develops the RN role when working with clients with complex health care needs. Includes developing skills needed for managing multiple clients and priorities. Using the nursing process, students gain experience in adapting nursing practice to meet the needs of clients with diverse needs and backgrounds.
Prerequisites: Health Alterations 10543105, Nursing Health Promotion 10543106, Clinical Care Across the Lifespan 10543107, and Intro to Clinical Care Management 10543108; Corequisites: Complex Health Alterations 10543109, Mental Health and Community Concepts 10543110, and Advanced Skills 10543112

Nursing: Intro to Clinical Care Management

10543108 2 credits

Applies nursing concepts and therapeutic nursing interventions to groups of clients across the lifespan. Provides an introduction to leadership, management, and team building.
Prerequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, Nursing Pharmacology 10543103, and Intro to Clinical Practice 10543104; Corequisite: Nursing Health Alterations 10543105

Nursing: Intro to Clinical Practice

10543104 2 credits

This introductory clinical course emphasizes basic nursing skills and application of the nursing process in meeting the needs of diverse clients across the lifespan. Emphasizes performing basic nursing skills, the formation of nurse-client relationships, communication, data collection, documentation, and medication administration.
Prerequisite: Successful completion of all Step 3 Nursing program required courses and space availability; Corequisites: Nursing Fundamentals 10543101, Nursing Skills 10543102, and Nursing Pharmacology 10543103

Nursing: Management and Professional Concepts

10543114 2 credits

Covers nursing management and professional issues related to the role of the registered nurse. Emphasizes preparing for practice as a registered nurse.
Prerequisites: Complex Health Alterations 1 10543109, Mental Health & Community Concepts 10543110, Intermediate Clinical Practice 10543111, and Advanced Skills 10543112

Nursing: Mental Health and Community Concepts

10543110 2 credits

Covers topics related to the delivery of community and mental health care. Specific health needs of individuals, families, and groups are addressed across the lifespan. Attention is given to diverse and at-risk populations. Mental health concepts concentrate on adaptive/maladaptive behaviors and specific mental health disorders. Community resources are examined in relation to specific types of support offered to racial, ethnic, economically diverse individuals and groups.
Prerequisites: Health Alterations 10543105, Nursing Health Promotion 10543106, Clinical Care Across the Lifespan 10543107, and Intro to Clinical Care Management 10543108

Nursing Pharmacology

10543103 2 credits

Introduces the principles of pharmacology, including drug classifications and their effects on the body. Emphasizes the use of the components of the nursing process when administering medications.
Prerequisite: Successful completion of all Step 3 Nursing program required courses and space availability.

Nursing Skills

10543102 3 credits

Focuses on development of evidence-based clinical skills and physical assessment across the lifespan. Includes mathematical calculations and conversions related to clinical skills. Teaches techniques related to obtaining a health history and basic physical assessment skills using a body systems approach.
Prerequisite: Successful completion of all Step 3 Nursing program required courses and space availability.

Microbiology

10806197 4 credits

Examines microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms, and the medical impact of microbes in the environment, industry, and biotechnology are also addressed.
Prerequisite: General Anatomy & Physiology 10806177, or General Biology 10806114, or Plant Biology 10806184 with a grade of "C" or better

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

NOTES:

Lined area for notes with horizontal lines.

NURSING ASSISTANT

Technical Diploma

Program Code: 30-543-1

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



NURSING ASSISTANT



The Nursing Assistant program at Mid-State provides hands-on learning that prepares students to assist in the care of patients in hospitals, extended care facilities, and home care situations. This 120-hour program includes online learning, campus lab experiences, and a 48-hour clinical practicum working with patients and residents. Skills labs ensure students have opportunities to practice skills under the supervision of experienced professionals. Personal care and emotional support of patients are always primary considerations. Upon completion of the course, students may choose to take the state certification exam.

Technical Diploma

Total Credits: 3

Salary information:
mstc.edu/programsalaries

Careers: CBRF Caregiver, Home Health Aide, and Nursing Assistant

In general, there is growing demand for these careers. Example: This career has grown by 1% over the last two years and is expected to grow by 10% over the next 10 years. Currently 16,154 Nursing Assistants are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Central Service Technician, Emergency Medical Technician, EMT-Paramedic, Health Information Management, Medical Assistant, Paramedic Technician, Pharmacy Technician, Phlebotomy Technician, Respiratory Therapist, and Surgical Technologist

NURSING



The Associate Degree Nursing (ADN) program at Mid-State prepares each graduate to work successfully as a registered nurse (RN). Students acquire a balance of knowledge and technical skills in physical and biological sciences, social sciences, and nursing. They also contribute to classroom discussion, independent learning projects, audio-tutorial labs, and hands-on clinical experiences in area healthcare agencies. After completing the first year (32 credits), you can opt to take the national licensing test for Licensed Practical Nurse. After 70 credits you will be eligible to take the licensing exam for Registered Nurse.

Associate in Applied Science

Total Credits: 70

Salary information:
mstc.edu/programsalaries

Careers Upon successful completion of licensure examination: Staff Nurse and Registered Nurse

In general, there is growing demand for these careers. Example: Registered Nurse career has grown by 2% over the last 2 years, and is expected to grow by 10% over the next 10 years. Currently 26,055 Registered Nurses are employed in the region. (EMSI data within 100-mile radius of Wisconsin Rapids).

bachelor's degree opportunities

Alverno

Marian

University of Phoenix

UW-Eau Claire

UW-Green Bay

UW-Madison

UW-Milwaukee

UW-Oshkosh

Viterbo

For more information and additional opportunities, go to mstc.edu/transfer

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Nursing Assistant graduate, to be able to:

- Communicate and interact effectively with clients, families, and co-workers.
- Maintain and protect client rights.
- Report information and record observations.
- Demonstrate the ethical and legal responsibilities of the NA/HHA.
- Provide safe care to a diverse population, meeting personal, physical, and psychosocial client needs.
- Assist with client rehabilitation and restorative care, promoting independence.
- Assist clients with long-term, disabling conditions including dementia, always focusing on the strengths of the client.
- Work cooperatively in a team environment.
- Be eligible to take the WI NA Competency evaluation.

Note: Outcomes for the Nursing Assistant program are state and federally mandated.

The Mid-State Technical College Nursing Assistant program is accredited by the Wisconsin Department of Health Services (DHS) Bureau of Quality Assurance.

ADDITIONAL ENTRY CRITERIA

To apply to the Nursing Assistant program, please submit the following documents to Mid-State Admissions:

Complete the Accuplacer or ACT test. Minimum scores required:

- Reading - Accuplacer score of 55
- Sentence Skills - Accuplacer score of 60
- Arithmetic - Accuplacer score of 34
- ACT equivalents for above scores are acceptable

Complete a Background Information Disclosure (BID) form and submit \$15 Caregiver Background check. The Wisconsin Caregiver Law requires a background check.

Must be at least 16 years of age.

After satisfactorily completing above steps, complete an online information session and accompanying quiz found on the Nursing Assistant accepted student website.

This website address will be provided in the program acceptance letter sent to applicants upon satisfactory completion of those steps. In the information session, students learn about the profession, academic requirements of the program, and the impact of program coursework on one's personal life. Once a student has completed the steps above, he/she is then able to register for the Nursing Assistant course.

**Mid-State Technical College
Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494**

ADDITIONAL OPTIONS

- Mid-State offers Personal Care Worker training (47543400), which is an optional introduction to Nursing Assistant.
- The Nursing Assistant-Acute Care course (10543173) expands the skill set of the nursing assistant. Prerequisite: completion of a 120-hour state approved nurse aide training program or current certification on the Wisconsin Nurse Aide registry. This course is an approved elective for the associate degree Nursing program.
- Nursing Assistant program is a prerequisite for admission to the Nursing program.

Upon completion of the nursing assistant course, students must pass a state certification exam to become a certified nursing assistant (CNA). Appropriate proof of identity will be required by the certification testing agency.

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a nursing assistant is available at mstc.edu/programs/nursing-assistant. Contact the disability services coordinator in the Student Services Office to receive assistance.

CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

Prior to beginning a clinical experience in a health care facility, students must:

- a. Provide evidence of good health by completion of required health work within three months prior to starting their clinical experience. The required form for reporting the results of your physical exam and specific immunization information is available on the accepted student website. The completed physical form is due the first day of class unless the class is accelerated, in which case it is due three weeks prior to the first day of class.
- b. Obtain the required uniform for clinical experiences.
- c. Assume responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

PROGRAM PROGRESSION

In order to successfully complete the program, students must receive a "C" or better in the Nursing Assistant course 30543300.

CERTIFICATION

The Department of Health Services Bureau of Quality Assurance requires that students who successfully pass the Nursing Assistant program take a state certification exam to qualify them to be listed in the state and federal nurse aide registries. Information to apply for this certification exam will be provided to students during their Nursing Assistant course. Nursing assistants must be listed on the state and federal nurse aide registries to be eligible to work in Wisconsin. Appropriate proof of identity will be required by the certification testing agency.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term	(3 credits)
30543300 Nursing Assistant	3
Total Credits 3	

academic career plan

Term/Year	Credits

course descriptions

Nursing Assistant

30543300..... 3 credits

The Nursing Assistant program prepares students for employment as nursing assistants. The program also prepares Nursing Assistant students with some of the skills needed for the first semester of the Nursing program. During this 120-hour course, students are required to demonstrate the following skills under the supervision of a licensed nurse: communication, basic nursing assistant and personal care skills, attention to clients' rights, and care of clients with dementias. The program is recognized by the Wisconsin Department of Health Services as a nurse-aide training program. Upon successful completion of the program, students are eligible to take the Wisconsin Nursing Assistant competency evaluation for employment in nursing homes, hospitals, home health agencies, hospices, CBRFs, assisted living centers, and homes for the developmentally disabled. *Prerequisite: Admission to Nursing Assistant program 305431 and Nursing Assistant Informational Session; Minimum Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34*

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

OFFICE SUPPORT SPECIALIST

Technical Diploma

Program Code: 31-106-8

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



OFFICE SUPPORT SPECIALIST



Mid-State's Office Support Specialist program develops students into key members of an office team. The program emphasizes document preparation and the effective use of personal interactions and ever-changing technology to support your role as the central communications link in an office. You'll experience hands-on learning through the organization of high-profile events. You'll also learn to handle multiple projects and deadlines, manage time, solve problems, and be helpful in nature—all in high demand by employers.

Graduates of the Office Support Specialist technical diploma may advance into the Administrative Professional program.

Technical Diploma

Total Credits: 36-37

Salary information:
mstc.edu/programsalaries

Careers: Administrative Assistant, Clerk, Customer Service Representative, General Office Clerk, Office Assistant, Program Assistant, and Receptionist

In general, there is growing demand for these careers. Example: General Office Clerk has remained the same over the last 2 years and is expected to grow by 2% over the next 10 years. Currently 42,376 General Office Clerks are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

CUSTOMER RELATIONSHIP PROFESSIONAL



Mid-State's Customer Relationship Professional program develops students into important members of a call center or customer service team. The program focuses on communicating with customers to help them navigate past challenges to fulfill their needs, emphasizing active listening, effective verbal communication, and customer service skills. Through hands-on projects, you will learn telephone etiquette, how to respond appropriately to customers, and how to perform quick problem-solving analysis while exceeding customer expectations.

Graduates of the Customer Relationship Professional technical diploma may advance into the Office Support Specialist program or the Administrative Professional program.

Technical Diploma

Total Credits: 12

Salary information:
mstc.edu/programsalaries

Careers: Account Representative, Client Services Specialist, Contact Center Agent, Customer Service Representative, and Customer Care Representative

In general, there is growing demand for these careers. Example: Customer Service Representative career has grown by 1% over the last two years and is expected to grow by 8% over the next 10 years. Currently 24,654 Customer Service Representatives are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

OTHER OPTIONS

RELATED PROGRAMS

Accounting, Business Management, Court Reporting, IT Network Specialist, IT Software Developer, and Marketing

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as an Office Support Specialist graduate, to be able to:

- Demonstrate effective workplace communications.
- Apply technology skills to business and administrative tasks.
- Perform routine administrative procedures.
- Maintain business relationships.
- Model professionalism in the workplace.

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure program outcomes attained by students. This requirement is called Technical Skills Attainment (TSA). The main objective of TSA is to ensure graduates have the technical skills needed by employers. Office Support Specialist program outcomes are measured in the TSA-designated course Administrative Office Procedures.

PROGRAM PROGRESSION

In order to maintain a passing status and progress in the program, students must:

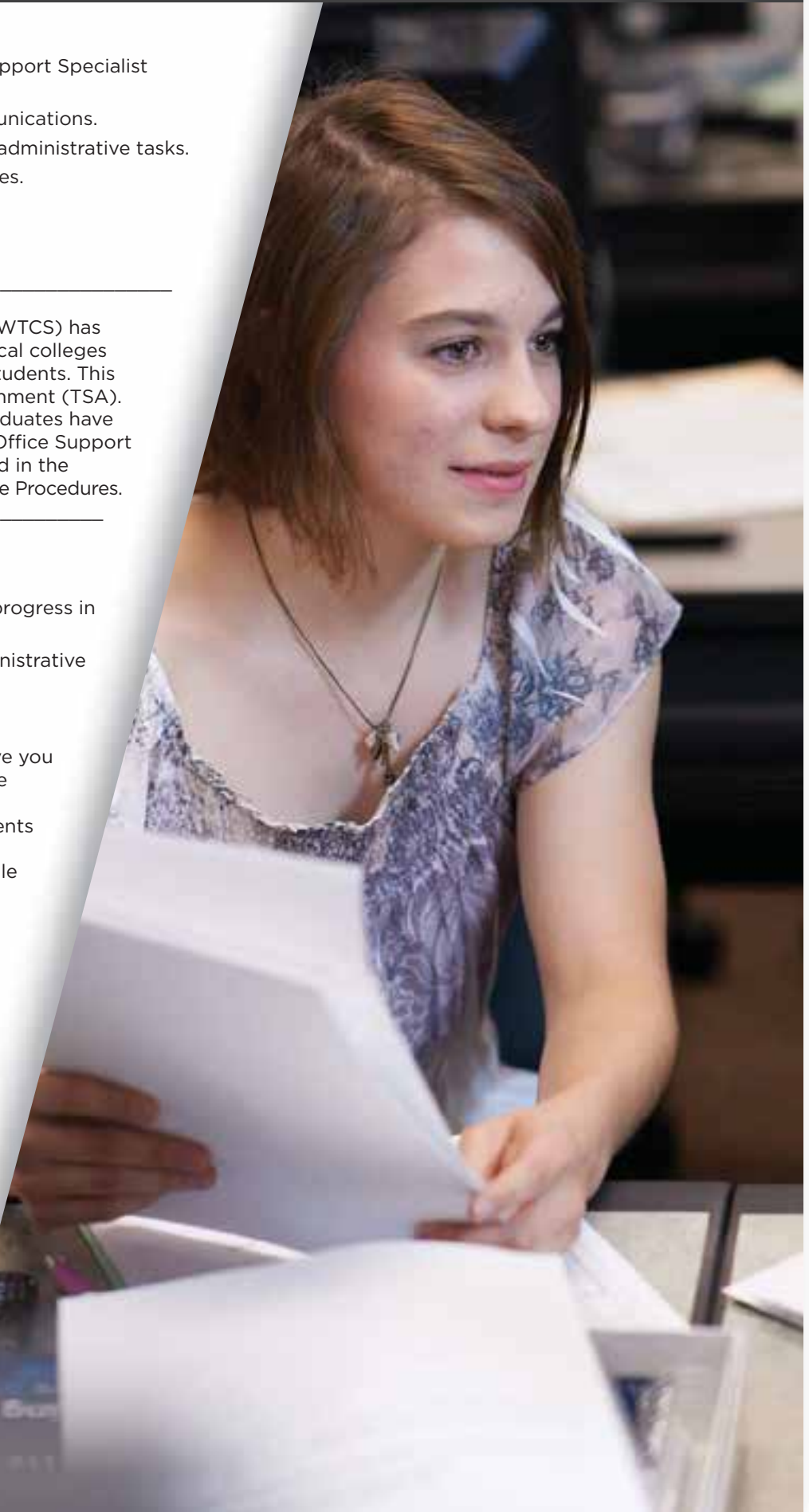
- Receive a grade of “C” or better in Administrative Office Procedures.

MOBILE DEVICE ENHANCEMENT

To support your hands-on learning and give you an edge in today’s digital workplace, Office Support Specialist program students are required to purchase an iPad device. Students accepted into the program will receive specific details about purchasing the mobile device (financial aid available).

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term	18-19 credits
10102101 Intro to Business	3
10103106 Microsoft Office-Introduction	3
10106157 Document Formatting	3
10106160 Proofreading & Editing	3
10801136 English Composition 1 -or-	
10801195 Written Communication	3
10804107 College Mathematics	3
-or-	
10804118 Intermediate Algebra with Applications	4
-or-	
10804189 Introductory Statistics	3
Term 18 credits	
10103114 Word-Intermediate	1
10103124 Excel-Intermediate	1
10103134 Access-Intermediate	1
10106140 Business Information Management	3
10106150 Administrative Office Procedures	3
10106172 Digital Communication Technology	3
10801196 Oral/Interpersonal Communication -or-	
10801198 Speech	3
10102130 Career Development -or-	
10801199 Employment Strategies	3
Total credits 36-37	

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term	6 credits
10103106 Microsoft Office-Introduction	3
10801136 English Composition 1 -or-	
10801195 Written Communication	3
Term 6 credits	
10102101 Intro to Business	3
10104107 Social Media Marketing	3
Term 6-7 credits	
10804107 College Mathematics	3
-or-	
10804118 Intermediate Algebra with Applications	4
-or-	
10804189 Introductory Statistics	3
10106150 Administrative Office Procedures	3
Term 6 credits	
10106157 Document Formatting	3
10106160 Proofreading & Editing	3
Term 6 credits	
10103114 Word-Intermediate	1
10103124 Excel-Intermediate	1
10103134 Access-Intermediate	1
10106140 Business Information Management	3
Term 6 credits	
10801196 Oral/Interpersonal Communication -or-	
10801198 Speech	3
10102130 Career Development -or-	
10801199 Employment Strategies	3
Total credits 36-37	

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Access-Intermediate

10103134 **1 credit**

Students develop forms, reports, and queries.

Prerequisite: Microsoft Office-Introduction 10103106 or Access-Beginning 10103133

Administrative Office Procedures

10106150 **3 credits**

Develops professional skills and attitudes needed in a global business environment. Skills include time management, problem solving, and decision making while working independently and as part of a team. Tasks such as electronic mail, calendaring, meeting and event planning, domestic and international travel, and project management and minute-taking are included. Familiarity with office machines is required.

Corequisites: Written Communication 10801195 and Microsoft Office Introduction 10103106

Business Information Management

10106140 **3 credits**

Following commonly-used ARMA rules, the student applies basic filing methods to paper and database filing systems. Methods to permanently archive data are also covered.

Corequisite: Microsoft Office-Introduction 10103106

Career Development

10102130 **3 credits**

Prepares students for the process of gaining employment. Learners assess their personal background; practice finding career opportunities through the job search process; develop a cover letter, resume, and thank you letter, and complete a job application; participate in a mock interview; and demonstrate how to deal with interpersonal situations found in a work environment.

NOTE: To enroll, you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

College Mathematics

10804107 **3 credits**

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Digital Communication Technology

10106172 **3 credits**

Introduces the student to digital and communication technology used in the office today, including digital cameras, digital video cameras, video conferencing, web conferencing, and multimedia presentations. The content focuses on understanding communication technologies and how they impact employees.

Corequisite: Microsoft Office-Introduction 10103106

Document Formatting

10106157 **3 credits**

Students are able to format styles of business letters, business and academic reports, memos, tables, business meeting documents, itineraries, legal documents, and business forms. Also includes drill work for improving keying speed and accuracy. Minimum typing speed of 30 wpm required (alphabetic keys only).

Corequisite: Microsoft Office-Introduction 10103106

Employment Strategies

10801199 **3 credits**

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation.

NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.

Excel-Intermediate

10103124 **1 credit**

Students develop charts and PivotTables and manage multiple worksheets/workbooks.

Prerequisite: Microsoft Office-Introduction 10103106 or Excel-Beginning 10103123

English Composition 1

10801136 **3 credits**

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to Business

10102101 3 credits

An introduction to what a business is, how it operates, and how it is managed. Students identify forms of ownership and the processes used in production and marketing, finance, personnel, and management in business operations.

Recommended Accuplacer scores - Reading 55, Sentence Skills 60, Arithmetic 34

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of "C" or better, or College Math 10804107 with a grade of "C" or better. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Microsoft Office-Introduction

10103106 3 credits

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

Proofreading & Editing

10106160 3 credits

Sharpens proofreading and editing skills. Competencies include detecting and editing errors in keying, spelling, capitalization, plurals, possessives, punctuation, numbers, grammar, sentence structure, and formatting. Documents are edited for clarity, conciseness, and completeness.

Corequisite: Microsoft Office-Introduction 10103106

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Word-Intermediate

10103114 1 credit

Students create columns, lists, and a table of contents. Desktop publishing, templates, and mail merge are also covered.

Prerequisite: Microsoft Office-Introduction 10103106 or Word-Beginning 10103113

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

PARAMEDIC TECHNICIAN

Associate in Applied Science (AAS)

Program Code: 10-531-1

our graduates
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2017/2018

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EMT-PARAMEDIC



Mid-State's EMT-Paramedic program provides the knowledge and skills needed to work competently as an entry-level EMT-paramedic. Students enter a joint core course cohort with Paramedic Technician degree students. Graduates earn a technical diploma upon successful completion of this program. This program consists of classroom lectures, practical skills lab, laboratory simulations, and hospital and pre-hospital clinical experiences. Upon successful completion, you will earn certifications in Advanced Cardiac Life Support, Prehospital Trauma Life Support, and Pediatric Advanced Life Support and be eligible to take the National Registry of Emergency Medical Technician written and practical examinations.

Technical Diploma

Total Credits: 38

Salary information:
mstc.edu/programsalaries

Careers: Emergency Medical Technician and Paramedic

In general, there is growing demand for these careers. Example: career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 3,158 Emergency Medical Technicians and Paramedics are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

EMERGENCY MEDICAL TECHNICIAN



The Emergency Medical Technician (EMT) program at Mid-State prepares students with the knowledge and skills needed to work as an entry-level EMT. This hands-on 185-hour program consists of classroom lectures, practical skill labs, laboratory simulations, and pre-hospital clinical experiences. Successfully completing the program qualifies you to take the National Registry of EMT's certification exam required to apply for state licensure.

Graduates of the Emergency Medical Technician technical diploma may advance into either the EMT-Paramedic program or Paramedic Technician program.

Technical Diploma

Total Credits: 5

Salary information:
mstc.edu/programsalaries

Careers: Emergency Medical Technician

In general, there is growing demand for these careers. Example: career has grown by 2% over the last two years and is expected to grow by 10% over the next 10 years. Currently 3,158 Emergency Medical Technicians and Paramedics are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

OTHER OPTIONS

RELATED PROGRAM

Fire Protection Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Paramedic Technician graduate, to be able to:

- Prepare for incident response and EMS operations
- Integrate pathophysiological principles and assessment findings for a variety of patient encounters.
- Demonstrate paramedic skills associated with established standards and procedures for a variety of patient encounters
- Communicate effectively with others.
- Demonstrate professional behavior.
- Meet state and national competency requirements for paramedic credentialing.

Paramedic Technician is an 1,150-hour program based upon the US Department of Transportation Administration/Wisconsin Bureau Local Health Support and EMS curriculum.

ADDITIONAL ENTRY CRITERIA

To apply to the Paramedic Technician program, please submit the following document to Mid-State Admissions:

Step 1:

Criminal Background Statement of Understanding and Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

Completion of step 1 requirements allows the student to begin general education courses.

If you are taking EMT as part of the Paramedic Technician program, you must apply to that program (30-531-3) separately. Even though EMT is part of the curriculum, it is handled as a stand-alone program for admission purposes.

Step 2:

Submit a current Wisconsin EMT license.

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

Completion of the Step 2 requirement will make the student eligible for entry into the Paramedic core courses (10531911 through 10531924). Completion of Step 2 does not guarantee entry into the next available cohort of core program students. Cohorts are filled on a first-eligible, first-served basis.

Students who fail to meet the non-paramedic core (associate degree) requirements within 31 undergraduate credit hours will have their conditional admission to the Paramedic Technician program withdrawn and will no longer be eligible for financial aid.

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a paramedic technician is available at mstc.edu/programs/paramedic-technician. Contact the disability services coordinator in the Student Services Office to receive assistance.

CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work and current health care provider-level CPR certification to a private vendor. Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the course and will not be able to advance in the program.

Prior to beginning a clinical experience in a healthcare agency or ambulance service, students must:

- a. Provide evidence of completion of the required health work within one month following the start of EMS Fundamental (10531911).
- b. Hold a current State of Wisconsin EMT license.
- c. Hold a Department of Health Services EMS Training Center Training Permit at the paramedic level.
- d. Provide evidence of current CPR at the health care professional level by a CPR organization specified under s. DHS 110.17(1).
- e. Obtain the required uniform for clinical experiences.
- f. Assume responsibility for clinical assignment(s) regardless of time and location, including transportation and other personal arrangements.

PROGRAM PROGRESSION

In order to progress in and complete the program, students must receive a grade of "C" or better in each of the paramedic core courses. Failure to obtain a grade of "C" in any core course will prevent a student from progressing onto the next course in the sequence until they have retaken the course and achieved a grade of "C" or better.

All general education and non-core technical education courses must be completed with a grade of "C" or better in order to be eligible for graduation.

Having to retake a core course will require removal from the student's cohort, and placement will be made in the next cohort with an available seat.

This requirement also applies to the last class in the sequence, as the grade of "C" or better is required in all core courses in order to retain eligibility to take the National Registry exam.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		16 credits
10531940	EMT Foundations	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10806177	General Anatomy & Physiology	4
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
10809198	Intro to Psychology	3

Term		12 credits
10531941	EMT Applications	2
10801196	Oral/Interpersonal Communication -or-	
10801197	Technical Reporting -or	
10801198	Speech	3
10804107	College Mathematics	3
10806134	General Chemistry -or-	
10806179	Advanced Anatomy & Physiology	4

Term		20 credits
10531911	EMS Fundamental	2
10531912	Paramedic Medical Principles	4
10531913	Patient Assessment Principles	3
10531914	Prehospital Pharmacology	3
10531915	Paramedic Respiratory Management	2
10531917	Paramedic Clinical/Field 1	3
10531918	Advanced Resuscitation	1
10531955	Paramedic Cardiology 1	2

Term		18 credits
10531919	Paramedic Medical Emergencies	4
10531920	Paramedic Trauma	3
10531921	Special Patient Populations	3
10531922	EMS Operations	1
10531923	Paramedic Capstone	1
10531956	Paramedic Cardiology 2	2
10531957	Paramedic Field Experience	3
10531958	Paramedic Field Leadership	1

Total credits 66

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		9 credits
10531940	EMT Foundations	3
10809122	Intro to American Government -or	
10809172	Introduction to Diversity Studies -or	
10809196	Intro to Sociology	3
10801136	English Composition 1 -or	
10801195	Written Communication	3

Term		9 credits
10531941	EMT Applications	2
10804107	College Mathematics	3
10806177	General Anatomy & Physiology	4

Term		7 credits
10806134	General Chemistry -or	
10806179	Advanced Anatomy & Physiology	4
10809198	Intro to Psychology	3

Term		3 credits
10801196	Oral/Interpersonal Communication -or	
10801197	Technical Reporting -or	
10801198	Speech	3

Term		9 credits
10531911	EMS Fundamental	2
10531912	Paramedic Medical Principles	4
10531913	Patient Assessment Principles	3

Term		10 credits
10531914	Prehospital Pharmacology	3
10531915	Paramedic Respiratory Management	2
10531917	Paramedic Clinical/Field 1	3
10531955	Paramedic Cardiology 1	2

Term		2 credits
10531956	Paramedic Cardiology 2	2

Term		11 credits
10531918	Advanced Resuscitation	1
10531919	Paramedic Medical Emergencies	4
10531920	Paramedic Trauma	3
10531957	Paramedic Field Experience	3

Term		6 credits
10531921	Special Patient Populations	3
10531922	EMS Operations	1
10531923	Paramedic Capstone	1
10531958	Paramedic Field Leadership	1

Total credits 66

Advanced Anatomy & Physiology

10806179..... 4 credits

The second semester in a two-semester sequence in which normal human anatomy and physiology are studied using a body system approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Instructional delivery is within a classroom and laboratory setting. Experimentation within a science lab includes analysis of cellular metabolism and the individual components of body systems such as the nervous, neuromuscular, cardiovascular, and urinary. Continued examination of homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance, and blood. Integration of genetics to human reproduction and development are also included in this course.

Prerequisite: General Anatomy & Physiology 10806177 with a grade of "C" or better

Advanced Resuscitation

10531918..... 1 credit

By teaching advanced cardiac life support (ACLS) and pediatric advanced life support (PALS) methodologies and protocols, this course prepares the paramedic student to integrate comprehensive knowledge of causes and pathophysiology into the management of shock, respiratory failure, respiratory arrest, cardiac arrest, and peri-arrest states. Emphasizes early intervention to prevent respiratory and/or cardiac arrest if possible.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

College Mathematics

10804107 3 credits

Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.

Prerequisite: Minimum Accuplacer scores – Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

EMS Fundamental

10531911 2 credits

Provides the paramedic student with comprehensive knowledge of EMS systems, safety, well-being, legal issues, and ethical issues, with the intended outcome of improving the health of EMS personnel, patients, and the community. Students obtain fundamental knowledge of public health principles and epidemiology as related to public health emergencies, health promotion, and illness/injury prevention. Introduces students to comprehensive anatomical and medical terminology and abbreviations with the aim of fostering the development of effective written and oral communications with colleagues and other healthcare professionals.

Prerequisites: Admission to Paramedic Technician 105311 or EMT-Paramedic 315311 and Wisconsin Emergency Medical Technician (or higher) license or a current National Registry of EMTs certification at the Emergency Medical Technician level or higher

EMS Operations

10531922 1 credit

Provides paramedic students with the knowledge of operational roles and responsibilities to ensure patient, public, and EMS personnel safety.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

EMT Applications

10531941..... 2 credit

Course covers the bulk of the Emergency Medical Technician certification course to include the handling of cervical and spine injuries, burn injuries, heart- and breathing-related problems, shock, and other trauma injuries. Includes several lab days to practice and perfect skills, clinical time, and extensive hands-on activities. Prepares students for national certification testing for EMT. To maintain National Registry certification eligibility this course must be finished the semester following the completion of EMT Foundations.

Prerequisite: EMT Foundations 10531940

EMT Foundations

10531940 3 credit

Covers the basics of the Emergency Medical Technician certification course to include CPR, airways, anatomy, hazmat response requirements, lifting and moving patients, incident command, and other technical information. It is the first part of a two-course system to prepare students for national certification testing for EMT.

Prerequisite: Admission to Paramedic Technician 105311; or Emergency Medical Technician program 305313 and recommended minimum Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 34

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

General Anatomy & Physiology

10806177 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: Minimum Accuplacer score for Reading is 55 (Students scoring between 55-80 are encouraged to enroll in Introduction to College Reading) and one semester of college-level biology or chemistry with a "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better, or Emergency Medical Technician-Basic 10531168 with a "C" or better

General Chemistry

10806134 4 credits

Covers the fundamentals of chemistry. Topics include the metric system; problem solving; periodic relationships; chemical reactions, chemical equilibrium; properties of water; acids, bases, and salts; and gas laws.

Prerequisite: College Mathematics 10804107 with a "C" or better, or Intermediate Algebra with Applications 10804118 with a "C" or better, or Accuplacer Algebra score of 57 or greater

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to American Government

10809122 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55-80 on their Accuplacer Reading Comprehension, or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55-80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course. *Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better*

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Paramedic Cardiology 2

10531956..... **2 credits**

Teaches the paramedic student knowledge and skills to integrate assessment findings with principles of cardiovascular anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a variety of cardiovascular complaints.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Clinical/Field 1

10531917..... **3 credits**

Enhances student learning through the practice of paramedicine in field and healthcare environment experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course.

Prerequisites: Admission to Paramedic Technician 105311 or EMT-Paramedic 315311, Advanced Prehospital Pharmacology 10531914, and a current Wisconsin license at the Emergency Medical Technician (or higher) level

Paramedic Field Experience

10531957..... **3 credits**

Provides the opportunity to enhance learning through the practice of paramedicine in a field environment and through experiences with actual patients under the supervision of instructors or approved preceptors. Students may also have the opportunity to participate in formal high-fidelity human patient simulator experiences as a part of this course. Successful completion of this course requires the student to meet all clinical and field competency requirements at the paramedic level as defined by WI DHS EMS.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Field Leadership

10531958..... **1 credit**

Provides the opportunity to act as the field team leader in a field environment and through experiences with actual patients under the supervision of instructors or approved preceptors. Successful completion of this course requires the student to meet all team leader competency requirements at the paramedic level as defined by WI DHS EMS and the CoAEMSP.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Medical Emergencies

10531919..... **4 credits**

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for a patient with a medical complaint.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Medical Principles

10531912..... **4 credits**

Addresses the complex depth of anatomy, physiology, and pathophysiology of major human systems while also introducing paramedic students to the topics of shock, immunology, and bleeding.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Respiratory Management

10531915..... **2 credits**

Teaches the paramedic student to integrate complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patient airway, adequate mechanical ventilation, and respiration for patients of all ages. Also provides specific knowledge pertaining to the respiratory system to ensure the student is prepared to formulate a field impression and implement a comprehensive treatment plan for a patient with a respiratory complaint.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Paramedic Trauma

10531920..... **3 credits**

Teaches the paramedic student to integrate assessment findings with principles of anatomy, physiology, epidemiology, and pathophysiology to formulate a field impression and implement a comprehensive treatment plan for an acutely injured patient.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Patient Assessment Principles

10531913..... **3 credits**

Teaches the paramedic student to integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. Uses a structured and organized assessment process that draws on knowledge of anatomy, physiology, pathophysiology, life span development, and changes that occur to the human body with time. Using this process students learn to develop a list of differential diagnoses through clinical reasoning and modify the assessment as necessary to formulate a treatment plan for their patients.

Prerequisite: Admission to Paramedic Technician program 105311 or EMT-Paramedic program 315311

Prehospital Pharmacology

10531914..... **3 credits**

Provides the paramedic student with the comprehensive knowledge of pharmacology required to formulate and administer a pharmacological treatment plan intended to mitigate emergencies and improve the overall health of the patient.

Prerequisite: Admission to Paramedic Technician 105311 or EMT-Paramedic 315311

PHARMACY SERVICES MANAGEMENT

Associate in Applied Science (AAS)

Program Code: 10-536-1

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu

pharmacy services management career pathway

PHARMACY SERVICES MANAGEMENT



Graduates of Mid-State's Pharmacy Services Management program are prepared to advance their roles as pharmacy technicians or transition into other roles related to the pharmacy. Their skills and knowledge include third-party payment processing, staff scheduling processes, customer service, and enhancing store sales. In this program, you'll be introduced to business operations and apply what you've learned through a capstone course. This provides hands-on experience with increasing store sales, creating efficient operations, improving management practices, or enhancing service to patients in a real-life situation. Core program courses are offered via video conference hosted by Lakeshore Technical College (LTC) and are supported by select classes available with Mid-State.

bachelor's degree opportunities
For more information, visit mstc.edu/transfer

Associate in Applied Science

Total Credits: 65

Salary information:
mstc.edu/programsalaries

Careers: Senior Pharmacy Technician and Pharmacy Technician Manager

In general, there is growing demand for these careers. Example: Pharmacy Services Management career has grown by 1% over the last two years and is expected to grow by 8% over the next 10 years. Currently 3,411 Pharmacy Technicians are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

PHARMACY TECHNICIAN



Mid-State's Pharmacy Technician program provides hands-on learning that prepares students to assist licensed pharmacists in safely dispensing prescription medication. Graduates may work in hospital and retail pharmacies, nursing homes, and everywhere medications are prepared. In this program, you'll receive both lab and clinical experience in using pharmacy software to build patient profiles, as well as interpret and enter prescriptions. Core program courses are offered via video conference hosted by Lakeshore Technical College (LTC) and are supported by select classes available with Mid-State.

Graduates of the Pharmacy Technician technical diploma may advance into the Pharmacy Services Management program.

Technical Diploma

Total Credits: 35

Salary information:
mstc.edu/programsalaries

Careers: Pharmacy Aide and Pharmacy Technician

In general, there is growing demand for these careers. Example: Pharmacy Technician career has grown by 1% over the last two years and is expected to grow by 8% over the next 10 years. Currently 3,411 Pharmacy Technicians are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Pharmacy Services Management graduate, to be able to:

- Perform all pharmacy technician functions.
- Incorporate into practice professional ethics, laws, regulations, and policies established by the licensing state and regulatory agencies (Pharmacy Examining Board, FDA, DEA).
- Pursue lifelong professional growth and development through self-directed learning, participation in professional organizations, and continuing education.
- Maintain an awareness of developments in the pharmacy and management fields as they relate to job responsibilities.
- Manage human resources and employee development.
- Resolve conflict and build teams.
- Implement a mission and goals.
- Demonstrate critical thinking and problem solving skills.



ADMISSIONS PROCEDURES

To apply to the Pharmacy Services Management program, please submit the following documents to Lakeshore Technical College (LTC):

1. Complete a WTCS application form and return it with the \$30 non-refundable application fee. Check is payable to LTC.
2. Complete the Accuplacer or ACT test.
Minimum scores required:
 - Reading - Accuplacer score of 55
 - Sentence Skills - Accuplacer score of 70
 - Arithmetic - Accuplacer score of 50
 - ACT equivalents for above scores are acceptableYou may take the Accuplacer again if you did not meet the required scores. Additional options, including coursework and tutoring, are also available to assist you. Contact the Student Services Office on your local campus to learn about your options. To schedule an Accuplacer test, contact your local Campus Office.
3. Submit an official copy of all academic transcripts, including high school, college or university, and HSED/GED.
4. Complete a Background Information Disclosure (BID) form and submit \$16 for Caregiver Background check. The Wisconsin Caregiver Law requires a background check.
5. Complete health form and immunization records.
6. Read, sign, and return the Functional Abilities Statement of Understanding form.
7. Read, sign, and return the sign-off sheet for the Pharmacy Technician Program Handbook.
8. Complete a telephone program advising session with LTC Counselor.
9. Upon receipt of the above materials, you will be accepted to Lakeshore Technical College. LTC will then notify you of additional program requirements.

Lakeshore Technical College • Admissions
1290 North Avenue
Cleveland, WI 53015-1414

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

CREDIT FOR PRIOR LEARNING

Credit for Prior Learning is available for certain courses in the form of high school advanced standing, transfer credit, test credit, military experience, and experiential credit.

CLINICAL-RELATED REQUIREMENTS

Clinical sites have the right to refuse a student's admission based on conviction records. If you have a criminal history, you may not be able to complete clinical courses. Also, clinical agencies will be notified of all students with pending charges and convictions, and agencies can decline student admission to that agency.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		18 credits
10501101	Medical Terminology	3
10501102	Health Insurance and Reimbursement	3
10536110	Pharmaceutical Calculations	3
10536113	Pharmacy Business Applications	3
10536115	Pharmacy Law	2
10536120	Fundamentals of Reading Prescriptions	1
10536122	Pharmacology	3

Term		17 credits
10536125	Pharmacy Drug Distribution Systems	2
10536126	Pharmacy Parenteral Admixtures	3
10536138	Pharmacy Community Clinical	2
10536141	Pharmacy Computer Lab	2
10536143	Pharmacy Hospital Clinical	2
10801196	Oral/Interpersonal Communication	3
10809198	Intro to Psychology	3

Term		15 credits
10104102	Principles of Marketing -or-	
10182108	Purchasing	3
10801195	Written Communication -or-	
10801136	English Composition 1	3
10804123	Math with Business Applications	3
10809195	Economics	3
10809196	Intro to Sociology	3

Term		15 credits
10182102	Service Operations Management -or-	
10102110	Introduction to Business	3
10196191	Supervision	3
10196193	Human Resource Management	3
10536150	Advanced Pharmacy Services Applications	3
10809166	Intro to Ethics: Theory & Application -or-	
10809172	Introduction to Diversity Studies	3

Total Credits 65

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

Advanced Pharmacy Services Applications
10536150..... 3 credits
 Allows the learner to integrate skills learned in the Pharmacy Services Management courses and apply them to the pharmacy workplace. Areas include staff training, development, supervision, and scheduling; customer service; PBM processing and claims rejection management; and improving efficiency of operations, maximizing profits, and increasing sales.
Prerequisites: 10536143 Pharmacy Hospital Clinical and 10536139 Pharmacy Community Clinical and Condition 105361 Pharmacy Services Management

Economics
10809195 3 credits
 Provides an overview of how a market-oriented economic system operates and surveys the factors that influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing, respectively.
Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

English Composition 1
10801136 3 credits
 Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.
Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

Fundamentals of Reading Prescriptions
10536120..... 1 credit
 Prepares the learner to work in a community or hospital pharmacy by exploring the role of a pharmacy technician within the healthcare team, examining each step in the prescription filling process, and identifying the key top 200 drugs by brand and generic name and therapeutic class.
Condition: 315361 Pharmacy Technician admission requirements met

Health Insurance and Reimbursement
10501102 3 credits
 Introduces the learner to federal, state, and private health insurance plans and managed care systems. Surveys the coding, submission, and processing cycle of claims, as well as reimbursement methods used by payers. It provides application information to ambulatory settings, pharmacies, hospitals, and long-term care.

Human Resource Management
10196193..... 3 credits
 Applies the skills/tools necessary to effectively value and apply employees’ abilities and needs to organization goals. Learners will demonstrate the application of the supervisor’s role in contemporary human resources management, impacts of EEOC, writing job descriptions, recruitment, selection, conducting job interviews, orientation, developing policies/procedures, training, performance management, employee counseling/development, and effective use of compensation and benefit strategies.

Intro to Ethics: Theory & Application
10809166 3 credits
 Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.
Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology
10809198 3 credits
 This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.
Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Sociology
10809196 3 credits
 Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.
Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Business

10102110 **3 credits**

Provides an introduction to the world of business from both the organizational and managerial viewpoint. It examines areas of business including the business environment, business formation, planning, operations, accounting, marketing, human resource management, and building effective teams.

Introduction to Diversity Studies

10809172 **3 credits**

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55-80 on Accuplacer Reading Comprehension or 60-80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Math with Business Applications

10804123 **3 credits**

Covers real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, math concepts applied to the purchasing/buying process, math concepts applied to the selling process, and basic statistics with business/consumer applications.

Prerequisite: Accuplacer Math minimum score of 79 or equivalent or 10834109 Pre-Algebra and Corequisite: 10838105 Intro Reading and Study Skills or Condition: Reading Accuplacer minimum score of 74 or equivalent or 610061 Agribusiness/Agronomy Basic program admissions requirements met

Medical Terminology

10501101 **3 credits**

Students focuses on the component parts of medical terms, including prefixes, suffixes, and word roots. Spelling, definition, and pronunciation will enhance student learning as students practice formation, analysis, and reconstruction of medical terms. Medical terminology will come alive through an introduction to operative, diagnostic, therapeutic, and symptomatic terminology of all body systems, as well as systemic and surgical terminology. Students will explore the Greek and Latin origins of medical terms and commonly used abbreviations.

Oral/Interpersonal Communication

10801196 **3 credits**

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Pharmaceutical Calculations

10536110 **3 credits**

Prepares the learner to enlarge and reduce formulas and solve proportions, dilutions, allegations, and other calculations pertinent to the preparation of pharmaceuticals using metric, apothecary, avoirdupois, and household measuring systems.

Condition: 315361 Pharmacy Technician or 195316 Employed Pharmacy Technician admission requirements met

Pharmacology

10536122 **3 credits**

Enhances the learner’s ability to act and react appropriately in the pharmacy by learning how drugs work through examination of the anatomy, physiology, pathophysiology, and drug therapy for each of the major systems.

Condition: 315361 Pharmacy Technician or 195361 Employed Pharmacy Technician admissions requirements met

Pharmacy Business Applications

10536113 **3 credits**

Prepares the learner to utilize pharmaceutical business terminology, procedures, customer service, record keeping, purchasing procedures, inventory control systems, pricing, merchandising, reference materials, ethics, roles, responsibilities, and relationships with patients and coworkers.

Condition: 315361 Pharmacy Technician program requirements met

Pharmacy Community Clinical

10536138 **2 credits**

Provides hands-on experience in a community pharmacy for 108 hours during term two. Areas of instruction include interpretation of prescriptions, entering prescriptions on computer, patient profiles, correctly filling and labeling prescriptions, billing patient and third parties, customer service, over-the-counter medications, purchasing, checking in deliveries, inventory control, compounding, and patient confidentiality.

Prerequisites: 10536110 Pharmaceutical Calculations, 10536120 Fundamentals of Reading Prescriptions, 10501102 Health Insurance & Reimbursement, 10536113 Pharmacy Business Applications; Corequisite: 10536141 Pharm Computer Lab; Condition: 315361 Pharmacy Technician program requirements met

course descriptions

Pharmacy Computer Lab

10536141..... 2 credits

Expands the learner's ability to enter prescription orders and familiarizes learner with a variety of pharmacy software features, including updating pharmacy databases, running reports, and billing. This course is offered in a self-paced format.

Prerequisites: 10536120 Fundamentals of Reading Prescriptions and Condition 315361 Pharmacy Technician admissions requirements met

Pharmacy Drug Distribution Systems

10536125..... 2 credits

Is an introductory study of the basic drug distribution systems used in community and institutional pharmacies, including automation technology, pharmacist and pharmacy technician roles, and dispensing considerations.

Condition: 315361 Pharmacy Technician admission requirements met

Pharmacy Hospital Clinical

10536143..... 2 credits

Provides the learner with the skills to prepare parenteral admixtures, fill medication carts and unit-dose drawers, control inventory, package medications, and maintain patient records in the hospital setting.

Prerequisites: 10536110 Pharmacy Calculations and Corequisite: 10536139 Pharmacy Community Clinical, 10536126 Pharmacy Parenteral Admixtures and 10536141 Pharmacy Computer Lab and Condition 315361 Pharmacy Technician admissions requirements met

Pharmacy Law

10536115..... 2 credits

Introduces the learner to federal and state regulations that apply to pharmacy practice.

Condition: 315361 Pharmacy Technician or 195361 Employed Pharmacy Technician admissions requirements met

Pharmacy Parenteral Admixtures

10536126..... 3 credits

Provides the learner with the skills to utilize aseptic technique in vertical and horizontal laminar flow hoods for preparation of solutions and medications to be administered intravenously, intramuscularly, subcutaneously, and intradermally to patients.

Prerequisite: 10536110 Pharmaceutical Calculations and Condition: 315361 Pharmacy Technician or 195361 Employed Pharmacy Technician admission requirements met

Principles of Marketing

10104102..... 3 credits

Introduces the student to the consumer decision process model, the bases used to segment a market, basic concepts about goods, services, and ideas, the nature of supply chain and distribution, integrated marketing communications, and the stages of the product life cycle and their impact on the marketing mix.

Purchasing

10182108 3 credits

Introduces the participant to basic purchasing, quality specifications, inventory control, supplier selection, price aspects, research and measurement, negotiation, and global purchasing. This course is exciting for anyone interested in working in a challenging and rewarding purchasing and supply chain management career.

Service Operations Management

10182102 3 credits

Introduces the student to the basic coverage of the concepts and current issues in service operation management. Topics include the value equation in operations management; understanding services; building the service system; operating the service system; enterprise resource management (ERP); and supply chain management concepts in the service sector.

Supervision

10196191 3 credits

Allows the learner to apply the skills and tools necessary to perform the functions of a frontline leader. Students learn the application of strategies and transition to a contemporary supervisory role including day-to-day operations, controlling, staffing, leadership, problem-solving, team skills, motivation, and training.

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

PHARMACY TECHNICIAN

Technical Diploma

Program Code: 31-536-1

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



pharmacy services management career pathway

PHARMACY TECHNICIAN



Mid-State's Pharmacy Technician program provides hands-on learning that prepares students to assist licensed pharmacists in safely dispensing prescription medication. Graduates may work in hospital and retail pharmacies, nursing homes, and everywhere medications are prepared. In this program, you'll receive both lab and clinical experience in using pharmacy software to build patient profiles, as well as interpret and enter prescriptions. Core program courses are offered via video conference hosted by Lakeshore Technical College (LTC) and are supported by select classes available with Mid-State.

Graduates of the Pharmacy Technician technical diploma may advance into the Pharmacy Services Management program.

Technical Diploma

Total Credits: 35

Salary information:
mstc.edu/programsalaries

Careers: Pharmacy Aide and Pharmacy Technician

In general, there is growing demand for these careers. Example: Pharmacy Technician career has grown by 1% over the last two years and is expected to grow by 8% over the next 10 years. Currently 3,411 Pharmacy Technicians are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

PHARMACY SERVICES MANAGEMENT



Graduates of Mid-State's Pharmacy Services Management program are prepared to advance their roles as pharmacy technicians or transition into other roles related to the pharmacy. Their skills and knowledge include third-party payment processing, staff scheduling processes, customer service, and enhancing store sales. In this program, you'll be introduced to business operations and apply what you've learned through a capstone course. This provides hands-on experience with increasing store sales, creating efficient operations, improving management practices, or enhancing service to patients in a real-life situation. Core program courses are offered via video conference hosted by Lakeshore Technical College (LTC) and are supported by select classes available with Mid-State.

Associate in Applied Science

Total Credits: 65

Salary information:
mstc.edu/programsalaries

Careers: Senior Pharmacy Technician and Pharmacy Technician Manager

In general, there is growing demand for these careers. Example: Pharmacy Services Management career has grown by 1% over the last two years and is expected to grow by 8% over the next 10 years. Currently 3,411 Pharmacy Technicians are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

bachelor's degree opportunities

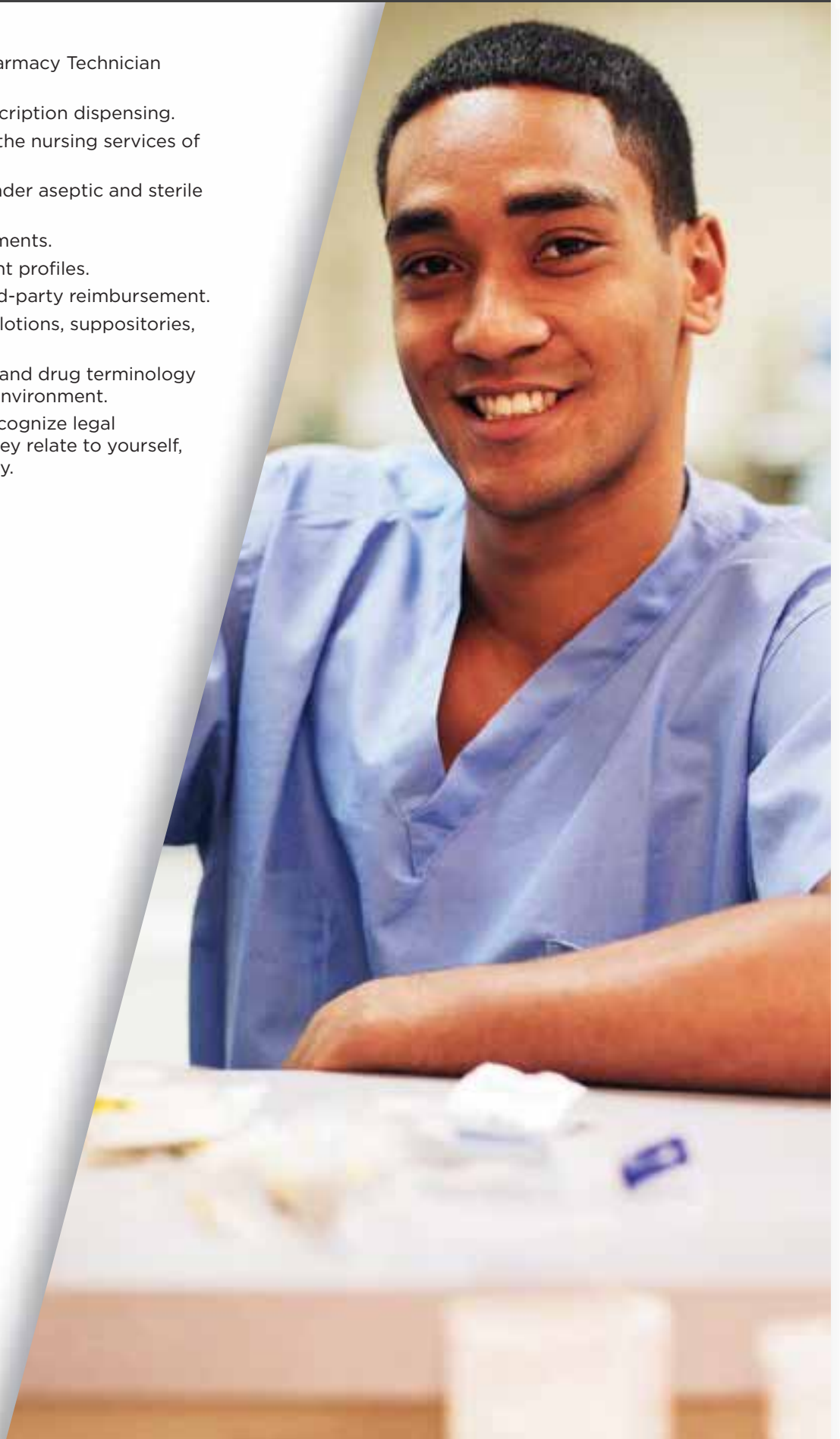
For more information, visit mstc.edu/transfer

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Pharmacy Technician graduate, to be able to:

- Package and label drugs for prescription dispensing.
- Prepare and deliver unit dose to the nursing services of hospitals or nursing homes.
- Prepare parenteral admixtures under aseptic and sterile conditions.
- Receive and inventory drug shipments.
- Maintain records, including patient profiles.
- Facilitate communication for third-party reimbursement.
- Compound solutions, ointments, lotions, suppositories, and other medications.
- Comprehend and utilize medical and drug terminology common to the pharmaceutical environment.
- Practice ethical standards and recognize legal implications of your actions as they relate to yourself, the pharmacist, and the pharmacy.



ADMISSIONS PROCEDURES

To apply to the Pharmacy Technician program, please submit the following documents to Lakeshore Technical College (LTC):

1. Complete a WTCS application form and return it with the \$30 non-refundable application fee. Check is payable to LTC.
2. Complete the Accuplacer or ACT test.
Minimum scores required:
 - Reading - Accuplacer score of 55
 - Sentence Skills - Accuplacer score of 70
 - Arithmetic - Accuplacer score of 50
 - ACT equivalents for above scores are acceptableYou may take the Accuplacer again if you did not meet the required scores. Additional options, including coursework and tutoring, are also available to assist you. Contact the Student Services Office on your local campus to learn about your options. To schedule an Accuplacer test, contact your local Campus Office.
3. Submit an official copy of all academic transcripts, including high school, college or university, and HSED/GED.
4. Complete a Background Information Disclosure (BID) form and submit \$16 for Caregiver Background check. The Wisconsin Caregiver Law requires a background check.
5. Complete health form and immunization records.
6. Read, sign, and return the Functional Abilities Statement of Understanding form.
7. Read, sign, and return the sign-off sheet for the Pharmacy Technician Program Handbook.
8. Complete a telephone program advising session with LTC Counselor.
9. Upon receipt of the above materials, you will be accepted to Lakeshore Technical College. LTC will then notify you of additional program requirements.

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Wisconsin Rapids, WI 54494

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10536138	Pharmacy Community Clinical	2
10536141	Pharmacy Computer Lab	2
10536143	Pharmacy Hospital Clinical	2

Total Credits 35

Please Note:

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Fundamentals of Reading Prescriptions

10536120..... 1 credit

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Condition: 315361 Pharmacy Technician admission requirements met

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10501102 3 credits

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Medical Terminology

10501101..... 3 credits

Students focuses on the component parts of medical terms, including prefixes, suffixes, and word roots. Spelling, definition, and pronunciation will enhance student learning as students practice formation, analysis, and reconstruction of medical terms. Medical terminology will come alive through an introduction to operative, diagnostic, therapeutic, and symptomatic terminology of all body systems, as well as systemic and surgical terminology. Students will explore the Greek and Latin origins of medical terms and commonly used abbreviations.

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Pharmaceutical Calculations

10536110 3 credits

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Condition: 315361 Pharmacy Technician or 195316 Employed Pharmacy Technician admission requirements met

Pharmacology

10536122 3 credits

Enhances the learner’s ability to act and react appropriately in the pharmacy by learning how drugs work through examination of the anatomy, physiology, pathophysiology, and drug therapy for each of the major systems.

Condition: 315361 Pharmacy Technician or 195361 Employed Pharmacy Technician admissions requirements met

Pharmacy Community Clinical

10536138 2 credits

Provides hands-on experience in a community pharmacy for 108 hours during term two. Areas of instruction include interpretation of prescriptions, entering prescriptions on computer, patient profiles, correctly filling and labeling prescriptions, billing patient and third parties, customer service, over-the-counter medications, purchasing, checking in deliveries, inventory control, compounding, and patient confidentiality.

Prerequisites: 10536110 Pharmaceutical Calculations, 10536120 Fundamentals of Reading Prescriptions, 10501102 Health Insurance & Reimbursement, 10536113 Pharmacy Business Applications; Corequisite: 10536141 Pharm Computer Lab; Condition: 315361 Pharmacy Technician program requirements met

Pharmacy Computer Lab

10536141..... 2 credits

Expands the learner’s ability to enter prescription orders and familiarizes learner with a variety of pharmacy software features, including updating pharmacy databases, running reports, and billing. This course is offered in a self-paced format.

Prerequisites: 10536120 Fundamentals of Reading Prescriptions and Condition 315361 Pharmacy Technician admissions requirements met

Pharmacy Drug Distribution Systems

10536125 2 credits

Is an introductory study of the basic drug distribution systems used in community and institutional pharmacies, including automation technology, pharmacist and pharmacy technician roles, and dispensing considerations.

Condition: 315361 Pharmacy Technician admission requirements met

PHLEBOTOMY TECHNICIAN

Technical Diploma

Program Code: 30-513-1

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



PROGRAM OUTCOMES

Employers will expect you, as a Phlebotomy Technician graduate, to be able to:

- Adhere to infection control and safe practices.
- Perform specimen collection.
- Process specimens.
- Comply with legal regulations.
- Model professional behaviors.

The Phlebotomy Technician program is approved by the National Accrediting Agency for Clinical Laboratory Sciences, one of only three approved programs in Wisconsin. Graduates are also prepared to take a national certification exam. However, taking and passing a national exam is not a graduation requirement.

National Accrediting Agency for Clinical Laboratory Sciences

5600 N. River Road Suite 720
Rosemont, IL 60018-5119
773.714.8880 • www.naacls.org

ADDITIONAL ENTRY CRITERIA

To apply to the Phlebotomy Technician program, please submit the following documents to Mid-State Admissions:

Criminal Background
Statement of Understanding and
Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494



RENEWABLE ENERGY TECHNICIAN

Associate in Applied Science (AAS)

Program Code: 10-482-3

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



renewable energy technician career pathway

RENEWABLE ENERGY TECHNICIAN



Mid-State's Renewable Energy Technician program prepares students to design an integrated portfolio of renewable and traditional energy-producing systems. Graduates develop a working knowledge of "green" building concepts and energy-efficient design principles as well as the foundation needed for an entry-level position in the heating, ventilation, and air conditioning (HVAC) fields. In this program you'll learn to perform site assessments and recommend appropriate renewable energy technologies, sell and market renewable energy technologies, and manage renewable energy installation projects. Mid-State's unique facilities, a variety of brands of equipment and software for training, experienced faculty, and off-campus design opportunities make this program one-of-a-kind.



bachelor's degree opportunities

UW-River Falls,
BS Sustainable
Management

UW-Stout,
BS Sustainable
Management

For more
information
and additional
opportunities, go to
mstc.edu/transfer

Associate in Applied Science

Total Credits: 60-61

Salary information:
mstc.edu/programsalaries

Careers: Building Controls Technician; Heating, Ventilation, and Air Conditioning Installer; Heating, Ventilation, and Air Conditioning Service Technician; and Heating and Air Conditioning Mechanic

In general, there is growing demand for these careers. Example: Heating and Air Conditioning Mechanic career has grown by 3% over the last two years and is expected to grow by 8% over the next 14 years. Currently 2,505 Energy Auditors are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)



Mid-State's Heating, Ventilation, and Air Conditioning program provides the hands-on foundation needed for an entry-level position in the heating, ventilation, air conditioning (HVAC) fields. Graduates will understand the various components of heating, ventilation, air-conditioning, and refrigeration systems, including furnaces, ductwork, boilers, hydronic piping, HRVs (heat recovery ventilators), evaporators, condensers, circuits, and controls. Students will also explore geothermal, biomass, and solar heating systems. Through hands-on classroom lab activities, students will join various piping types, design and construct ductwork, and install a complete residential HVAC system. They will also learn the electrical skills necessary to read wiring diagrams and troubleshoot mechanical control systems. Graduates are prepared to take the EPA 608 Technician Certification exam for refrigerants.

Graduates of the Heating, Ventilation, and Air Conditioning technical diploma may advance into the Renewable Energy Technician program.

Technical Diploma

Total Credits: 24

Salary information:
mstc.edu/programsalaries

Careers: Building Controls Technician; Heating, Ventilation, and Air Conditioning Installer; Heating, Ventilation, and Air Conditioning Service Technician; and Heating and Air Conditioning Mechanic

In general, there is growing demand for these careers. Example: Heating and Air Conditioning Mechanic career has grown by 3% over the last two years and is expected to grow by 8% over the next 14 years. Currently 2,505 Energy Auditors are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer
college credit

dual credit

credit by
examination

credit for military or
work experience

For estimated tuition and fees,
visit mstc.edu/programcosts.

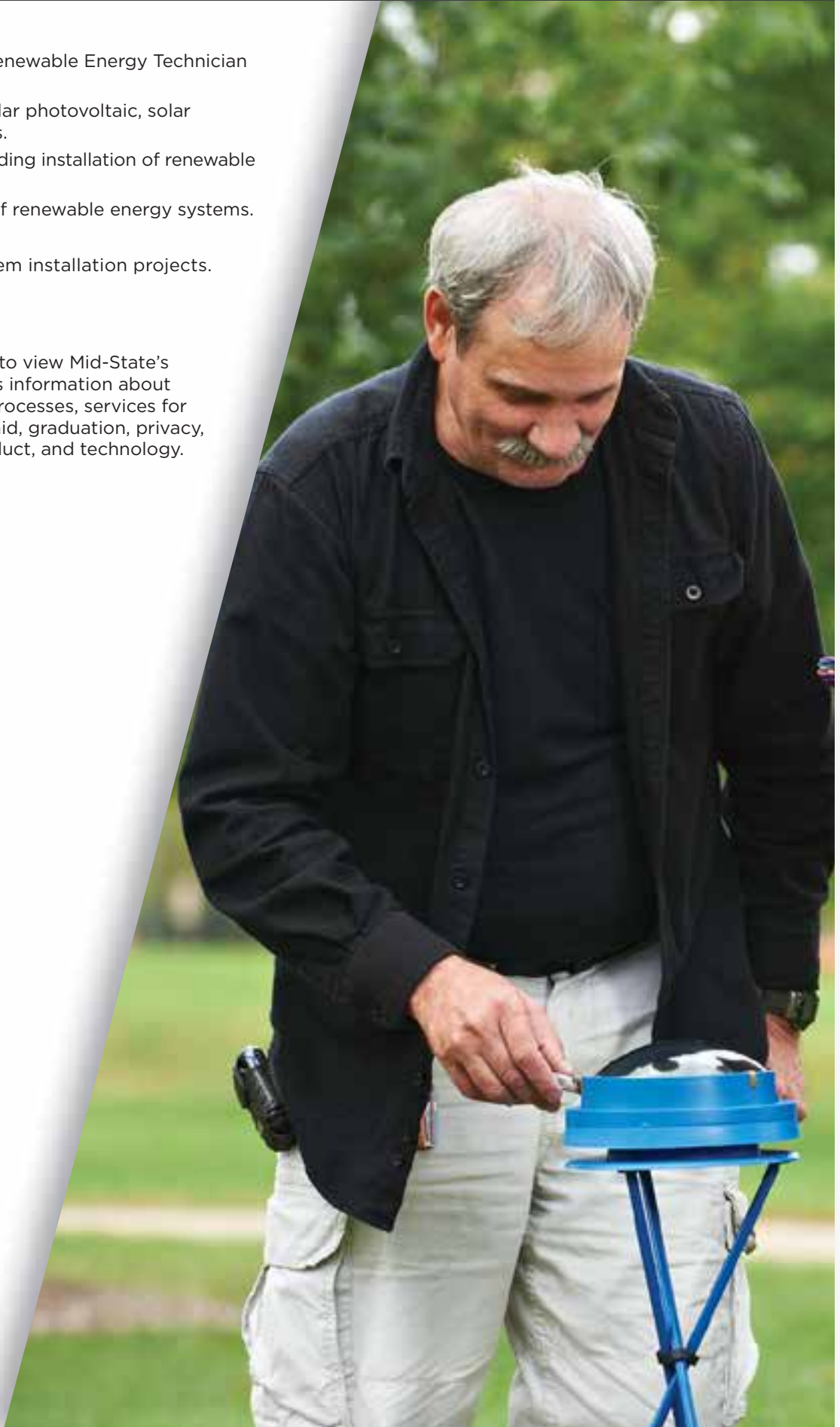
PROGRAM OUTCOMES

Employers will expect you, as a Renewable Energy Technician graduate, to be able to:

- Perform site assessments for solar photovoltaic, solar thermal, and small wind systems.
- Conduct feasibility studies regarding installation of renewable energy systems.
- Design an integrated portfolio of renewable energy systems.
- Respond to customer inquiries.
- Manage renewable energy system installation projects.
- Sell renewable energy systems.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		14-15 credits
10480101	Renewable Energy Overview	2
10481110	Building Science and Evaluation	2
10483121	Piping Applications	3
10601110	HVAC Heating Fundamentals	2
10605108	Intro to Electronics	2
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		15 credits
10103106	Microsoft Office-Introduction	3
10482101	Solar Site Assessment & Evaluation	3
10482107	Construction Fundamentals	2
10482140	Planning, Design, & Project Management I	2
10483110	Sustainable Heating System Design & Installation	3
10601120	HVAC Air Conditioning Fundamentals	2
Term		16 credits
10482110	Photovoltaic System Design & Installation 1	3
10483115	Heat Load Estimation & Modeling	3
10601130	Blueprint Reading for Construction Trades	2
10623106	Intro to AutoCAD	2
10801136	English Composition 1	-or-
10801195	Written Communication	3
10801196	Oral/Interpersonal Communication	-or-
10801198	Speech	3
Term		15 credits
10482111	Photovoltaic System Design & Installation 2	2
10482141	RE-Planning, Design, & Project Management II	2
10483130	Electrical Controls & Systems for Buildings	3
10601121	Intro to HVAC Installation	2
10809166	Intro to Ethics: Theory & Application	3
10809196	Intro to Sociology	-or-
10809122	Intro to American Government	3
Total credits 60-61		

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		9 credits
10480101	Renewable Energy Overview	2
10483121	Piping Applications	3
10601110	HVAC Heating Fundamentals	2
10605108	Intro to Electronics	2
Term		10 credits
10103106	Microsoft Office-Introduction	3
10482107	Construction Fundamentals	2
10483110	Sustainable Heating System Design & Installation	3
10601120	HVAC Air Conditioning Fundamentals	2
Term		11-12 credits
10482110	Photovoltaic System Design & Installation 1	3
10483115	Heat Load Estimation & Modeling	3
10601130	Blueprint Reading for Construction Trades	2
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
	-or-	
10804189	Introductory Statistics	3
Term		9 credits
10482111	Photovoltaic System Design & Installation 2	2
10482141	RE-Planning, Design, & Project Management II	2
10483130	Electrical Controls & Systems for Buildings	3
10601121	Intro to HVAC Installation	2
Term		10 credits
10481110	Building Science and Evaluation	2
10623106	Intro to AutoCAD	2
10801136	English Composition 1	-or-
10801195	Written Communication	3
10801196	Oral/Interpersonal Communication	-or-
10801198	Speech	3
Term		11 credits
10482101	Solar Site Assessment & Evaluation	3
10482140	Planning, Design, & Project Management I	2
10809166	Intro to Ethics: Theory & Application	3
10809196	Intro to Sociology	-or-
10809122	Intro to American Government	3
Total credits 60-61		

academic career plan

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

Term/Year	Credits

course descriptions

Blueprint Reading for Construction Trades
10601130 **2 credits**
 Develops the ability to read blueprints for commercial and non-commercial structures. Emphasizes blueprints drawn by licensed architects, covering plumbing, electrical wiring, structural framing, millwork, interior and exterior details, and basic information.

Building Science and Evaluation
10481110 **2 credits**
 Studies the interrelationship of a building, its occupants, and the systems in the building. Topics include ventilation, moisture, renewable energy, sustainability, LEED design, and energy use in buildings. Students learn the tools and techniques used in the analysis of building envelope integrity. Skills include blower door testing and how to use an infrared camera and other tools to detect insulation, air, and moisture problems in a building.

College Mathematics
10804107 **3 credits**
 Designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators. Topics include performing arithmetic operations and simplifying algebraic expressions, solving linear equations and inequalities in one variable, solving proportions and incorporating percent applications, manipulating formulas, solving and graphing systems of linear equations and inequalities in two variables, finding areas and volumes of geometric figures, applying similar and congruent triangles, converting measurements within and

between US and metric systems, applying Pythagorean Theorem, solving right and oblique triangles, calculating probabilities, organizing data and interpreting charts, calculating central and spread measures, and summarizing and analyzing data.
Prerequisite: Minimum Accuplacer scores - Arithmetic 65, Algebra 30; or Pre-Algebra 10834109 with a grade of "C" or better

Construction Fundamentals
10482107..... **2 credits**
 Studies the concepts associated with the theory, materials, and methods used in construction, including footings and foundations, walls, floors, roofs and roof materials, exterior finishes, interior walls, ceiling and floor finishes, insulation types, vapor and air infiltration, and sound protection. Students also become familiar with blueprint reading and examine all trades associated with construction, including, electrical, HVAC, and plumbing. Safe use of the appropriate tools for each trade is covered.

Electrical Controls & Systems for Buildings
10483130..... **3 credits**
 Topics include an introduction to AC/DC electricity and the physical laws that apply to electronic circuits. Direct current (DC) covers basic definitions of voltage, current, and resistance and analysis of series and parallel resistive circuits. Alternating current (AC) includes an introduction to AC generation, capacitors, inductors, and transformers and their applications in electronic circuits. Additional topics include control circuits, symbols, diagrams, protection devices, relays, thermostats, single-phase motors, control components, and troubleshooting ACR system wiring diagrams.
Corequisite: Electrical Circuits I 10605105 or Intro to Electronics 10605108

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

Heat Load Estimation & Modeling

10483115..... 3 credits

Develops the skills to do residential heating and cooling heat loads. Students calculate heat loss and losses or gains due to infiltration, sun loads, etc. Includes performing calculations on actual buildings using ACCA industry standard form J-1 as well as estimating energy upgrades such as insulation, window improvements, etc., and calculating payback and fuel savings. Also covers a variety of computer programs available for analyzing buildings.

HVAC Air Conditioning Fundamentals

10601120 2 credits

Topics include air conditioning principles and terms, physical principles of air movement, air filtering and humidity, and methods of conditioning air for comfort and health. Also covers the proper use of psychrometers, dry bulb thermometers, hygrometers, and reading and interpretation of psychrometric charts and scales as well as ASHRAE and BPI ventilation standards for residential units. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

HVAC Heating Fundamentals

10601110..... 2 credits

Provides an introduction to how homes and buildings are heated. Topics include introduction to heat principles, temperature measurement, fuels and other sources of heat, combustion, basic heating systems, basic furnace design, boiler design and operation, venting of furnaces, chimney or exhaust gases, and system controls. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of "C" or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a "C" or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to AutoCAD

10623106 2 credit

This introductory course in computer-aided drafting (CAD) using AutoCAD software provides foundation skills in using CAD software to create and print two-dimensional technical drawings. This course is available to students in any program. Computer skills and prior knowledge of drawing/drafting techniques is recommended.

Intro to Electronics

10605108 2 credits

Presents a survey of electricity and electronics, including lab activities. Designed for persons required to learn some of the basics of electricity and electronics and an excellent refresher course to get back into electronics or improve a skills list. Intended for persons where electronics has become a critical core skill and/or a need exists to identify various electronic components and perform basic tests using test equipment such as multimeters. Covers concepts and applications of DC and AC electricity and some semiconductor components using basic math skills. *Recommended Accuplacer scores – Reading 55, Sentence Skills 60, Arithmetic 65*

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of "C" or better and Intro to College Writing 10831103 with a grade of "C" or better

Intro to HVAC Installation

10601121 2 credits

Addresses residential and light commercial heating and cooling systems. Emphasizes the diversity of heating and cooling systems and how they operate. Students participate in the installation of a variety of HVAC systems and troubleshoot and service systems. (HVAC is a common industry reference to heating, ventilation, and air conditioning.)

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introductory Statistics

10804189 3 credits

Students taking Introductory Statistics display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA. Algebra knowledge and foundational skills in mathematics are important for success in this course.

Prerequisite: Accuplacer Algebra score of 45 or greater, or ACT math score of 19 or greater, or Pre-Algebra 10834109 with a grade of “C” or better, or College Math 10804107 with a grade of “C” or better. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Microsoft Office-Introduction

10103106 3 credit

Develops introductory skills in the Microsoft Office Suite (Word, Excel, Access, PowerPoint, and Outlook) while reinforcing knowledge of computer concepts, Windows Explorer, and Internet usage. Students should possess basic keyboarding, mouse, and Windows 7 or Windows 8 skills. Students may develop these skills in the Learning Commons while concurrently enrolled in this course.

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Photovoltaic System Design & Installation 1

10482110 3 credits

Students learn the details involved in the mechanical and electrical integration of a photovoltaic (PV) system. Topics include system components, product specifications, product integration, racking system design capabilities and limits, system diagramming, configurations, safety, common design mistakes and solutions, and installation techniques. Involves students in the installation of a PV system.

Photovoltaic System Design & Installation 2

10482111 2 credits

A continuation of Photovoltaic System Design & Installation 1 and includes an in-depth focus of the electrical integration of a photovoltaic (PV) system. Topics include system design capabilities and limits, system diagramming, wiring configurations, safety, National Electrical Code, common design mistakes and solutions, wiring techniques, and installation techniques. System maintenance principles and commissioning are covered.

Piping Applications

10483121..... 3 credits

Presents the fundamentals of plumbing and piping installation practices. Laboratory activities provide students with basic pipe joining processes associated with the plumbing and HVAC industries.

Planning, Design, & Project Management I

10482140 2 credits

Students in this capstone course design an integrated portfolio of energy systems, incorporating renewable energy options into a conventional system. Each learner writes a project proposal, works with project teams, sequences project tasks, develops project budgets, and identifies project resources.

Renewable Energy Overview

10480101..... 2 credits

Investigates the need for renewable energy systems and emerging careers in renewable energy. Students examine the basic design, function, cost, and other considerations associated with solar photovoltaic, solar thermal, wind, geothermal and biomass renewable energy systems. Students also explore energy efficiency and conservation methods.

RE-Planning, Design, & Project Management II

10482141 2 credits

A continuation of Planning, Design, & Project Management I. Students create a capstone project that incorporates traditional and renewable energy systems with an overall goal of peak energy efficiency.

Prerequisite: Planning, Design, & Project Management I 10482140

Solar Site Assessment & Evaluation

10482101 3 credits

Students learn the steps to performing solar electric and solar water heating site assessments of a home or business. Includes solar window determination, load analysis, site selection, system types, system sizing and efficiency measures, and energy output estimation. Also covers an overview of existing renewable electric incentive programs.

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent.

Sustainable Heating System Design & Installation

10483110 3 credits

Addresses solar thermal, geothermal, and biomass heating systems. Students participate in the installation and design of a solar hot water system. Topics include safety; system design and layout; component selection; mounting collectors; installing and insulating copper tubing; and installing a storage tank, heat exchanger, circulation pump, and other system components.

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

RESPIRATORY THERAPIST

Associate in Applied Science (AAS)

Program Code: 10-515-1

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



PROGRAM OUTCOMES

Employers will expect you, as a Respiratory Therapist graduate, to be able to:

- Apply advanced-level respiratory therapy concepts to patient care situations.
- Demonstrate technical proficiency required to fulfill the role of an advanced-level respiratory therapist.
- Practice respiratory therapy according to established professional and ethical standards.

Respiratory therapists in Wisconsin and many other states are licensed professionals. The Respiratory Therapist program is accredited by:

Commission on Accreditation for Respiratory Care (CoARC)

1248 Harwood Road, Bedford, TX 76021-4244
817.283.2835 • www.coarc.com

ADDITIONAL ENTRY CRITERIA

To apply to the Respiratory Therapist program, please submit the following documents to Mid-State Admissions: Criminal Background Statement of Understanding and Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494

FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a respiratory therapist is available at mstc.edu/programs/respiratory-therapist. Contact the disability services coordinator in the Student Services Office to receive assistance.

CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.



PROGRAM PROGRESSION

In order to progress in and successfully complete the program, students must:

- Repeat courses not completed with a grade of “C” or better prior to progressing in core courses or other courses with co- or prerequisites.
- Receive a grade of “C” or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability of courses. Students may be required to apply for program re-entry in order to repeat courses within the program’s instructional area.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State’s student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State’s Student Code of Conduct, and technology.



This ACT program is 100 percent funded with a TAACCCT Round IV \$19.9 million grant awarded by the US Department of Labor’s Employment and Training Administration. This program is an equal opportunity program, and auxiliary aids and services are available upon request to individuals with disabilities. This workforce product was funded by a grant awarded by the US Department of Labor’s Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the US Department of Labor. The US Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

academic career plan

Term/Year	Credits	Term/Year	Credits
Term/Year	Credits	Term/Year	Credits

SAMPLE FULL-TIME CURRICULUM OPTION

Term		17 credits
10501101	Medical Terminology	3
10515100	Student Success in Respiratory Therapist	1
10515111	Respiratory Survey	3
10515171	Respiratory Therapeutics 1	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10806177	General Anatomy & Physiology	4
Term		13 credits
10515172	Respiratory Therapeutics 2	3
10515173	Respiratory Pharmacology	3
10515174	Respiratory/Cardiac Physiology	3
10806197	Microbiology	4
Term		5 credits
10515175	Respiratory Clinical 1	2
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
Term		20 credits
10515112	Respiratory Airway Management	2
10515113	Respiratory Life Support	3
10515176	Respiratory Disease	3
10515178	Respiratory Clinical 2	3
10515179	Respiratory Clinical 3	3
10809166	Intro to Ethics: Theory & Application	3
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Term		15 credits
10515101	Respiratory Therapist Test Prep	1
10515180	Respiratory Neo/Peds Care	2
10515181	Respiratory/Cardio Diagnostics	3
10515182	Respiratory Clinical 4	3
10515183	Respiratory Clinical 5	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Total Credits 70		

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. **For details, go to mstc.edu/classfinder.**

SAMPLE PART-TIME CURRICULUM OPTION

Term		6 credits
10501101	Medical Terminology	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		7 credits
10806177	General Anatomy & Physiology	4
10809122	Intro to American Government -or-	
10809172	Introduction to Diversity Studies -or-	
10809196	Intro to Sociology	3
Term		7 credits
10806197	Microbiology	4
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Term		6 credits
10801196	Oral/Interpersonal Communication -or-	
10801198	Speech	3
10809166	Intro to Ethics: Theory & Application	3
Term		7 credits
10515100	Student Success in Respiratory Therapist	1
10515111	Respiratory Survey	3
10515171	Respiratory Therapeutics 1	3
Term		9 credits
10515172	Respiratory Therapeutics 2	3
10515173	Respiratory Pharmacology	3
10515174	Respiratory/Cardiac Physiology	3
Term		2 credits
10515175	Respiratory Clinical 1	2
Term		14 credits
10515112	Respiratory Airway Management	2
10515113	Respiratory Life Support	3
10515176	Respiratory Disease	3
10515178	Respiratory Clinical 2	3
10515179	Respiratory Clinical 3	3
Term		12 credits
10515101	Respiratory Therapist Test Prep	1
10515180	Respiratory Neo/Peds Care	2
10515181	Respiratory/Cardio Diagnostics	3
10515182	Respiratory Clinical 4	3
10515183	Respiratory Clinical 5	3
Total credits 70		

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

General Anatomy & Physiology

10806177..... 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: Minimum Accuplacer score for Reading is 55 (Students scoring between 55–80 are encouraged to enroll in Introduction to College Reading) and one semester of college-level biology or chemistry with a “C” or better, or Human Body in Health & Disease 10509102 with a “C” or better, or Emergency Medical Technician-Basic 10531168 with a “C” or better

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of “C” or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to American Government

10809122..... 3 credits

Introduces American political processes and institutions. Focuses on rights and responsibilities of citizens and the process of participatory democracy. Learners examine the complexity of the separation of powers and checks and balances. Explores the role of the media, interest groups, political parties, and public opinion in the political process. Also explores the role of state and national government in our federal system. A student scoring between 55–80 on their Accuplacer Reading Comprehension, or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of C or better and Intro to College Writing 10831103 with a grade of C or better

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Sociology

10809196 3 credits

Introduces students to the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions of family, politics, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, and social organization. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended

to co-enroll in Introduction to College Reading and/or Introduction to College Writing, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Introduction to Diversity Studies

10809172..... 3 credits

Introduces learners to the study of diversity from a local to a global environment using a holistic, interdisciplinary approach. Encourages self-exploration and prepares the learner to work in a diverse environment. In addition to an analysis of majority/minority relations in a multicultural context, the primary topics of race, ethnicity, age, gender, class, sexual orientation, disability, and religion are explored. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Medical Terminology

10501101..... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

Microbiology

10806197..... 4 credits

Examines microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms, and the medical impact of microbes in the environment, industry, and biotechnology are also addressed.

Prerequisite: General Anatomy & Physiology 10806177, or General Biology 10806114, or Plant Biology 10806184 with a grade of “C” or better

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Respiratory Airway Management

10515112 2 credits

Provides a comprehensive exploration of airway management concepts and skills.

Prerequisite: Respiratory Clinical 1 10515175

Respiratory Clinical 1

10515175..... 2 credits

Introduces respiratory therapy practice in the hospital setting. Develops skills such as basic therapeutics, patient assessment, medical record review, safety practices, and patient interaction and communication.

Prerequisites: Respiratory Survey 10515111, Respiratory Therapeutics 1 10515171, Respiratory Therapeutics 2 10515172, Respiratory Pharmacology 10515173, Respiratory/Cardiac Physiology 10515174, and Microbiology 10806197

Respiratory Clinical 2

10515178..... 3 credits

Continued development of respiratory therapy clinical skills, including respiratory therapeutics. Focuses on monitoring, analyzing, and interpreting data to make appropriate modifications in patient care.

Prerequisite: Respiratory Clinical 1 10515175

Respiratory Clinical 3

10515179..... 3 credits

Continued development of respiratory therapy clinical skills, including respiratory therapeutics. Focuses on monitoring, analyzing, and interpreting data to make appropriate modifications in patient care.

Corequisite: Respiratory Clinical 2 10515178

Respiratory Clinical 4

10515182..... 3 credits

Continued development of respiratory therapy clinical skills including respiratory therapeutics. Focuses on monitoring, analyzing, and interpreting data to make appropriate modifications in patient care.

Prerequisites: Respiratory Clinical 3 10515179, Respiratory Life Support 10515113

Respiratory Clinical 5

10515183..... 3 credits

Focuses on the completion of respiratory therapy competencies and transition to employment.

Corequisite: Respiratory Clinical 4 10515182

Respiratory Disease

10515176..... 3 credits

Explores the signs, symptoms, causes, progression, and treatment of obstructive, restrictive, and infectious diseases or disorders of the body that affect the respiratory system.

Prerequisites: Respiratory Survey 10515111, General Anatomy & Physiology 10806177, and Microbiology 10806197

Respiratory Life Support

10515113..... 3 credits

Focuses on management of adult ventilatory support.

Prerequisites: Respiratory Therapeutics 2 10515172 and Respiratory Clinical 1 10515175; Corequisite: Respiratory Airway Management 10515112

course descriptions

Respiratory Neo/Peds Care

10515180 2 credits

Provides a comprehensive orientation to the field of neonatal and pediatric respiratory care to include fetal development, birth, neonatal physiology, pulmonary dynamics, abnormal cardiopulmonary conditions, diseases, and noninvasive and invasive therapeutic interventions.

Prerequisite: Respiratory Life Support 10515113 and Respiratory Clinical 3 10515179

Respiratory Pharmacology

10515173 3 credits

Examines basic pharmacology principles, drug dosage, and calculations. Medications for inhalation including mucolytics, bronchodilators, and anti-inflammatories. Also includes cardiac drugs, anesthetic drugs, neuromuscular blockers, and antimicrobials.

Prerequisites: Respiratory Survey 10515111, Respiratory Therapeutics 1 10515171, and General Anatomy & Physiology 10806177

Respiratory Survey

10515111 3 credits

Examines the role of the respiratory therapist within the healthcare community. Reviews the ethical, legal, and regulatory principles that guide practice across diverse populations. Introductory patient assessment and critical thinking processes used in the development of respiratory care plans are explored.

Prerequisite: Admission to Respiratory Therapist 105151 program; Corequisite: Medical Terminology 10501101

Respiratory Therapeutics 1

10515171 3 credits

Introduces the topics of medical gas administration and humidity and aerosol therapy. Applies physics, math, and patient assessment concepts to oxygen, aerosol, and humidity therapy.

Corequisites: Respiratory Survey 10515111, Medical Terminology 10501101, and General Anatomy & Physiology 10806177

Respiratory Therapeutics 2

10515172 3 credits

Introduces therapeutic procedures including arterial puncture, bronchial hygiene, lung expansion therapy, and pulmonary rehabilitation.

Prerequisites: Respiratory Therapeutics 1 10515171, Respiratory Survey 10515111, and General Anatomy & Physiology 10806177

Respiratory Therapist Test Prep

10515101 1 credit

Explores strategies for preparing for respiratory therapist professional examinations including study skills, test-preparation skills, and test-taking skills. Includes a basic review of content related to the examinations.

Corequisite: Respiratory Clinical 4 10515182

Respiratory/Cardiac Physiology

10515174 3 credits

Provides an in-depth knowledge of the structure and function of the respiratory and circulatory systems necessary to function as a competent respiratory therapist.

Prerequisites: General Anatomy & Physiology 10806177; Respiratory Survey 10515111; and Respiratory Therapeutics 1 10515171

Respiratory/Cardio Diagnostics

10515181 3 credits

Advanced invasive and noninvasive diagnostic cardiopulmonary procedures including pulmonary function, hemodynamics, and rescue medicine.

Prerequisite: Respiratory Clinical 3 10515179

Speech

10801198 3 credits

Explores the fundamentals of effective oral presentation to small and large groups. Topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process, form the basis of this course. If a student earns below the minimum Accuplacer score in each category (Reading 80, Sentence Skills 85), he/she is eligible to take Oral Communication in lieu of Speech, provided the Accuplacer scores are minimum of Reading 55 and Sentence Skills 60, or the student has completed Intro to College Writing and/or Intro to College Reading with a "C" or better.

Prerequisite: Minimum Accuplacer scores - Reading 80, Sentence Skills 85, or completion of Intro to College Writing and/or Intro to College Reading with a "C" or better or equivalent

Student Success in Respiratory Therapist

10515100 1 credit

Explores success strategies for the Respiratory Therapist program including time management, study skills, test-preparation and test-taking skills, planning, and stress management.

Prerequisite: Admission to Respiratory Therapist program 105151; Corequisite: Respiratory Survey 10515111

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

ADAMS COUNTY CENTER

401 North Main
Adams, WI 53910
608.339.3379

MARSHFIELD CAMPUS

2600 West 5th Street
Marshfield, WI 54449
715.387.2538

STEVENS POINT CAMPUS

1001 Centerpoint Drive
Stevens Point, WI 54481
715.344.3063

WISCONSIN RAPIDS CAMPUS

500 32nd Street North
Wisconsin Rapids, WI 54494
715.422.5300

STAINLESS STEEL WELDING

Technical Diploma

Program Code: 30-442-7

our graduates
INDEMAND

2017/2018



MID-STATE
TECHNICAL COLLEGE

mstc.edu



STAINLESS STEEL WELDING



Mid-State's Stainless Steel Welding program prepares students for entry-level employment as a stainless steel welder in production, construction, manufacturing, and servicing industries. Experienced instructors will teach you basic TIG (tungsten inert gas) welding of stainless steel as well as fabrication, blueprint reading, and more. Instruction will combine lecture with hands-on practice, giving you the confidence you need to start your career in this rewarding field.

Graduates of the Stainless Steel Welding technical diploma may advance into the Welding program.

Technical Diploma

Careers: Stainless Steel TIG Welder

Total Credits: 7

Salary information:
mstc.edu/programsalaries

WELDING



The Welding program at Mid-State prepares graduates for a wide variety of welding jobs in production, maintenance, construction, manufacturing, and servicing industries. You will receive hands-on instruction and practice in a number of welding processes, including shielded metal arc, gas tungsten arc, gas metal arc, submerged arc, oxyacetylene cutting and brazing, plasma arc, and arc-air cutting. You will also become familiar with various types of metals, fabrication of metals, and welding under industry codes. Successful completion of this program prepares you to take welding certification tests.

Technical Diploma

Total Credits: 33-35

Salary information:
mstc.edu/programsalaries

Careers: Combination and Construction Welder, Counterperson in Distributorship, Fabricator Maintenance Welder, MIG Welder, Pipeline Welder, Production Line Welder, Shipyard Welder, Structural Welder, TIG Welder, Welder, Fitter, and Welding Repair

In general, there is growing demand for these careers. Example: Welders, Cutters, and Welder Fitters career has remained the same over the last two years and is expected to grow by 8% over the next 10 years. Currently 6,730 Welders, Cutters, and Welder Fitters are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Industrial Mechanical Technician and Machine Tool Technician

RELATED APPRENTICESHIPS

Ironworker and Steamfitting

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Stainless Steel Welding graduate, to be able to:

- Demonstrate appropriate safe work habits when operating welding equipment.
- Use terminology associated with welding to communicate effectively with coworkers, supervisors, customers, inspectors, engineers, and vendors.
- Perform welding operations using TIG processes on stainless steel in a variety of situations.
- Interpret blueprint and welding symbols to fabricate components.
- Analyze given procedures to simulate state weld tests.

PROTECTIVE CLOTHING

Students are required to provide their own protective clothing and equipment. Details of the requirements and where they may be purchased are provided by the program instructor at the beginning of each semester.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SURGICAL TECHNOLOGIST

Technical Diploma

Program Code: 31-512-1

our graduates
INDEMAND

2017/2018

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TECHNICAL COLLEGE

mstc.edu



surgical technologist career pathway

SURGICAL TECHNOLOGIST



The Surgical Technologist program at Mid-State prepares graduates to work as part of the surgical team in operating rooms, providing instruments and supplies to the surgeon. Students learn skills and techniques used in central service with instrument processing. Training encompasses both classroom and lab instruction. You will gain clinical hands-on experience in surgery, ambulatory centers, central service, and other related areas. After successful completion of the program and certification exam, you will be a Certified Surgical Technologist (CST).

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Technical Diploma

Total Credits: 38-40

Salary information:
mstc.edu/programsalaries

Careers: Ambulatory Surgery Technician, Cath Lab Surgical Technologist, Central Service Technician, Dental Office Assistant, Emergency Room Technician, Material Management, Surgical Technologist, and Veterinary Surgery Assistant

In general, there is growing demand for these careers. Example: Surgical Technologist career has grown by 2% over the last two years and is expected to grow by 8% over the next 10 years. Currently 1,116 Surgical Technologists are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

CENTRAL SERVICE TECHNICIAN



Mid-State's hands-on Central Service Technician program prepares students to work with supplies and equipment related to surgery, obstetrics, emergency departments, and other patient care settings. Effective communication is vital within this multi-service area. The curriculum includes online instruction, lab, and clinical experience. The clinical portion of the course places students at a minimum of two sites. Students learn the principles of standard precautions, asepsis, disinfection, and sterilization procedures. Course completion leads to a technical diploma and eligibility for certification exams.

Graduates of the Central Service Technician technical diploma may advance into the Surgical Technologist program.

Technical Diploma

Total Credits: 19-22

Salary information:
mstc.edu/programsalaries

Careers: Central Processing or Instrument Technician, Central Service Aide, Central Service Technician, Central Service Technologist, Materials Manager, Medical Equipment Preparer, and Processing/Distributions Technician

In general, there is growing demand for these careers. Example: Medical Equipment Preparer career has grown by 4% over the last two years and is expected to grow by 10% over the next 10 years. Currently 204 Medical Equipment Preparers are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Medical Assistant and Phlebotomy Technician

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Surgical Technologist graduate, to be able to:

- Apply health care and technological science principles to the perioperative environment.
- Maintain principles of sterile technique in the surgical environment.
- Provide a safe, efficient, and supportive environment for the patient.
- Prepare the patient, operating room, and surgical team for the preoperative phase.
- Perform intraoperative case management in the scrub role.
- Perform postoperative case management.
- Function as an ethical, legal, and professional member of the health care team as determined by governing bodies.

The Mid-State Technical College Surgical Technologist program is accredited by the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA), under the auspices of:

Commission on Accreditation of Allied Health Education Programs

25400 US Highway 19 North, Suite 158
Clearwater, FL 33763
727.210.2350 • www.caahep.org

ADDITIONAL ENTRY CRITERIA

To apply to the Surgical Technologist program, please submit the following documents to Mid-State Admissions:

Criminal Background Statement of Understanding and Release of Information form

Mid-State Technical College • Admissions
500 32nd Street North
Wisconsin Rapids, WI 54494



FUNCTIONAL ABILITIES

A list of specific physical, emotional, and mental tasks needed to function as a surgical technologist is available at mstc.edu/programs/surgical-technologist. Contact the disability services coordinator in the Student Services Office to receive assistance.

CLINICAL-RELATED REQUIREMENTS

Prior to placement at a clinical site, students need to pay for a criminal background check and provide documentation of required health work to a private vendor.

Students are responsible for ensuring all requirements remain current during program enrollment.

Clinical sites have the right to refuse a student's placement based on inadequate health records, pending charges, or conviction records. Students with a criminal history may not be able to complete clinical courses. Mid-State will make two attempts to place a student in an appropriate clinical experience. If Mid-State is unable to place the student after two attempts, the student will be withdrawn from the clinical course and will not be able to advance in the program.

PROGRAM PROGRESSION AND COMPLETION

In order to maintain a passing status and progress in the program, students must:

- Repeat courses not completed with a grade of "C" or better prior to progressing in core courses or other courses with co- or prerequisites.

- Receive a grade of "C" or better in all courses required for graduation.

Please note that the ability to repeat courses is dependent upon availability in courses. Students may be required to apply for program re-entry in order to repeat courses within the program's instructional area.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



This ACT program is 100 percent funded with a TAACCCCT Round IV \$19.9 million grant awarded by the US Department of Labor's Employment and Training Administration. This program is an equal opportunity program, and auxiliary aids and services are available upon request to individuals with disabilities. This workforce product was funded by a grant awarded by the US Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the US Department of Labor. The US Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

SAMPLE FULL-TIME CURRICULUM OPTION

Term		7 credits
10501101	Medical Terminology	3
10806177	General Anatomy & Physiology	4
Term		16-18 credits
10501123	Student Success in Allied Health	1
31512327	ST: Introduction to Surgical Technology	4
31512328	ST: Fundamentals 1	4
31512329	ST: Fundamentals 2	2
31512330	ST: Clinical 1	3
10806197	Microbiology	4
	-or-	
31806311	Applied Microbiology	2
Term		15 credits
10801136	English Composition 1 -or-	
10801195	Written Communication -or-	
10801196	Oral/Interpersonal Communication	3
31512331	ST: Surgical Procedures	4
31512332	ST: Clinical 2	4
31512334	ST: Clinical 3	4
Total credits		38-40

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

SAMPLE PART-TIME CURRICULUM OPTION

Term		7 credits
10501101	Medical Terminology	3
10806177	General Anatomy & Physiology	4
Term		5-7 credits
10806197	Microbiology	4
	-or-	
31806311	Applied Microbiology	2
10801136	English Composition 1 -or-	
10801195	Written Communication -or-	
10801196	Oral/Interpersonal Communication	3
Term		14 credits
10501123	Student Success in Allied Health	1
31512327	ST: Introduction to Surgical Technology	4
31512328	ST: Fundamentals 1	4
31512329	ST: Fundamentals 2	2
31512330	ST: Clinical 1	3
Term		12 credits
31512331	ST: Surgical Procedures	4
31512332	ST: Clinical 2	4
31512334	ST: Clinical 3	4
Total credits		38-40

Applied Microbiology

31806311..... 2 credits

Directs the learner's understanding of aseptic techniques, antimicrobial methods, specimen collection, preparation of cultures, body defenses against microorganisms, the infectious process, and the transmission of disease-causing organisms. Students learn such techniques as standard and transmission-based precautions, sanitization, disinfection, sterilization, preparation of cultures, and microscopic slide preparations with simple staining and gram staining.

Prerequisites: Human Body in Health and Disease 10509102 or General Anatomy & Physiology 10806177.

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

General Anatomy & Physiology

10806177..... 4 credits

Examines basic concepts of human anatomy and physiology as they relate to health sciences. Using a body systems approach, the course emphasizes the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. It is intended to prepare health care professionals who need to apply basic concepts of whole body anatomy and physiology to informed decision making and professional communication with colleagues and patients.

Prerequisite: Minimum Accuplacer score for Reading is 55 (Students scoring between 55-80 are encouraged to enroll in Introduction to College Reading) and one semester of college-level biology or chemistry with a "C" or better, or Human Body in Health & Disease 10509102 with a "C" or better, or Emergency Medical Technician-Basic 10531168 with a "C" or better

Medical Terminology

10501101..... 3 credits

Focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms. Emphasizes spelling, definition, and pronunciation. Introduces operative, diagnostic, therapeutic, and symptomatic terminology of all body systems as well as systemic and surgical terminology.

Microbiology

10806197..... 4 credits

Examines microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Disease production, epidemiology, host defense mechanisms,

and the medical impact of microbes in the environment, industry, and biotechnology are also addressed.

Prerequisite: General Anatomy & Physiology 10806177, or General Biology 10806114, or Plant Biology 10806184 with a grade of "C" or better

Oral/Interpersonal Communication

10801196 3 credits

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55-80 on their Accuplacer Reading Comprehension exam and 60-80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores - Reading 55, Sentence Skills 60 or equivalent

ST: Clinical 1

31512330 3 credits

Applies basic surgical theories, principles, and procedural techniques in the operating room. Students begin to function as team members under the guidance of the instructor and authorized clinical personnel. Surgical rotation case requirements are documented.

Prerequisites: Introduction to Surgical Technology 31512327, Fundamentals 1 31512328, and CPR certification

ST: Clinical 2

31512332..... 4 credits

Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures. Surgical rotation case requirements are documented.

Prerequisites: ST: Clinical 1 31512330 and ST: Fundamentals 2 31512329; Corequisite: ST: Surgical Procedures 31512331

ST: Clinical 3

31512334 4 credits

Enhances the student's technical experience and employee skills. Serves as a transition between student and employee. Applies advanced skills for the entry-level surgical technologist in the clinical setting. Surgical rotation case requirements are documented.

Prerequisite: ST: Clinical 2 31512332; Corequisite: ST: Surgical Procedures 31512331

ST: Fundamentals 1

31512328 4 credits

Includes the basic clinical skills needed by the surgical technologist in the scrub role. Learners develop skills in disinfection, sterilization, identifying basic instrumentation, supplies, drains, catheters, dressings and sponges. Includes practice experience in creating a sterile field, draping, passing instruments and supplies, performing counts, and preparing supplies.

Prerequisites: Admission to Surgical Technologist program 315121; Medical Terminology 10501101 and General Anatomy & Physiology 10806177

URBAN FORESTRY TECHNICIAN

Associate in Applied Science (AAS)

Program Code: 10-001-5

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



urban forestry technician career pathway

URBAN FORESTRY TECHNICIAN



Mid-State's Urban Forestry Technician graduates enter the workforce with real-world knowledge and skills. Our students learn the fundamentals of pruning, plant health care, tree planting and maintenance, plant identification, tree risk assessment, and landscape installation and management. Our unique aerial component gives our graduates experience working safely in the trees. You'll learn rope and saddle climbing, work with aerial lifts, and operate brush clippers and other industry equipment.

Associate in Applied Science

Total Credits: 68-69

Salary information:
mstc.edu/programsalaries

Careers: Arborist in commercial, utility, and municipal/government tree care programs; Golf Course Arborist; Landscape Contractor/Grounds Technician; Nursery Technician; Plant Healthcare Technician; Tree Trimmer and Pruner; and Vegetation Management

In general, there is growing demand for these careers. Example: Tree Trimmer and Pruner career has grown by 3% over the last two years and is expected to grow by 11% over the next 10 years. Currently 289 Tree Trimmers and Pruners are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

bachelor's degree opportunities

UW-River Falls, BS Sustainable Management
UW-Stevens Point, BS Forestry
For more information and additional opportunities, go to mstc.edu/transfer

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED APPRENTICESHIP

Arborist

For estimated tuition and fees, visit mstc.edu/programcosts.

ARBORIST TECHNICIAN



In response to urban forestry industry needs for trained employees, Mid-State offers an advanced certificate for arborists. This certificate enables individuals presently employed on the technical level in the field to advance their careers.

Certificate

Total Credits: 12

PROGRAM OUTCOMES

Employers will expect you, as an Urban Forestry Technician graduate, to be able to:

- Explain proper tree care to clients.
- Identify and diagnose tree diseases and pests.
- Identify trees by common and scientific name.
- Plant and maintain commercial and residential landscapes.
- Properly prune, plant, maintain, and remove trees and shrubs.

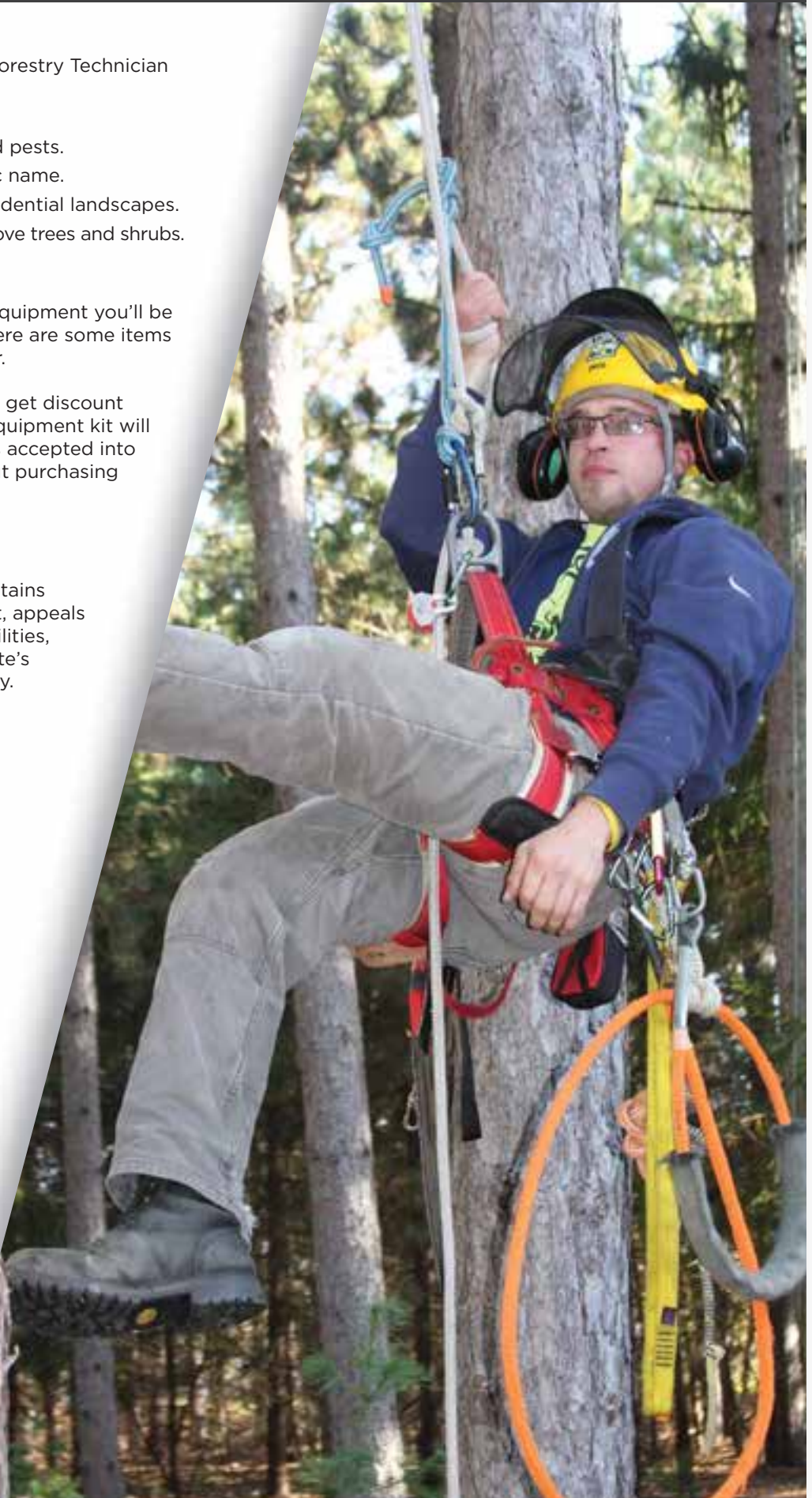
TOOL AND EQUIPMENT KIT

While the college provides much of the equipment you'll be working with in the hands-on training, there are some items each student is personally responsible for.

Mid-State works with industry vendors to get discount prices on professional-grade tools. The equipment kit will cost approximately \$250-\$300. Students accepted into the program will get specific details about purchasing the equipment.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



SAMPLE FULL-TIME CURRICULUM OPTION

Term		17-18 credits
10001118	Landscape Plant Identification	2
10001124	Fundamentals of Aerial Tree Work	2
10001133	Chainsaw Safety and Operation	2
10001173	Urban Tree Maintenance	2
10801136	English Composition 1 -or-	
10801195	Written Communication	3
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
10806184	Plant Biology	3
Term		16 credits
10001102	Plant Health Care Applicator	2
10001110	Tree Biology	2
10001111	Intro to Horticulture	3
10001121	Tree Crew Practicum 1 -or-	
10001125	Aerial Tree Work Practicum 1	2
10001148	People, Resources, and Sustainability	3
10806134	General Chemistry	4
Term		18 credits
10001104	Applied Landscape Architecture	2
10001105	Dendrology and Silvics	3
10001138	Landscape & Turf Management I	2
10001199	Intro to Fisheries, Forestry, & Wildlife Resources	3
10801196	Oral/Interpersonal Communication	3
10809166	Intro to Ethics: Theory & Application Elective	3 2
Term		17 credits
10001103	Applied Urban Forestry	2
10001113	Ornamental Plant Health Care	3
10001139	Landscape & Turf Management II	2
10001149	Ecological Basis for Natural Resource Management	3
10001198	Intro to Soil & Water Resources	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology Elective	3 1
Total credits 68-69		

Please Note:

- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Program completion time may vary based on student scheduling and course availability. For details, go to mstc.edu/classfinder.

NOTES:

SAMPLE PART-TIME CURRICULUM OPTION

Term		11-12 credits
10001118	Landscape Plant Identification	2
10001124	Fundamentals of Aerial Tree Work	2
10001133	Chainsaw Safety and Operation	2
10001173	Urban Tree Maintenance	2
10804107	College Mathematics	3
	-or-	
10804118	Intermediate Algebra with Applications	4
Term		13 credits
10001102	Plant Health Care Applicator	2
10001110	Tree Biology	2
10001111	Intro to Horticulture	3
10001121	Tree Crew Practicum 1 -or-	
10001125	Aerial Tree Work Practicum 1	2
10806134	General Chemistry	4
Term		11 credits
10001138	Landscape & Turf Management I	2
10806184	Plant Biology	3
10001199	Intro to Fisheries, Forestry, & Wildlife Resources	3
10801196	Oral/Interpersonal Communication	3
Term		10 credits
10001103	Applied Urban Forestry	2
10001139	Landscape & Turf Management II	2
10001149	Ecological Basis for Natural Resource Management	3
10801136	English Composition 1 -or-	
10801195	Written Communication	3
Term		11 credits
10001104	Applied Landscape Architecture	2
10001105	Dendrology and Silvics	3
10809166	Intro to Ethics: Theory & Application Elective	3 1
	Elective	2
Term		12 credits
10001148	People, Resources, and Sustainability	3
10001113	Ornamental Plant Health Care	3
10001198	Intro to Soil & Water Resources	3
10809188	Developmental Psychology -or-	
10809198	Intro to Psychology	3
Total credits 68-69		

different spatial and temporal scales. Builds on concepts from botany and ecology with an emphasis on woody plant systematics and silvics. Tree identification is a major component of this course.

Prerequisites: Landscape Plant Identification 10001118 and Plant Biology 10806184

Developmental Psychology

10809188..... 3 credits

Studies human development throughout the lifespan and explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills enable students to gain an increased knowledge and understanding of themselves and others. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Ecological Basis for Natural Resource Management

10001149..... 3 credits

Introduces the basic principles of ecology and their application to management of natural resources. The scientific method and interactions between and among species are examined. Lab exercises are designed to give hands-on experience with measurement and data collection, preparation of technical reports, use of library resources, use of computer models, and development of critical thinking skills.

Prerequisite: Plant Biology 10806184

English Composition 1

10801136 3 credits

Designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing, and revising are applied through a variety of activities. Students analyze audience and purpose, use elements of research, and format documents using standard guidelines. Individuals develop critical reading skills through analysis of various written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of “C” or better. Proficiency in word processing skills recommended.

Fundamentals of Aerial Tree Work

10001124 2 credits

Introduces students to the basic safety requirements, equipment, and techniques employed by arborists who work aloft. Topics include applied rope-and-saddle and aerial lift usage, electrical hazard recognition, and common knots used in the industry.

Corequisites: Urban Tree Maintenance 10001173 and Chainsaw Safety and Operation 10001133

General Chemistry

10806134 4 credits

Covers the fundamentals of chemistry. Topics include the metric system; problem solving; periodic relationships; chemical reactions, chemical equilibrium; properties of water; acids, bases, and salts; and gas laws.

Prerequisite: College Mathematics 10804107 with a “C” or better, or Intermediate Algebra with Applications 10804118 with a “C” or better, or Accuplacer Algebra score of 57 or greater

Intermediate Algebra with Applications

10804118 4 credits

This course offers algebra content with applications. Topics include properties of real numbers; order of operations; algebraic solution for linear equations and inequalities; operations with polynomial and rational expressions; operations with rational exponents and radicals; and algebra of inverse, logarithmic, and exponential functions.

Prerequisite: Pre-Algebra 10834109 with a grade of “C” or better, Accuplacer Arithmetic score of 110, Accuplacer Arithmetic score of 90, and Accuplacer Algebra score of 30. (A student scoring a “C” or lower should enroll in the Math Lab supplementary instruction with the next level math class.)

Intro to Ethics: Theory & Application

10809166 3 credits

Provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives are used to analyze and compare relevant issues. Students critically evaluate individual, social, and/or professional standards of behavior, and apply a systemic decision-making process to these situations. A student scoring between 55–80 on Accuplacer Reading Comprehension or 60–80 on Accuplacer Sentence Skills is recommended to co-enroll in the Introduction to College Reading course and/or Introduction to College Writing course, respectively.

Prerequisite: Minimum Accuplacer Scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Fisheries, Forestry, & Wildlife Resources

10001199 3 credits

Provides an integrated introduction to principles and practices of fisheries, forestry, and wildlife management, including production of goods and services while maintaining ecosystem integrity and functions. Emphasizes contemporary issues.

Intro to Horticulture

10001111 3 credits

Provides an overview of the science and profession of horticulture. Its role and importance throughout history, current trends, and careers are covered. Particular attention is given to horticultural crops, their use and interrelationships among the environment, plant growth, and plant development.

Intro to Psychology

10809198 3 credits

This introductory course surveys the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. A student scoring between 55–80 on Accuplacer Reading Comprehension is recommended to co-enroll in the Introduction to College Reading course.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent, or Intro to College Reading 10848104 with a grade of “C” or better and Intro to College Writing 10831103 with a grade of “C” or better

Intro to Soil & Water Resources

10001198 **3 credits**

Introduces the student to integrated concepts of soil and water resources at the landscape level. Examines physical, chemical, and biological interactions relating to watershed processes and response to land use and management.

Prerequisites: General Chemistry 10806134 and Plant Biology 10806184

Landscape & Turf Management I

10001138 **2 credits**

Students learn all aspects of landscape and turf management during the fall season. Emphasis is on planning and installation of living and non-living landscape materials and turf. Estimating and time management are also key components of this course.

Prerequisites: Landscape Plant Identification 10001118 and Urban Tree Maintenance 10001173

Landscape & Turf Management II

10001139 **2 credits**

Students learn all aspects of landscape and turf management during the spring season. Emphasis is on planning and installation of living and non-living landscape materials and turf. Estimating and time management are also key components of this course.

Prerequisites: Landscape Plant Identification 10001118 and Urban Tree Maintenance 10001173

Landscape Plant Identification

10001118 **2 credits**

Introduces students to woody trees/shrubs and herbaceous plants commonly used in residential and commercial landscapes in Wisconsin. The three plant groups covered in this course are woody trees/shrubs, herbaceous perennial plants, and herbaceous annual plants. Identification, installation, and maintenance are covered for each plant group.

Oral/Interpersonal Communication

10801196 **3 credits**

Focuses upon developing speaking, verbal, and non-verbal communication, and listening skills through individual presentations, group activities, and other projects. For a student scoring between 55–80 on their Accuplacer Reading Comprehension exam and 60–80 on the Sentence Skills exam, it is recommended to co-enroll in the Introduction to College Reading and/or Intro to College Writing courses.

Prerequisite: Minimum Accuplacer scores – Reading 55, Sentence Skills 60 or equivalent

Ornamental Plant Health Care

10001113 **3 credits**

Classification and identification of important ornamental plant insects, diseases, and abiotic agents is presented, emphasizing their modes of plant damage. Diagnostics, damage assessment, sample preparation, and control strategies are introduced.

Prerequisites: Landscape Plant Identification 10001118 and Plant Health Care Applicator 10001102

People, Resources, and Sustainability

10001148 **3 credits**

Explores the relationship between the human population and natural resources over time, and the effect this relationship has on the biosphere. Global resources, environmental concerns, and the human dimensions of

resource management are explored from biological and socioeconomic perspectives.

Plant Biology

10806184 **3 credits**

This lecture/laboratory course provides students with an in-depth study of the plant kingdom. The content includes, but is not limited to, plant cell anatomy and physiology, plant genetics, plant classification, plant anatomy and physiology, plant responses, plant life cycles, and ecology. A survey of viruses, prokaryotes, protista, and fungi as they pertain to plants is presented.

Plant Health Care Applicator

10001102 **2 credits**

Focuses on training to successfully pass the Wisconsin Department of Agriculture and Consumer Protection's pesticide applicator exam (which will be proctored in this class). Additionally, students are familiarized with chemical handling, mixing, calibration, and application via field exercises.

Tree Biology

10001110 **2 credits**

An overview of the tree system with an emphasis on growth and development, compartmentalization of wounds, and how the tree adapts to the urban environment.

Prerequisites: Admission to Urban Forestry Technician program 100015 and Introduction To Plant Biology 10001147

Tree Crew Practicum 1

10001121 **2 credits**

Emphasizes implementation of the basic requirements and techniques employed by arborists who work on tree crews. Students will perform ground-related activities with limited opportunities to work aloft and participate as members of a working crew, gaining introductory experience in tree pruning, rigging, hardware installation, electrical hazard awareness, ground work, and work site management. Emphasis is placed on equipment operation and ground crew skills expected of Plant Health Care Technicians working in support of tree care crews.

Prerequisites: Fundamentals of Aerial Tree Work 10001124, Urban Tree Maintenance 10001173, and Chainsaw Safety and Operation 10001133

Urban Tree Maintenance

10001173 **2 credit**

Primarily focuses on the art and science of tree pruning. Young tree training and mature tree maintenance are practiced. Proper pruning cuts and techniques specified in the ANSI A300 Pruning Standard are taught throughout this course.

Written Communication

10801195 **3 credits**

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

WELDING

Technical Diploma

Program Code: 31-442-1

our graduates
INDEMAND

2017/2018

 **MID-STATE**
TECHNICAL COLLEGE

mstc.edu



WELDING



The Welding program at Mid-State prepares graduates for a wide variety of welding jobs in production, maintenance, construction, manufacturing, and servicing industries. You will receive hands-on instruction and practice in a number of welding processes, including shielded metal arc, gas tungsten arc, gas metal arc, submerged arc, oxyacetylene cutting and brazing, plasma arc, and arc-air cutting. You will also become familiar with various types of metals, fabrication of metals, and welding under industry codes. Successful completion of this program prepares you to take welding certification tests.

bachelor's degree opportunities

For more information, visit mstc.edu/transfer

Technical Diploma

Total Credits: 33-35

Salary information:
mstc.edu/programsalaries

Careers: Combination and Construction Welder, Counterperson in Distributorship, Fabricator Maintenance Welder, MIG Welder, Pipeline Welder, Production Line Welder, Shipyard Welder, Structural Welder, TIG Welder, Welder, Fitter, and Welding Repair

In general, there is growing demand for these careers. Example: Welders, Cutters, and Welder Fitters career has remained the same over the last two years and is expected to grow by 8% over the next 10 years. Currently 6,730 Welders, Cutters, and Welder Fitters are employed in the region (EMSI data within 100-mile radius of Wisconsin Rapids).

STAINLESS STEEL WELDING



Mid-State's Stainless Steel Welding program prepares students for entry-level employment as a stainless steel welder in production, construction, manufacturing, and servicing industries. Experienced instructors will teach you basic TIG (tungsten inert gas) welding of stainless steel as well as fabrication, blueprint reading, and more. Instruction will combine lecture with hands-on practice, giving you the confidence you need to start your career in this rewarding field.

Graduates of the Stainless Steel Welding technical diploma may advance into the Welding program.

Technical Diploma

Total Credits: 7

Salary information:
mstc.edu/programsalaries

Careers: Stainless Steel TIG Welder

TRANSFER TO MID-STATE

You may be eligible to receive credit for prior knowledge and skills gained. This includes transfer credit for approved coursework from high schools and post-secondary institutions, credit for approved military or occupational experience/training, and credit by examination. Go to mstc.edu/transfer for more information.

approved transfer college credit

dual credit

credit by examination

credit for military or work experience

OTHER OPTIONS

RELATED PROGRAMS

Industrial Mechanical Technician and Machine Tool Technician

RELATED APPRENTICESHIPS

Ironworker and Steamfitting

For estimated tuition and fees, visit mstc.edu/programcosts.

PROGRAM OUTCOMES

Employers will expect you, as a Welding graduate, to be able to:

- Demonstrate appropriate safe work habits when operating oxy-fuel and electric welding equipment.
- Use terminology associated with welding to communicate effectively with coworkers, supervisors, customers, inspectors, engineers, and vendors.
- Perform welding operations using the appropriate process on various metals in a variety of situations.
- Interpret blueprint and welding symbols to fabricate components.
- Analyze given procedures to simulate state weld tests.
- Display manipulative skills with various welding processes to ensure adequate weld integrity and appearance.
- Manufacture and repair parts using thermal cutting processes to include oxy-fuel, air carbon arc, and plasma cutting equipment.
- Set up and operate fabrication equipment, including press brakes, saws, iron workers, punch operations, and tube bending.
- Create a plan and construct a product based on an analyzed need within a team environment.

PROTECTIVE CLOTHING

Students are required to provide their own protective clothing and equipment. Details of the requirements and where they may be purchased are provided by the program instructor at the beginning of each semester.

STUDENT HANDBOOK

Visit mstc.edu/studenthandbook to view Mid-State's student handbook, which contains information about admissions, enrollment, appeals processes, services for people with disabilities, financial aid, graduation, privacy, Mid-State's Student Code of Conduct, and technology.



Employment Strategies

10801199 3 credits

A course designed to assist students in securing employment. This communication-based course helps develop an awareness of personal and academic skills as they relate to the job seeking process. Topics of study include personal and skill assessments, research of employment sources, completion of application forms, formation of professional resumes, composition of various business letters, interviewing skills, and job offer evaluation. *NOTE: To enroll you must have completed 50 percent of technical program credits or receive department approval. See program advisor or program faculty to register.*

Gas Metal Arc Welding (GMAW)

10442110 3 credits

Develops skills of welding on steel sheet metals and plates using the GMAW process. Emphasizes axial spray, pulse spray, and short circuit mode of transfer. Students are able to weld in several positions, read basic weld symbols, and have an understanding of written welding procedures. *Corequisite: Intro to Welding 10442100*

Industrial Safety

10462107 2 credits

Provides an overview of safety, health, and environmental issues as they relate to industry. Various types of hazards and the controls and equipment used to reduce risks from hazards are discussed. Focuses on understanding the Occupational Safety and Health Administration (OSHA) and its function as well as other regulatory and enforcement agencies associated with industrial safety, health, and the environment.

Intermediate GMAW/FCAW

10442111 3 credits

Builds skills with the GMAW process and performing welds on stainless steel and aluminum sheet metal and plate. Students are able to differentiate and select proper electrodes and shielding gases, and properly adjust parameters. Emphasizes axial spray, pulse spray, and short circuit mode of transfer depending on base metal. Students learn about and practice the FCAW process, including types of electrodes, fluxes, and shielding gases used in these processes. Students are able to weld in several positions, read some basic weld symbols, and have a basic understanding of written welding procedures. *Prerequisite: Intro to Welding 10442100*

Intermediate GTAW (TIG)

10442102 2 credits

In this course students weld in the horizontal and vertical positions on stainless steel and aluminum. Pulsed current is applied to stainless steel weldments. Complete penetration groove welds in stainless steel are practiced and evaluated.

Corequisite: Basic GTAW (TIG) 10442101

Intro to AutoCAD

10623106 2 credits

This introductory course in computer-aided drafting (CAD) using AutoCAD software provides foundation skills in using CAD software to create and print two-dimensional technical drawings. This course is available to students in any program. Computer skills and prior knowledge of drawing/drafting techniques is recommended.

Intro to Welding

10442100 1 credit

Builds knowledge of general welding shop procedures and safety, arc welding principles and equipment setup, and metal fabrication equipment use. Students work with a lab instructor to begin developing skills with the gas metal arc welding (GMAW) and gas tungsten arc welding (GTAW) welding processes by completing simple welding and fabricating tasks in preparation for further exploration in welding and fabricating.

Math for Manufacturing

32420320 2 credits

Studies machine tool problems involving calculations with fractions, decimals, and percentage. Includes work with the metric system, measurement conversion, geometry, trigonometry of right triangles, and use of a scientific calculator. Formulas with application to the trades are also studied.

Prerequisite: Admission into Machine Tool Technician program 324201, Welding program 314421, Gas Metal Arc Welding (GMAW) certificate 144422, or consent of instructor

Metal Cutting Welding

10442132 2 credits

Covers oxy-fuel cutting, plasma arc cutting, air-carbon arc cutting, mechanical cutting, and nontraditional cutting. Individual parts are produced using automatic and manual equipment. Both shop and field applications are practiced. The parts may be joined, by welding, to complete an assembly. Students may work in a team environment to complete assignments. This course is available to Welding program students only.

Corequisite: Intro to Welding 10442100

Metals & Machining

10462114 3 credits

A two-part class that introduces the basics of metal science and machine shop practice. Introduces metallurgical concepts of steel and iron production, properties of metals, testing of metals, carbon and its role, heat-treating, steel designations, and cast iron and non-ferrous metals. Students participate in lab exercises examining the properties of metal, an introduction to machine shop practices of safety, measurement, and machining through the use of hand tools, drilling machines, saws, and engine lathes. Students are introduced to concepts by both classroom presentation and hands-on shop experiences.

Problem Solving & Critical Thinking

10623100 1 credit

Centers around logical approaches to problem solving through defining the problem, identifying contributing factors, creating and testing plans, and reviewing results. Includes problem solving from variety of perspectives and touches on approaches that are mathematical and logical and consider risk.

Shielded Metal Arc Welding (SMAW)

10442130 2 credits

Begins to build the knowledge and skills of the SMAW process commonly known as stick welding. Students are able to weld in several positions, read some basic weld symbols, and have a basic understanding of written welding procedures.

Corequisite: Intro to Welding program 10442100

Weld Inspections and Testing

10442163..... 1 credit

Emphasizes measurement of weld defects and assessment of weld quality conformance to common welding codes. Students conduct etch tests, bend tests, and break tests on welds. Visual inspection, dye penetrant testing, and magnetic particle testing are practiced.

Prerequisite: Intro to Welding 10442100

Welding Fabrication Techniques

10442115 2 credits

Students fabricate parts from prints and weld assemblies with a specified welding process. Cutting and forming may be required prior to assembly. Depending on the size and complexity of the project, students may be asked to work in a team to complete an assignment.

Prerequisites: Admission to Welding programs 314421 and Intermediate GTAW (TIG) 10442102

Welding Metallurgy

10442159..... 2 credits

Investigates the effects of welding on the mechanical properties of metals. Learners explore hardness, strength, and weldability of various metals. Concepts are applied in various activities, including heat treating, hardness testing, and tensile testing.

Welding Print Reading

10442112 2 credits

Students study print format, line types, orthographic views, dimensioning, welding symbols, and bill of materials. Students apply concepts by creating and fabricating from prints in individual and group activities.

Written Communication

10801195 3 credits

Develops writing skills, which include prewriting, drafting, revising, and editing. A variety of writing assignments is designed to help the learner analyze audience and purpose, research and organize ideas, and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through analysis of a variety of written documents.

Prerequisite: Accuplacer Sentence Skills score of 85 or equivalent, or Intro to College Writing 10831103 with a grade of "C" or better. Proficiency in word processing skills recommended.

