

ARBORIST TECHNICIAN

Associate in Applied Science (AAS) Program Code: 10-001-5

Total Credits: 60-61

Mid-State's Arborist 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, and tree risk assessment. Our unique aerial component gives our graduates experience working safely in the trees.

Estimated tuition and fees: mstc.edu/programcosts

ACADEMIC ADVISOR

To schedule an appointment with an academic advisor, call 715.422.5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit mstc.edu/advising.

NEW STUDENT CHECKLIST

Complete the following steps to prepare for your New Student Advising appointment with your academic advisor:

- ☐ Submit a Mid-State application at mstc.edu/apply.
- Send official transcripts to: Mid-State Technical College Student Services 1001 Centerpoint Drive Stevens Point, WI 54481
- ☐ Complete the Free Application for Federal Student Aid (FAFSA) at fafsa.gov. Mid-State's Financial Aid team is available to assist with your FAFSA application and to answer your financial aid questions. Contact Financial Aid or schedule an appointment at mstc.edu/financial-aid.
- ☐ Set up student MyCampus account at mstc.edu/mycampus-assistance.
- ☐ Schedule a New Student Advising appointment at mstc.edu/advising.



mstc.edu • 888.575.6782 • TTY: 711

ADAMS CAMPUS 401 North Main Adams, WI 53910 MARSHFIELD CAMPUS 2600 West 5th Street Marshfield, WI 54449





MID-STATE

Wisconsin Rapids, WI 54494

CAREER PATHWAY • BEGIN AT ANY POINT







CREDIT FOR PRIOR LEARNING AND EXPERIENCE

CREDIT FOR PRIOR LEARNING AND EXPERIENCE

- Certifications and Licenses
- High School Credit
- Military Experience
- National/Standardized Exams
- Transfer Credit
- Work and Life Experience

Learn about Credit for Prior Learning at mstc.edu/cpl.



UTILITY TREE TRIMMER

Technical Diploma • 16 Credits

Start Your Career

- Utility Arborist
- Tree Trimmer
- Pruner



ARBORIST TECHNICIAN

Associate in Applied Science (AAS) • 60-61 Credits

Start Your Career

- Arborist (commercial, utility, government)
- Landscape Contractor
- Plant Health Care Technician
- Apprenticeship



BACHELOR'S DEGREE OPTIONS

For those interested in continuing their education, Mid-State offers transfer agreements with various four-year colleges and universities. For more information and additional opportunities, visit **mstc.edu/transfer**.

OTHER OPTIONS

RELATED PROGRAMS

- Agribusiness Science & Technology
- Agronomy Technician
- Farm Operation

APPRENTICESHIP OPPORTUNITIES

Arborist Apprenticeship

OUTCOMES

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

- Diagnose ornamental plant disorders.
- Identify woody plants by common and scientific name.
- Apply tree biology for arboricultural maintenance practices.
- · Adhere to industry safety standards.

TECHNICAL SKILLS ATTAINMENT

The Wisconsin Technical College System (WTCS) has implemented a requirement that all technical colleges measure 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. Students are notified of TSA reporting in courses where the TSA is assessed.

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.

GRADUATION REQUIREMENT

The GPS for Student Success course is required for all Mid-State program students and is recommended to be completed before obtaining 12 credits. (Not counted in the total credit value for this program.) Some students are exempt from this requirement. Please see your program advisor for more information.

GPS for Student Success 108901021 credit

Integrate necessary skills for student success by developing an academic plan, identifying interpersonal attributes for success, adopting efficient and effective learning strategies, and utilizing Mid-State resources, policies, and processes. This course is recommended to be completed prior to obtaining 12 credits and is a graduation requirement unless you receive an exemption from your program advisor.

ADDITIONAL COURSES AS NEEDED

The following courses may be recommended or required if the student does not achieve minimum Accuplacer scores.

College Reading and Writing 1 108311043 credits

Provides learners with opportunities to develop and expand reading and writing skills to prepare for college-level academic work. Students will employ critical reading strategies to improve comprehension, analysis, and retention of texts. Students will apply the writing process to produce well-developed, coherent, and unified written work.

Pre-Algebra 108341093 credits

Provides an introduction to algebra. Includes operations on real numbers, solving linear equations, percent and proportion, and an introduction to polynomials and statistics. Prepares students for elementary algebra and subsequent algebra-related courses.

NOTES:			

SAMPLE FULL-TIME CURRICULUM OPTION

Term	14 cred	its
10001118	Landscape Plant Identification 🗹	2
10001124	Arborist Skills Introduction	2
10001133	Chainsaw Safety and Operation Pruning for Structure &	2
10801178	Speech & -OR-	_
10801196	Oral/Interpersonal Communication 🗹	3
10806184	Plant Biology	3
Term	16 cred	its
10001102	Plant Health Care Applicator	2
10001108	Electric Systems & Safety in Arboriculture Z Tree Biology	1 2
10001110	Intro to Horticulture	2
10001125	Arboriculture Operations 1	2
10001150	Workplace Communication in Arboriculture	1
10806112	Principles of Sustainability	3
10809166	Intro to Ethics: Theory & Application 🗷	3
Term	16-17 cred	
10001105	Dendrology and Silvics	3
10001115	Root Management Arboriculture Operations 2	2
10001120	Fish, Forest, and Wildlife Management	3
10801195	Written Communication -OR-	_
10801136	English Composition 1 🗹	3
10804107	College Mathematics 🗹	3
10804118	-OR- Intermediate Algebra with Applications &	4
		_
Term	14 cred	
10001103	Applied Arboriculture & Urban Forestry	2
10001103 10001113	Applied Arboriculture & Urban Forestry Ornamental Plant Health Care	2
10001103	Applied Arboriculture & Urban Forestry	
10001103 10001113 10001149 10001198 10809188	Applied Arboriculture & Urban Forestry Ornamental Plant Health Care Ecology for Arboriculture Soil & Water Resources Developmental Psychology & -OR-	2 3 3 3
10001103 10001113 10001149 10001198	Applied Arboriculture & Urban Forestry Ornamental Plant Health Care Ecology for Arboriculture Soil & Water Resources	2

This course has options available to receive credit for prior learning (CPL) or work experience. Visit the website at mstc.edu/cpl or contact your advisor for details.

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/schedule**.

SAMPLE PART-TIME CURRICULUM OPTION

Term 10001118 10001124 10001133 10001173	Arborist Skills Introduction 2 Chainsaw Safety and Operation 2 Pruning for Structure 2 8 credits 2 Chainsaw 2 Pruning for Structure 2
Term 10001125 10001108 10001150 10806112	Arboriculture Operations 1 2 Electric Systems & Safety in Arboriculture © 1 Workplace Communication in Arboriculture 1 Principles of Sustainability 3
Term 10806184 10804107	Plant Biology 3 College Mathematics 2 3 -OR- Intermediate Algebra with Applications 2 4
Term 10001102 10001110 10001111 10809166	Plant Health Care Applicator 2 Tree Biology 2 Intro to Horticulture 2 Intro to Ethics: Theory & Application 2 3
Term 10001115 10001126 10801198 10801196	Root Management 2 Arboriculture Operations 2 2 Speech ? -OR- Oral/Interpersonal Communication ? 3
Term 10001113 10809188 10809198	Ornamental Plant Health Care Developmental Psychology & -OR- Intro to Psychology & 3
Term 10001105 10001199 10801195 10801136	Dendrology and Silvics 3 Fish, Forest, and Wildlife Management 3 Written Communication -OR- English Composition 1 3
Term 10001103 10001149 10001198	Applied Arboriculture & Urban Forestry 2 Ecology for Arboriculture 3 Soil & Water Resources 3 Total credits 60-61

MULTIPLE MEASURES		
Multiple Measures Writing (MMW): High school GPA of 2.6 and successful completion of 2.0 credits of high school writing courses with a "C" or better	Multiple Measures Reading (MMR): High school GPA of 2.6 and successful completion of 2.0 credits of high school literature courses with a "C" or better	
Multiple Measures Math 1 (MMM_1): High school GPA of 2.6 and successful completion of 1.0 credits of high school math (Algebra 1 or equivalent) with a "C" or better	Multiple Measures Math 2 (MMM_2): High school GPA of 2.6 and successful completion of 2.0 credits of high school math including Algebra 1 and Algebra 2 with a "C" or better	
Multiple Measures Science 1 (MMS_1): High school GPA of 2.6 and successful completion of 1.0 credits of high school lab science course with a "C" or better	Multiple Measures Science 2 (MMS_2): High school GPA of 2.6 and successful completion of 1.0 credits of high school chemistry with a "C" or better	

Past high school and college transcripts are used in making course placement decisions.

COURSE DESCRIPTIONS

Applied Arboriculture & Urban Forestry 10001103.....2 credits

Students gain familiarity with techniques & methods used in the management of trees & tree populations. This course also serves to create an awareness of arboriculture career

Prerequisites: Pruning for Structure 100001173 and Tree Biology 100001110

Arboriculture Operations 1

100011252 credits

Emphasizes practice of skills associated with being safe & productive members of crews engaged in basic tree work/ arboricultural operations. Topics include introductory elements of pruning & removal techniques, equipment operations, & work site set-up.

Prerequisites: Arborist Skills Introduction 10001124 and Pruning for Structure 10001173

Arboriculture Operations 2

100011262 credits

Builds upon the skills & topics of Arboriculture Operations 1. Students will participate as safe & productive members of crews engaged in an intermediate level of arboricultural operations skills development.

Prerequisites: Arboriculture Operations 1 10001125, Chainsaw Safety & Operation 10001133

Arborist Skills Introduction

100011242 credits

A hands-on introduction to the basic techniques employed by arborists engaged in performing aerial tree care operations. Topics include canopy access methods, arborist gear usage, safety considerations/risk recognition, and knot selection.

Chainsaw Safety and Operation 100011332 credits

This course will familiarize students with common chainsaw practices employed within the arboricultural industry, including safe operation, routine maintenance, common cutting techniques, and use of personal protective equipment. Students will operate and maintain chainsaws. Additionally, field exercises will simulate tree removal operations.

College Mathematics &

108041073 credits

This course is designed to review and develop fundamental concepts of mathematics in the areas of algebra, geometry, trigonometry, measurement and data. Algebra topics emphasize simplifying algebraic expressions, solving linear equations and inequalities with one variable, solving proportions and percent applications. Geometry and trigonometry topics include; finding areas and volumes of geometric figures, applying similar and congruent triangles. applying Pythagorean Theorem, and solving right triangles using trigonometric ratios. Measurement topics emphasize the application of measurement concepts and conversion techniques within and between U.S. customary and metric system to solve problems. Data topics emphasize data organization and summarization skills, including: frequency distributions, central tendency, relative position and measures of dispersion. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators.

Prerequisite: High School GPA of 2.6 and MMM_1 or Accuplacer Arithmetic of 250 and QAS 234 or ACT Math score of 17 or Pre-Algebra 10834109 with a "C" or better

Dendrology and Silvics

10001105.....3 credits

Provides the student with an understanding of how trees interact with their environment and with one another, at 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.

Prerequisite: Landscape Plant Identification 10001118

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.

Prerequisite: High School GPA of 2.6 and MMR and MMW or Accuplacer Reading Skills of 236 and Writing of 237 or ACT of 15 Reading/16 English

Ecology for Arboriculture 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

COURSE DESCRIPTIONS

Electric Systems & Safety in Arboriculture & 10001108.....1 credit

Students will gain familiarity with electrical distribution and transmission system hardware identification. Industry safety best practices and standards related to performing tree work near energized conductors will be explored.

English Composition 1 2

108011363 credits

Learners develop and apply skills in all aspects of the writing process. Through a variety of learning activities and written documents, learners employ rhetorical strategies, plan, organize and revise content, apply critical reading strategies, locate and evaluate information, integrate and document sources, and apply standardized English language conventions.

Prerequisite: High School GPA of 2.6 and MMW or Accuplacer Writing of 262 or ACT English score of 20 or completion of College Reading and Writing 1 10831104 with a "C" or better

Fish, Forest, and Wildlife Management 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.

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: High School GPA of 2.6 and MMM 1 or Accuplacer Arithmetic of 263 and QAS 234 or ACT Math score of 19 or QAS of 245 or Pre-Algebra 10834109 with a "C" or better

Intro to Ethics: Theory & Application & 108091663 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 decisionmaking process to these situations.

Prerequisite: High School GPA of 2.6 and MMR and MMW or Accuplacer Reading Skills of 236 and Writing of 237 or ACT of 15 Reading/16 English

Intro to Horticulture 10001111.....2 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, plant growth, and plant development.

Intro to Psychology &

108091983 credits

This science of psychology course is a survey of multiple aspects of behavior and mental processes. It provides an overview of topics such as research methods, theoretical perspectives, learning, cognition, memory, motivation, emotions, personality, abnormal psychology, physiological factors, social influences, and development.

Prerequisite: High School GPA of 2.6 and MMR and MMW or Accuplacer Reading Skills of 236 and Writing of 237 or ACT of 15 Reading/16 English

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 & 108011963 credits

Focuses on developing effective listening techniques and verbal and nonverbal communication skills through oral presentation, group activity, and other projects. The study of self, conflict, and cultural contexts will be explored, as well as their impact on communication.

Prerequisite: High School GPA of 2.6 and MMR and MMW or Accuplacer Reading Skills of 236 and Writing of 237 or ACT of 15 Reading/16 English

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 108061843 credits

This lecture/laboratory course provides students with an indepth 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.

COURSE DESCRIPTIONS

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.

Principles of Sustainability & 108061123 credits

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

Pruning for Structure &

100011732 credits

Focuses on the art and science of tree pruning. Topics include tree structure, introductory biology, pruning cuts, and young tree training. Students will gain hands-on experience performing tree pruning.

Root Management

10001115.....2 credits

This course is an exploration of the landscape below ground, focusing on woody plant roots. Students will uncover different root types, root systems, and how roots uptake water and elements. Hands-on class activities include experimenting with several techniques of root excavation, assessment, and pruning. Critical thinking and relevant skills in properly managing roots in the urban environment will be discussed.

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. Prerequisite: Plant Biology 10806184; Corequisite: General Chemistry 10806134

Speech 2

108011983 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, Includes informative. persuasive, and occasion speech presentations. Prerequisite: High School GPA of 2.6 and MMR and MMW or Accuplacer Reading Skills of 253 and Writing of 262 or ACT of 21 Reading/19 English or completion of College Reading and Writing 1 10831104 with a "C" or better

Tree Biology

100011102 credits

This course provides an overview of the major structures and functions of woody plants. The overall objective is to provide a basic understanding of these complex organisms. equipping you with a solid foundation to diagnose myriad health & structural abnormalities you'll encounter. Major course themes include plant functions, physiology, adaptations, root systems, planting, & basic risk assessment.

Workplace Communication in Arboriculture 10001150.....1 credit

This course introduces students to the key concepts of effective and impactful communications in the arboriculture industry. Students will investigate the diversity of commonalities and differences among people and how they relate to improving personal and organizational effectiveness at work.

Written Communication

108011953 credits

Develops writing skills which include prewriting, drafting, revising, and editing. A variety of writing assignments are 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 the analysis of a variety of written documents. Prerequisite: High School GPA of 2.6 and MMW or Accuplacer

Writing of 262 or ACT English score of 20 or completion of College Reading and Writing 1 10831104 with a "C" or better