

URBAN FORESTRY TECHNICIAN



Program Code 10-001-5

Estimated Program Costs: \$11,700

Median Annual Salary: \$29,000

OVERVIEW

The Urban Forestry Technician program is truly unique. Rewarding jobs from employers throughout the county seek MSTC graduates with a degree in this exciting field. This program prepares students for careers in arboriculture, landscape management, and urban forestry.

Skills learned include fundamentals of pruning, plant health care, tree planting and maintenance, plant identification, tree risk assessment, and landscape installation and management. The Wisconsin Pesticide Certification Exam is given in class.

An aerial component is included in the curriculum to prepare students for working safely aloft. Elective courses include a series of aerial tree pruning and rigging courses. These courses feature both rope and saddle climbing techniques and working with aerial lifts, along with operating brush chippers and other industry equipment.

The Urban Forestry Technician program is offered at the Wisconsin Rapids campus.

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

CAREER OPTIONS

Arborist in utility, commercial, and municipal/government tree care programs

Golf Course Arborist

Landscape Contractor/Grounds Technician

Nursery Technician

Plant Healthcare Technician

POTENTIAL FOR ADVANCEMENT

Arborist Manager

Commercial Tree Care or Consulting

Company Manager or Owner

Landscape Contractor Manager

Nursery Manager, Grower, or Owner

Potential advancement generally requires further education.

ADMISSIONS PROCEDURES

To apply to the Urban Forestry Technician program, please submit the following documents to the MSTC Admissions Office:

1. Complete an MSTC application form and return it with the \$30 non-refundable application fee.
2. Complete the Accuplacer or ACT test. Minimum scores required:
 - Reading-Accuplacer score of 55
 - Sentence Skills-Accuplacer score of 60
 - Math-Accuplacer score of 34
 - 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 Affairs Office on your local campus to learn about your options. To schedule an Accuplacer test, contact your local Campus Office.

Written Communication, courses in mathematics, and some science courses have placement requirements. Please refer to the course description section in the back of the catalog, listed under General Education, for course specific information.

3. Submit an official copy of all academic transcripts, including high school, college or university, and HSED/GED.

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

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.

MSTC works with industry vendors to get discount prices on professional-grade tools. The equipment kit will cost approximately \$250 to \$300. Students accepted into the program will get specific details about purchasing the equipment.

PROGRAM COURSE DESCRIPTIONS

10001102 // 2 credits

Plant Health Care Applicator

The focus of this class is 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 will be familiarized with chemical handling, mixing, calibration, and application via field exercises.

10001103 // 2 credits

Arboriculture

Will gain familiarity with several techniques, tools, and pieces of equipment used in the management of trees and tree populations. This course also serves to create an awareness of arboricultural careers as applied to commercial, municipal, and utility employers.

Prerequisites: Urban Tree Maintenance 10001173 and Tree Biology 10001110

10001104 // 2 credits

Applied Landscape Architecture

Introduces the student to the landscape design process, a structured approach for shaping outdoor settings for human use and enjoyment. Development of skills in graphic techniques to communicate your landscaping ideas in plan drawings and sketches. Gain experience in presenting your ideas before large and small groups.

Prerequisites: Admission to Urban Forestry Technician 100015 program and Landscape Plant Identification 10001118

10001105 // 3 credits

Dendrology and Silvics

This course provides the student with an understanding of how trees interact with their environment and with one another, at different spatial and temporal scales. This course 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

10001110 // 2 credits

Tree Biology

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 100015 program and Introduction To Plant Biology 10001147

10001111 // 3 credits

Intro to Horticulture

This course provides an overview of the science and profession of horticulture. Its role and importance throughout history, current trends, and careers will be covered. Particular attention is given to horticultural crops and their use and interrelationships among the environment, plant growth, and plant development.

10001113 // 3 credits

Ornamental Plant Health Care

Classification and identification of important ornamental plant insects, diseases, and abiotic agents will be presented, emphasizing their modes of plant damage. Diagnostics, damage assessment, sample preparation, and control strategies will also be introduced.

Prerequisites: Landscape Plant Identification 10001118 and Plant Health Care Applicator Training 10001102

10001118 // 2 credits

Landscape Plant Identification

This course 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 will be covered for each plant group.

CURRICULUM

Term		(17 credits)
10001118	Landscape Plant Identification	2
10001124	Fundamentals of Aerial Tree Work	2
10001133	Chain Saw Safety and Operation	2
10001173	Urban Tree Maintenance	2
10801195	Written Communication	3
10804107	College Mathematics	3
10806184	Plant Biology	3

Term		(16 credits)
10001102	Plant Health Care Applicator	2
10001110	Tree Biology	2
10001111	Intro to Horticulture	3
10001148	People, Resources, and Sustainability	3
10806134	General Chemistry	4
	Elective	2

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
10809144	Macroeconomics	3
	Elective	2

Term		(17 credits)
10001103	Arboriculture	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
10809198	Intro to Psychology	3
	Elective	1

Total Credits 68

Please Note:

- The Urban Forestry Technician program has August and January start dates. We advise you to meet with an academic advisor or counselor to successfully plan your academic schedule.
- This curriculum sequence is only for student planning. Actual student schedules will vary depending on course availability.
- Degree completion time may vary based on student scheduling and course availability.
- For General Education course descriptions (800 level), see section marked under Course Descriptions.

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10001124 // 2 credits

Fundamentals of Aerial Tree Work

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 Chain Saw Safety and Operation 10001133

10001133 // 2 credits

Chain Saw Safety and Operation

This course will familiarize students with common chainsaw practices within the urban forestry industry. Personal protective equipment, safe operation, routine maintenance, and common cutting techniques in accordance with current industry standards will be emphasized. Students will operate chainsaws in a variety of field exercises that simulate tree removal operations. Additional exposure to relevant pieces of industry equipment will be included.

10001138 // 2 credits

Landscape & Turf Management I

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

10001139 // 2 credits

Landscape & Turf Management II

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.

Prerequisite: Landscape and Turf Management I 10001138

10001148 // 3 credits

People, Resources, and Sustainability

This course 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.

10001149 // 3 credits

Ecological Basis for Natural Resource Management

This course 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

10001173 // 2 credits

Urban Tree Maintenance

The art and science of tree pruning are the primary objectives of this course. 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 class.

10001198 // 3 credits

Intro to Soil & Water Resources

Introduces the student to integrated concepts of soil and water resources at the landscape level. Physical, chemical, and biological interactions relating to watershed processes and response to land use and management.

Prerequisites: General Chemistry 10806134 and Plant Biology 10806184

10001199 // 3 credits

Intro to Fisheries, Forestry, & Wildlife Resources

Integrated introduction to principles and practices of fisheries, forestry, and wildlife management, including production of goods and services while maintaining ecosystem integrity and functions. Emphasis on contemporary issues.