ARBORIST TECHNICIAN

Associate in Applied Science (AAS)
Program Code: 10-001-5
Total Credits: 61-62

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.

To learn more about this program, visit **mstc.edu/programs**.

ACADEMIC ADVISOR

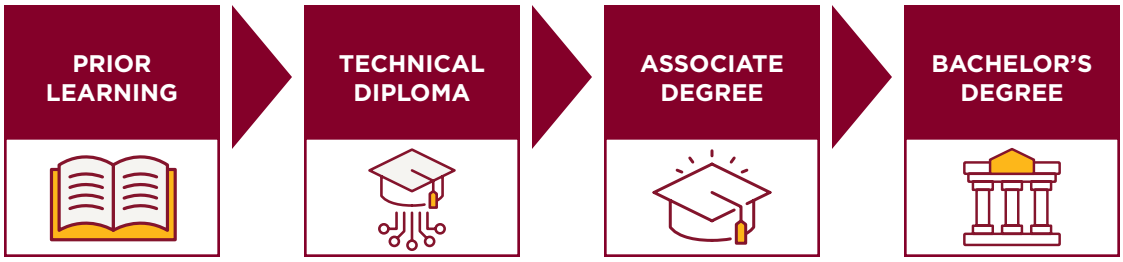
To schedule an appointment with an academic advisor, call 715-422-5300. Academic advisors will travel to other campuses as necessary to accommodate student needs. For more information about advising, visit **mstc.edu/advising.**

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
  500 32nd Street North
  Wisconsin Rapids, WI 54494
- 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**.

CAREER PATHWAY



Career pathways help you build your education step by step. Each stage offers one or more credentials that are recognized by employers and lead to real jobs—and you can keep building toward your career goals as you go.

Begin at any point.

Prior Learning

Credit for Prior Learning

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

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

High School Credit

- High School Dual Credit
- Mid-State Fast Track

Learn about High School Credit at **mstc.edu/dc**.

Technical Diploma

- Utility Tree Trimmer (17 Credits)
  Start Your Career: Right of Way Vegetation Management Specialist, Tree Climber, Tree Trimmer, Utility Arborist, Utility Vegetation Management

Associate Degree

- Arborist Technician (61-62 Credits)
  Start Your Career: Arborist (commercial, utility, government), Landscape Contractor, Plant Health Care Technician, Tree Trimmer/Climber, Utility Vegetation Management Technician

Bachelor's Degree

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

Other Options

Related Programs: Agribusiness Science & Technology, Agronomy Technician, Farm Operation

Apprenticeship Opportunity: Arborist

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.
- Consider tree biology for arboricultural maintenance practices.
- Integrate industry safety practices.

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. Faculty will let students know when and how the TSA is being assessed in the program.

TECHNICAL STANDARDS

Students enrolled in the Arborist Technician program must be able to meet the established technical standards identified below, which reflect those found in the profession.

- Ability to lift, carry, and transport equipment, tools, climbing gear, and materials up to 50 pounds (or more) with occasional to frequent exertion.
- Ability to detect and respond to emergencies, hazards, and changing conditions in outdoor and elevated work environments (trees, heights, weather, power lines).
- Sufficient endurance, strength, mobility, balance, flexibility, and coordination to perform tasks such as tree climbing, aerial rescue, ground-based rigging, working at heights, and emergency procedures.
- Sufficient sensory (auditory, visual, tactile, smell) ability to assess tree health, detect equipment malfunctions, evaluate environmental conditions, communicate in noisy outdoor settings, and ensure safety of self and others.

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. Some students are exempt from this requirement. Please see your academic advisor for more information.

ADDITIONAL COURSES AS NEEDED

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

College Reading and Writing 1
10831104
3 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
10834109
3 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.

MULTIPLE MEASURES

Students can place into courses using high school GPA and completed classes. Placement can be determined in the following ways:

- **Multiple Measures Writing (MMW)**
  High school GPA of 2.6 & 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 & 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 & successful completion of 1.0 credit 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 & 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 & successful completion of 1.0 credit of high school lab science course with a "C" or better
- **Multiple Measures Science 2 (MMS_2)**
  High school GPA of 2.6 & successful completion of 1.0 credit of high school chemistry with a "C" or better

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

SAMPLE FULL-TIME CURRICULUM OPTION

Arborist Technician • 61-62 Total Credits

Term 16 Credits

Course Number	Course Name	CPL	Credits
10001118	Landscape Plant Identification	Yes	2
10001124	Arborist Skills Introduction	No	2
10001133	Chainsaw Safety and Operation	No	2
10001173	Pruning for Structure	Yes	2
10001108	Electric Systems & Safety in Arboriculture	Yes	1
10001199	Natural Resource Management	No	3
10801198 or 10801196	Speech or Oral/Interpersonal Communication	Yes	3
10890102	GPS for Student Success	Yes	1

Term 15 Credits

Course Number	Course Name	CPL	Credits
10001102	Plant Health Care Applicator	Yes	2
10001110	Tree Biology	No	2
10001111	Intro to Horticulture	No	2
10001125	Arboriculture Operations 1	No	2
10001150	Workplace Communication in Arboriculture	No	1
10806112	Principles of Sustainability	Yes	3
10809166	Introduction to Ethics: Theory & Application	Yes	3

Term 16-17 Credits

Course Number	Course Name	CPL	Credits
10001105	Dendrology and Silvics	No	3
10001115	Root Management	No	2
10001126	Arboriculture Operations 2	No	2
10001120	Tree Disease	No	3
10801195 or 10801136	Written Communication or English Composition 1	Yes	3
10804107 or 10804189	College Mathematics or Intermediate Algebra with Applications	Yes	3 or 4

Term 14 Credits

Course Number	Course Name	CPL	Credits
10001103	Applied Arboriculture & Urban Forestry	No	2
10001113	Landscape Entomology	No	3
10001149	Urban Ecology	No	3
10001198	Urban Soils	No	3
10809198 or 10809188	Introduction to Psychology or Developmental Psychology	Yes	3

Please Note

- Credit for Prior Learning (CPL) options are available for some courses. You can visit **mstc.edu/cpl** or contact your academic advisor for details.
- 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**.
- Get the latest updates online at **mstc.edu**.

SAMPLE PART-TIME CURRICULUM OPTION

Arborist Technician • 61-62 Total Credits

Term 9 Credits

Course Number	Course Name	CPL	Credits
10001118	Landscape Plant Identification	Yes	2
10001124	Arborist Skills Introduction	No	2
10001133	Chainsaw Safety and Operation	No	2
10001173	Pruning for Structure	Yes	2
10890102	GPS for Student Success	Yes	1

Term 6 Credits

Course Number	Course Name	CPL	Credits
10001125	Arboriculture Operations 1	No	2
10001150	Workplace Communication in Arboriculture	No	1
10806112	Principles of Sustainability	Yes	3

Term 7-8 Credits

Course Number	Course Name	CPL	Credits
10001199	Natural Resource Management	No	3
10804107 or 10804189	College Mathematics or Intermediate Algebra with Applications	Yes	3 or 4
10001108	Electric Systems & Safety in Arboriculture	Yes	1

Term 9 Credits

Course Number	Course Name	CPL	Credits
10001102	Plant Health Care Applicator	Yes	2
10001110	Tree Biology	No	2
10001111	Intro to Horticulture	No	2
10809166	Introduction to Ethics: Theory & Application	Yes	3

Term 7 Credits

Course Number	Course Name	CPL	Credits
10001115	Root Management	No	2
10001126	Arboriculture Operations 2	No	2
10801198 or 10801196	Speech or Oral/Interpersonal Communication	Yes	3

Term 6 Credits

Course Number	Course Name	CPL	Credits
10001113	Landscape Entomology	No	3
10809198 or 10809188	Introduction to Psychology or Developmental Psychology	Yes	3

Term 9 Credits

Course Number	Course Name	CPL	Credits
10001105	Dendrology and Silvics	No	3
10001120	Tree Disease	No	3
10801195 or 10801136	Written Communication or English Composition 1	Yes	3

Term 8 Credits

Course Number	Course Name	CPL	Credits
10001103	Applied Arboriculture & Urban Forestry	No	2
10001149	Urban Ecology	No	3
10001198	Urban Soils	No	3

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 paths.
Prerequisites: Pruning for Structure 10001173 and Tree Biology 10001110

Arboriculture Operations 1
10001125
2 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
10001126
2 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
10001124
2 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
10001133
2 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.

GPS for Student Success
10890102
1 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.

College Mathematics
10804107
3 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

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
10801136
3 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 Accuplacer Reading 253 or ACT English score of 20 or ACT Reading 21 or completion of College Reading and Writing 1 10831104 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: 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.

Introduction 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.
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.

Introduction to Psychology
10809198
3 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 Entomology
10001113
3 credits
An introductory study of important insects and arthropods commonly associated with landscape plants in the Midwest. Topics include classification and identification, diagnostics, damage assessment, and control strategies.
Prerequisites: Landscape Plant Identification 10001118 and Plant Health Care Applicator 10001102

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.

Natural Resources Management
10001199
3 credits
Introduces principles and practices of natural resource management and its history in the US. Disciplines included are watershed management, fisheries, forestry, and wildlife management. Discussions cover the production of goods and services while maintaining ecosystem integrity and functions. Lab activities practice field skills relevant to outdoor professionals.

Oral/Interpersonal Communication
10801196
3 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 or College Reading and Writing with a C or better

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
10806112
3 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
10001173
2 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.

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. 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
10001110
2 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.

Tree Disease
10001120
3 credits
Investigates common urban tree diseases of the Great Lakes region and their effect on tree health. Provides a diagnostic framework for identifying biotic and abiotic causes of urban tree decline. Explores appropriate management techniques and control plans used in arboriculture.

Urban Ecology
10001149
3 credits
Explores the close relationship between humans and nature and how they affect one another. Discussion will include the benefits and services of the natural world in our increasingly urban lives. Activities will promote mindfulness of our actions as just one of many species that call Earth home.

Urban Soils
10001198
3 credits
Examines concepts of soil formation and management. Discussion and activities explore soil physical, chemical, and biological interactions relating to soil formation and management. Specifically focuses on the influence that urban soils have on urban trees.

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
10801195
3 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