

# **Grounds Maintenance and Landscaping Curriculum Guide 2023-2024**

## **Program Description**

Students use and maintain power equipment and tools to mow and trim lawns; trim and prune hedges and bushes; and plant trees, shrubs, and flowers to maintain the grounds at MCTI. In the winter months, they train in safe removal of ice and snow. Students prepare to take the State of Michigan Pesticide Application exam.

**Program Admissions Requirements** - Students who most closely match the **U.S. Department of Labor occupational profile** for the first exit point of a Grounds Maintenance Worker are accepted for enrollment.

**CASAS Scaled Scores** - Reading & Math 208 – 220

**Aptitudes** - General Learning (G) CareerScope: 70+

## **Temperaments**

- Perform repetitive or short-cycle work, Complete of routine tasks according to set procedures with little opportunity for independent judgment.
- Perform a variety of duties involving different equipment and procedures. Complete physical demands without loss of efficiency or composure.

**Physical Demands & Work Environment** -Minimum Physical Requirements can be found on the Curriculum Guide online at [www.michigan.gov/MCTI](http://www.michigan.gov/MCTI).

## **Certificate of Completion Programs:**

- Grounds Specialist (37-3011: Landscaping and Groundskeeping Workers)

The Grounds Maintenance and Landscaping program is two terms and students are expected to earn the Grounds Maintenance/Landscaping Technician certificate.

New students in the Grounds Maintenance and Landscaping program are accepted in the Fall and Spring terms only

## **Required Courses**

*To advance from term to term, students must demonstrate academic progress (satisfactory grade point average of 2.0) and good employability skills.*

### **General Grounds Maintenance Worker (first term)**

<b>Course Number</b>	<b>Course Name</b>	<b>Credits</b>
GM 101A or GM 111	Grounds Maintenance Procedures 1	4
GM 102A	Maintenance and Operation of Power Equipment 1	4
GM 105	Grounds Maintenance Special Projects	2
GM 106	Job Readiness Skills	2

### **Grounds Maintenance/Landscaping Technician (second term)**

<b>Course Number</b>	<b>Course Name</b>	<b>Credits</b>
GM 201A or gm 211	Grounds Maintenance Procedures II	4
GM 202A	Maintenance and Operation of Power Equipment II	4
GM 205	Grounds Maintenance Special Projects II	2
GM 206	Job Seeking and Retention Skills	2

### **Other courses (Instructor Approval Needed)**

<b>Course Number</b>	<b>Course Name</b>	<b>Credits</b>
EC 095	Basic Math	0
EC 100	Consumer Math	1
GM 680	Independent Study	2-12
GM 690	Work Internship	6-12

Instructors, program managers, and/or the referring counselor may recommend employability skills and elective classes based on the student's needs, interest, and abilities. Additional terms or courses are initiated by the instructor and approved by the Manager of Career and Technical Education programs. Job Seeking Skills is required for all students expecting to graduate from MCTI.

## **Course Descriptions**

**EC 095 Basic Math** - Students learn to master concepts using fractions, decimals, and percents in practical and applied settings. Course is individualized to meet students' specific needs as determined by a math pretest. The course is self-paced to match student's personal grasp and understanding of concepts. **Topics Covered:** fractions, decimals, and percents; addition, subtraction, multiplication, and division.

**EC 100 Consumer Math** - Students practice math problems related to everyday living to be better prepared to live independently. **Topics Covered:** computing straight time,

overtime, gross and net pay; filling out deposit and withdrawal slips for savings and checking accounts; filling out check stubs and keeping a running balance; computing inventory values; preparing a budget.

**GM 105 Grounds Maintenance Special Projects** - This course is designed for individuals who plan to work in the ground's maintenance field. Focus is on developing skills needed to complete a variety of special projects that are often assigned to Grounds Maintenance workers. Assignments may vary from class to class and may be related to common seasonal activities and/or basic indoor or outdoor maintenance tasks. **Topics Covered:** Dependent of project but always includes safety procedures, personal protective equipment, tools, and equipment needed for the specific project, teamwork.

**GM 106 Job Readiness Skills** - This course is designed for students who plan to seek employment in the Grounds Maintenance field. Students learn what employers expect and typical workplace rules. Emphasis is placed on development and demonstration of workplace skills that are necessary to become reliable, dependable, and motivated employees. **Topics Covered:** Self-evaluation, program, and school (workplace) rules, safety, self-management, organization, teamwork, communication, production.

**GM 101A Grounds Maintenance Procedures 1** - This course is designed for students with little or no knowledge or experience in ground maintenance. Emphasis is placed on working as a professional and developing skill related to maintaining grassy areas, beds, walks and drives as the season changes from summer to fall. **Topics Covered:** Cardinal directions, common plants, and weeds, grass/bed/walk and drive procedures, selection of tools and equipment, irrigation systems.

**GM 102A Maintenance & Operation of Power Equipment** - This course is designed to develop basic skills in maintaining/operating outdoor power equipment. Students learn to transport, operate, and maintain various power equipment used in the field. Emphasis is placed on safety, using appropriate maintenance tools/supplies, and completing work in a timely fashion. **Topics Covered:** equipment maintenance/operation, equipment maintenance tools, transport vehicles, record keeping, equipment and tool storage.

**GM 202 Maintenance & Operation of Power Equipment II** - This course is designed for students who already have a basic knowledge and skill in maintenance and operation of power equipment used in the ground's maintenance field. Students hone their skills in the safe and efficient use of power equipment and vehicles while adapting to seasonal changes. **Topics Covered:** maintenance and operation of equipment, equipment maintenance tools, transport vehicles, record keeping, equipment and tool storage.

**GM 205 Grounds Maintenance Special Projects II** - This course is designed for individuals who plan to work in the ground's maintenance field. Focus is on developing skills to complete a variety of special projects that are often assigned to Grounds Maintenance workers. Assignments may vary from class to class and may be related to common seasonal activities and/or basic indoor or outdoor maintenance tasks. Students may complete some projects in or with other trades. **Topics Covered:** Dependent of project but always includes safety procedures, personal protective equipment, tools, and equipment needed for the specific project, teamwork.

**GM 111 Grounds Maintenance Procedures 1** - This course is designed for students with little or no knowledge or experience in grounds maintenance. Emphasis is placed on working as a professional and developing skills related to maintaining grassy areas, beds, walks and drives as the season changes from winter to spring. **Topics Covered:** Cardinal directions, common plants, and weeds, grass/bed/walk and drive procedures, selection of tools and equipment, irrigation systems.

**GM 201A Grounds Maintenance Procedures 1** - This course is designed for students who already know the basics related to grounds maintenance. Students hone their skills while performing grounds maintenance tasks as the season changes from fall to winter. Emphasis is placed on developing skills that lead to working independently or with minimal supervision. Emphasis is also placed on proper selection of equipment, working efficiently, and paying attention to detail. **Topics Covered:** cardinal directions, organization, evaluation, planning, turf/bed/walk and drive maintenance, snow removal techniques and equipment.

**GM 206 Job Seeking and Retention Skills** - This course is designed for students who plan to seek employment in the Grounds Maintenance field. Students continue to work to become reliable, dependable, and motivated employees. Students develop job seeking skills and begin their job search. Emphasis is placed on the demonstration of workplace skills that are necessary to obtain and retain a job. **Topics Covered:** job search skills, applications, cover letters, resumes, interviewing techniques, follow-up strategies, job-retention strategies, disability disclosure.

**GM 211 Grounds Maintenance Procedures II** - This course is designed for students who already know the basics related to grounds maintenance. Students hone their grounds maintenance skills and adapt their skills as the season changes from spring to summer. Emphasis is placed on becoming a "self-starter", selecting proper equipment for the job, building efficiency, and paying attention to detail. **Topics Covered:** cardinal directions, organization, evaluation, planning, turf/bed/walk and drive maintenance, selection of tools and equipment, irrigation systems, pesticide application.