

MECHANICAL TECHNIQUES - SMALL ENGINE MECHANIC

Program Outline

Major: MTSE
Length: 1 Year
Delivery: 2 Semesters
Credential: Ontario College Certificate
Effective: 2017-2018
Location: Midland
Start: Fall (Midland)

Description

Career Opportunities

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

The Program Progression:

Fall Intake - Midland

Sem 1 | Sem 2

Fall | Winter
2017 | 2018

Articulation:

A number of articulation agreements have been negotiated with universities and other institutions across Canada, North America and internationally. These agreements are assessed, revised and updated on a regular basis. Please contact the program co-ordinator for specific details if you are interested in pursuing such an option. Additional information can be found on our website at <http://www.georgiancollege.ca/admissions/credit-transfer/>

Admission Requirements:

Mature students, non-secondary school applicants (19 years or older), and home school applicants may also be considered for admission. Eligibility may be met by applicants who have taken equivalent courses, upgrading, completed their GED, and equivalency testing. For complete details refer to: www.georgiancollege.ca/admissions/policies-procedures/

Applicants who have taken courses from a recognized and accredited post-secondary institution and/or have relevant life/learning experience may also be considered for admission; refer to the Credit Transfer Centre website for details: www.georgiancollege.ca/admissions/credit-transfer/

Graduation Requirements:

- 13 Mandatory Courses
- 1 Communications Course
- 1 Field Placement

Graduation Eligibility:

To graduate from this program, the passing weighted average for promotion through each semester, and to graduate is 60%. Additionally, a student must attain a minimum of 50% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester unless otherwise stated on the course outline.

Mandatory Courses

- BUSI1004 Service and Information Techniques
- MATH1007 Mathematics Techniques
- MENG1000 Workshop Procedures

MENG1001 Engine Fuel Systems Principles
MENG1002 Engine Electrical Systems Diagnostics
MENG1003 Engine Function and Design
MENG1009 Basic Electrical Principles
MENG1010 Diesel and Overhead Valve Engines
MENG1011 Health and Safety Fundamentals
SENG1000 Outdoor Power Tool Fundamentals
SENG1001 ATV Repair Principles
SENG1002 Principles of Residential Grounds Maintenance Equipment
SENG1003 Snowmobile Repair Principles

Communications Course

To be selected at time of registration from the College list, as determined by testing.

Field Placement

SENG1004 Field Placement

Course Descriptions:

BUSI1004 Service and Information Techniques 42.0 Hours

In this course, students gain an overview of customer service and small business operations. Students also develop an understanding of electronic parts catalogues, service manuals, and technical information access via the Internet.

MATH1007 Mathematics Techniques 42.0 Hours

In this course, students consolidate and review the principles and techniques of mathematics required for the technical trades. Emphasis is placed on developing and promoting the use of mental arithmetic, estimation skills, problem solving, and reasoning skills.

MENG1000 Workshop Procedures 42.0 Hours

In this course, students are provided with the necessary knowledge and skills to perform essential mechanical workshop duties. Function and safe use of hand and select power tools, measurement devices, and related equipment for the technical trades will be emphasized.

MENG1001 Engine Fuel Systems Principles 42.0 Hours

In this course, students are provided with an understanding of common internal combustion engine fuels, fuel supply, and fuel management systems. Students also access and review relative engine fuel system manufacturer information technology.

MENG1002 Engine Electrical Systems Diagnostics 42.0 Hours

The nature of electricity and its function relating to common internal combustion engines are explored in this course. Students also begin to develop comprehension of electrical system diagnostics and testing procedures.

MENG1003 Engine Function and Design 42.0 Hours

An understanding of the design and function of common internal combustion engines and components relative to their operation are discussed and reviewed. Students also access and review relative engine manufacturer information technology.

MENG1009 Basic Electrical Principles 42.0 Hours

The basic concepts of electricity are explored in this course. The electrical circuit is the fundamental building block for these concepts. With knowledge of these electrical concepts and ohms law, the behavior of most electrical components will be understood.

MENG1010 Diesel and Overhead Valve Engines 42.0 Hours

The theory and operating principles of diesel and overhead valve engines are explored in this course. Students also develop the skills to diagnose, disassemble, analyze, and repair diesel and overhead valve engines and the components relative to their operation.

MENG1011 Health and Safety Fundamentals 42.0 Hours

Students explore basic fundamentals of safety in the workplace, sound environmental procedures in and around the workplace, and home safety. Students also identify personal health and safety concerns and problems in the environment.

SENG1000 Outdoor Power Tool Fundamentals 42.0 Hours

In this course, students gain an understanding of the repair and general maintenance of common outdoor power tools, systems, and components relative to their operation. The use of information systems, specialty tools, and equipment during the practical repair section are reinforced.

SENG1001 ATV Repair Principles 42.0 Hours

Students are provided with an understanding of the repair and general maintenance of common All Terrain Vehicles, systems, and components relative to their operation. The use of information systems, specialty tools, and equipment during the practical repair section are reinforced.

SENG1002 Principles of Residential Grounds Maintenance Equipment 42.0 Hours

In this course, students gain an understanding of common types of residential grounds maintenance equipment, systems, and components relative to their operation. The use of information systems, specialty tools, and equipment during the practical repair section are emphasized.

SENG1003 Snowmobile Repair Principles 42.0 Hours

In this course, students gain an understanding of the repair and general maintenance of common snowmobiles, systems, and components relative to their operation. Students also gain knowledge of the use of information systems, specialty tools, and equipment during the practical repair section.

SENG1004 Field Placement 160.0 Hours

In this course, students are placed in field related agencies to apply their previously learned skills under the direction and supervision of a qualified professional. As well, field placement learning is reviewed and consolidated in classroom sessions as determined by the instructor.

P- MENG1000 Workshop Procedures and P- MENG1001 Engine Fuel Systems Principles and P- MENG1002 Engine Electrical Systems Diagnostics and P- MENG1003 Engine Function and Design and P- MENG1009 Basic Electrical Principles and P- MENG1011 Health and Safety Fundamentals and C- BUSI1004 Service and Information Techniques and C- MENG1010 Diesel and Overhead Valve Engines and C- SENG1000 Outdoor Power Tool Fundamentals and C- SENG1001 ATV Repair Principles and C- SENG1002 Principles of Residential Grounds Maintenance Equipment and C- SENG1003 Snowmobile Repair Principles

Course Description Legend

P = Prerequisite; C = Concurrent prerequisite; CO= Corequisite

Information contained in College documents respecting programs is correct at the time of publication. Academic content of programs and courses is revised on an ongoing basis to ensure relevance to changing educational objectives and employment market needs. The college reserves the right to add or delete programs, options, courses, timetables or campus locations subject to sufficient enrolment, and the availability of courses.