Georgian

MARINE ENGINEERING MANAGEMENT

Program: MEMG
Credential: Ontario College Graduate Certificate
Delivery: Full-time
Length: 2 Semesters
Duration: 1 Year
Effective: Winter 2019
Location: Owen Sound

Description

Students are presented with material designed in co-operation with Transport Canada Marine Safety and Security (TCMSS), and Canada's shipping companies. Content material includes the academic portion of the TCMSS Engineering Officer Education Training (EOET) program for senior engineering officers. Students develop the knowledge, skills, and professionalism expected to function as part of an engineering team at the management level.

NOTE: This is a Transport Canada designated program.

Career Opportunities

The graduate of this program may find a rewarding career as a ship's engineering officer managing commercial vessel operations throughout Canada and the world. This program may lead to career advancement to senior ranks on board ships and to positions of leadership in the marine industry.

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

1. use principles of leadership, team management and conflict resolution expectant of a marine engineering officer at the management levels;
2. lead and manage effective operational teams whose goal is to transport cargo in a safe and environmentally sustainable manner;
3. perform all work in accordance with legislation, regulation, policies and practices related to health and safety, accessibility, human rights and environmental management;
4. evaluate the power plant performance and efficiencies through charting and trending and participate in the installation and maintenance of marine equipment and systems;
5. operate and maintain equipment safely using handbooks, catalogues, manufacture's specifications, checklists, and legislative codes;
6. interpret installation drawings, assembly drawings and detail drawings and compile technical specifications;
7. integrate electro-technology, electronics and electrical equipment in the operation of alternators, generators, AC and DC motors;
8. use senior engineering management principles during normal and abnormal operations of marine vessels;
9. apply computer skills to conduct daily power plant operations at the management level;
10. analyze basic entrepreneurial strategies used to identify and respond to new opportunities.

The Program Progression
Winter Intake
- **Sem 1:** Winter 2019
- **Sem 2:** Summer 2019

Admission Requirements

Applicants must meet ONE of the following requirements to be eligible for admission to this program:

- Graduates of a Marine Engineering Cadet Training Program in Canada, (Georgian METC graduates meet this requirement), or
- holders of a Certificate of Competency as a Marine Engineer issued under the STCW Convention, or
- equivalent level of knowledge demonstrated through an interview and portfolio of experience

Note: applicants seeking transfer credit or advanced standing from other programs may be considered on an individual basis

Additional Information

This program delivers the academic portion of the TCMSS Engineering Officer Education Training (EOET) Program for senior engineering officers. Further courses in engineering knowledge subjects and simulator training are also available at Georgian College.

Students interested in obtaining TCMSS engineering certificates must comply with legal requirements. These may include proof of Canadian Citizenship or proof of permanent resident status and a valid medical certificate and marine emergency training. Refer to Canada Shipping Act Marine Personnel Regulations for details.

International applicants must sign a letter to acknowledge that Transport Canada does not issue Marine Certificates of Competency (Marine Licence) to non-Canadians.

Graduation Requirements

10 Program Courses

Graduation Eligibility

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

Program Tracking

Semester 1		Hours
Program Courses		
MEMG 1000	Advanced Thermodynamics	80
MEMG 1001	Advanced Applied Mechanics	64
MEMG 1003	Automation and Control Systems 1	80
MEMG 1010	Power Plant Auxiliaries Management	144
MEMG 1011	Steam Plant Management	96
	Hours	464
Semester 2		
Program Courses		

MEMG 1004	Automation and Controls 2	64
MEMG 1005	Ship's Business and Maritime Law	48
MEMG 1006	Naval Architecture	128
MEMG 1007	Electrical Machines Management	144
MEMG 1012	Motor Plant Management	128
	Hours	512
	Total Hours	976

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.