Marine Service Technology



I490306/8751000 -1350 hours Industrial Education Cluster

The purpose of this program is to prepare students for employment as machinery mechanics for marine engines or outboard motors. Program content includes service, repair and overhaul for four-stroke and two-stroke cycle engines and outboard motors; service and repair of boating accessories; electrical, fuel, power transfer, ignition, cooling, lubrication and drive systems; and maintenance of boat and trailer rigging. The student may exit the program at one of the six levels of proficiency. Total length of the program is 1350 hours.

OCP: A – Marine Rigger – 300 Hours

- Perform shop practices to industry standards
- Maintain and repair basic four-stroke cycle engines
- Maintain and repair basic two-stroke cycle engines
- Maintain and repair electrical systems
- Maintain and repair fuel systems
- Maintain and repair two-stroke cycle carburetors
- Use marine woods, metals, and fiberglass
- Adjust and repair trailers
- Prepare and deliver sales merchandise
- Parts specialist and computer skills to industry standards
- Maintain and repair cooling systems
- Maintain and repair lubrication systems
- Demonstrate mathematics knowledge and skills
- Demonstrate science knowledge and skills
- Use oral and written communication skills in creating, expressing and interpreting information and ideas

OCP: B – Outboard Engine Technician (1 of 2) – 300 Hours

- Perform gasket/seal operations and electronic test equipment skills to industry standards
- Maintain and repair basic two-stroke cycle outboard engines
- Maintain and repair outboard fuel systems
- Maintain and repair outboard cooling systems
- Maintain and repair outboard lubrication systems
- Maintain and repair outboard lower gear cases
- Demonstrate language arts knowledge and skills
- Solve problems using critical thinking skills, creativity and innovation
- Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance



OCP: C – Outboard Engine Technician (2 of 2) – 300 Hours
Maintain and repair outboard cranking systems
Maintain and repair outboard magneto ignition systems
Maintain and repair outboard battery ignition systems
Maintain and repair outboard capacitor discharge ignition systems
Maintain and repair outboard charging systems
Perform outboard upper to lower gear case maintenance
Assemble and maintain outboard lower units and housing assemblies
Use information technology tools
 Describe the importance of professional ethics and legal responsibilities
• Demonstrate personal money-management concepts, procedures, and strategies
OCP: D – Stern Drive Technician – 150 Hours
Maintain and repair basic four-stroke cycle stern drive engines Maintain and repair basic four-
stroke cycle engines
Maintain and repair stern drive fuel systems
Maintain and repair stern drive cooling systems
Maintain and repair stern drive lubrication systems
Maintain and repair stern drive upper gear case
Maintain and repair stern drive lower gear cases
Maintain and repair stern drive battery ignition systems
 Maintain and repair stern drive capacitor discharge ignition systems
Maintain and repair stern drive intermediate housings
• Describe the roles within teams, work units, departments, organizations, inter-organizational
systems, and the larger environment
 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives
Explain the importance of employability and entrepreneurship skills
OCP: E – Inboard Gas Technician – 150 Hours
Perform parts manual activities to industry standards
 Maintain and repair basic four-stroke cycle inboard gas engines
Maintain and repair inboard fuel systems
Maintain and repair inboard gas cooling systems
 Maintain and repair inboard gas lubrication systems
Maintain and repair inboard gas fuel systems
Maintain and repair transmissions
OCP: F – Inboard Diesel Technician – 150 Hours
Maintain and repair inboard diesel fuel systems
Maintain and repair inboard diesel cooling systems
Maintain and repair inboard diesel lubrication systems
Maintain and repair inboard diesel charging systems

