Marine Technology (MT)

Courses

MT A102 Introduction to Maritime Trades 2 Credits

Surveys critical topics in seaside and shoreside maritime vocations. Covers facility considerations, dockside maritime heavy machinery, common ship loading procedures, the use of nonverbal signaling, maritime water safety and survivability, boat identification, basic navigation, and chart reading and plotting.

Special Note: Prepares students to take the National Center for Construction Education and Research (NCCER) certification exam in Introduction to Maritime Trades.

MT A109 Introduction to Outboard Systems 1 Credit

Introduces marine internal combustion engine theory and the proper function of electrical, fuel, ignition, lubrication, and drive systems in two- and four-stroke marine outboard engines.

MT A110 Marine Boathandling and Safety 1 Credit

Introduces marine terminology, common hull forms, line handling, securing a boat, leaving a dock, safe fueling practices, and marine safety gear.

MT A111 Outboard Engine Maintenance Technician-Portable 3 Credits

Introduces troubleshooting, maintaining, and repairing four-stroke Portable (2.5-25 HP) outboard marine engines. Provides entry-level marine technicians with the knowledge to maintain the Yamaha F9.9B/ T9.9B engine platform according to a maintenance schedule.

Prerequisites: MT A109 with a minimum grade of C or concurrent enrollment or MT A112 with a minimum grade of C.

MT A112 Internal Combustion Engine Theory 2 Credits

Introduces marine and non-marine internal combustion engine theory, and the repair and maintenance of two- and four-stroke engines. **Special Note:** Course is part of the Marine Service Technician certification.

MT A113 Outboard Engines 2 Credits

Introduces troubleshooting, maintaining and repairing two-stroke and four-stroke outboard marine engines.

Prerequisites: MT A112 with a minimum grade of C.

MT A114 Gasoline Inboard Maintenance and Troubleshooting 2 Credits

Introduces the maintenance, troubleshooting and repair of gas inboard marine engines.

Prerequisites: MT A112 with a minimum grade of C.

MT A116 Outboard Engine Maintenance Technician-Mid Range 3 Credits

Introduces troubleshooting, maintaining, and repairing four-stroke Mid Range (30-50 HP) outboard marine engines. Provides entry-level marine technicians with the knowledge to maintain the Yamaha F30A/ F40A engine platform according to a maintenance schedule.

Prerequisites: MT A109 with a minimum grade of C or concurrent enrollment or MT A112 with a minimum grade of C.

MT A117 Outboard Engine Maintenance Technician-Inline **3 Credits** Introduces troubleshooting, maintaining, and repairing four-stroke Inline (90-200 HP) outboard marine engines. Provides entry-level marine technicians with the knowledge to maintain the Yamaha F/ LF150B engine platform according to a maintenance schedule. **Prerequisites:** MT A109 with a minimum grade of C or concurrent enrollment or MT A112 with a minimum grade of C.

MT A118 Outboard Engine Maintenance Technician-V6 **3 Credits** Introduces troubleshooting, maintaining, and repairing four-stroke V6 (225-300 HP) outboard marine engines. Provides entry-level marine technicians with the knowledge to maintain the Yamaha 4.2L Offshore engine platform according to a maintenance schedule.

Prerequisites: MT A109 with a minimum grade of C or concurrent enrollment or MT A112 with a minimum grade of C.

MT A119 Marine Electrical 2 Credits

Introduces marine electrical system installation and troubleshooting for alternating and direct current systems.

MT A120 Marine Electronics 1 Credit

Introduces the installation, setup and maintenance of marine electronics. **Prerequisites:** MT A119 with a minimum grade of C.

MT A121 Marine Plumbing **1 Credit** Introduces basic plumbing as it applies in a marine environment.

MT A130 Marine Drive Systems 1 Credit

Introduces the fundamental concepts of marine drive systems, including transmissions, drive shafts, and propellers.

Special Note: Course is part of the Marine Service Technician certificate.

MT A140 Marine Boat Trailers 1 Credit

Introduces the maintenance and repair of boat trailers.

MT A150 Marine Materials 1 Credit

Introduces procedures to make minor repairs to marine hulls made of wood, metal and composite materials.