MARR - MARINE ENGR TECHNOLOGY (MARR)

MARR 101 Marine Engineering Fundamentals

Credits 2. 1 Lecture Hour. 3 Lab Hours. A study of basic marine engineering systems, with emphasis on propulsion plants; propulsion plant machinery, watch standing organization and duties, shipboard safety practices and equipment.

MARR 102 Engine Room Resource Management and Dynamics

Credit 1. 0 Lecture Hours. 2 Lab Hours. Marine engineering watch standing and operations, safety and security, effective resource management and control of engine room equipment, leadership and managerial skills.

MARR 200 Basic Operations

Credits 6. 6 Lecture Hours. Practical application of student's classroom studies while at sea on training ship during sea-training period. Student required to complete several projects relating to engineering plant of ship. **Prerequisite:** MART 103.

MARR 300 Intermediate Operations

Credits 6. 6 Lecture Hours. Training program for second sea-training period. Sea project required of each student under supervision of officer-instructors. Lifeboat and safety training. **Prerequisite:** Junior or senior classification or approval of instructor.

MARR 400 Advanced Operations

Credits 6. 6 Lecture Hours. Training program for third sea-training period. At the end of this period each student will have achieved the knowledge and will have demonstrated the ability to take complete charge of a modern marine power plant while underway at sea. **Prerequisite:** Junior or senior classification or approval of instructor.

MARR 451 Senior Capstone Project I

Credits 2. 1 Lecture Hour. 3 Lab Hours. Design, modeling, testing and validation processes; design of equipment, components, or systems for seagoing vessels; use of design manuals, material/equipment specifications and industry regulations applicable to marine engineering technology. **Prerequisites:** Grade of C or better in MARE 206; MARE 242, MARE 309, and MARE 313, or concurrent enrollment; senior classification.

MARR 452 Senior Capstone Project II

Credits 2. 1 Lecture Hour. 3 Lab Hours. Continuation of MARR 451; implementation of ship-related project initiated and developed therein, which may include development of theoretical, computational or experimental models and /or formulation, construction, and fabrication work; refining, experimenting, and tesing of models considering alternatives; analyzing results and preparing and submitting design documents including a project report. **Prerequisite:** MARR 451.

MARR 481 Seminar

Credit 1. 1 Other Hour. Preparation for USCG 3rd Assistant Engineer examination; review or marine engineering safety; review of motor plants; overview of steam plants; review of electricity and electrical control systems; review of refrigeration systems and general subjects. **Prerequisites:** Senior classification; enrollment in marine engineering technology license option program.