

# MARR - MARINE ENGR TECHNOLOGY (MARR)

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## **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 testing 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.