

MNG 336 - ELECTRIC MACH. & CONTROLS LAB

Course Description

This course is a companion class to MNG 335. Course material is reinforced with practical hands-on experience with universal electrical lab machinery. The operating characteristics of typical rotating machines are studied. Special attention is given to problems associated with multiple generator AC distribution. Safe and effective troubleshooting techniques are practiced on live 110/208 volt electrical control systems. STCW.

Credit Hours

2

Contact Hours

2

Lab Hours

4

Required Prerequisites

All prerequisites for all GLMA courses are satisfied by following the approved Course Sequence Guide and any deviation from this guide needs to be approved by the cadet's adviser.

Corequisites

MNG 335

Course Learning Outcomes

Knowledge:

- Describe electrical machines and control equipment.

Application:

- Demonstrate knowledge of rotating electrical machines and control equipment.

Integration:

- Correlate shipboard equipment and performance and the readings of technical instruments.
- Apply academic concepts to real world applications.

Human Dimension:

- See themselves as engineering officers responsible for a broad array of electrical equipment and electrical systems.

Caring - Civic Learning:

- Determine expectations of a licensed merchant marine engineering officer with respect to industrial electrical safety, shock hazards, and emergency procedures are stressed.

Learning How to Learn:

- Demonstrate competency on the STCW Code Knowledge, Understanding and Proficiencies (KUP) for Able Seafarer-Engine (AB-E) Watch Task No.: 6.1.A.
- Demonstrate competency on the STCW Code KUPs for Officer in Charge of an Engineering Watch Task No.: 6.1.D, 6.1.E, 7.1.A, 7.2.A, 7.2.B, 7.4.A.