

# MDK 331 - ELECTRONIC NAVIGATION

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**Learning How to Learn:**

- Demonstrate the STCW Code KUPs for Officer in Charge of a Navigation Watch: 3.1, 3.4.

## Course Description

An in depth study of the various electronic navigation systems with emphasis on RADAR. Covers the theory, operation, use, advantages, disadvantages and general maintenance of: RADAR, gyrocompass, GPS, speed logs, fathometers, and electronic chart systems. REQUIRED COURSE that must be completed successfully before the student may receive an original "RADAR Observer Certificate". STCW.

## Credit Hours

3

## Contact Hours

3

## Lecture Hours

3

## 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

MDK 332

## Recommended Prerequisites or Skills Competencies

ENG 111 and MTH 111

## Course Learning Outcomes

**Knowledge:**

- Learn to recognize and use various types of electronic navigation systems.
- Gain an understanding of the operational theory of various electronic navigation systems.

**Application:**

- Demonstrate correct operational procedures for each navigation system.
- Demonstrate proficiency in rapid radar transfer plotting.

**Integration:**

- Learn how to interpret data displayed on an electronic interface with information contained on a navigational chart, and make informed decisions regarding vessel movements.

**Human Dimension:**

- Learn to see themselves as officers who not only have the ability to use numerous tools, such as radar, to perform their duties, but also to make informed decisions based on the known advantages and disadvantages of each system.

**Caring - Civic Learning:**

- Learn how to use advanced electronic navigational equipment in order to safely navigate a vessel, ensure the safety of shared waterways, and minimize the risk of collusion and pollution.