

Part C. Course Syllabus (NAV 6)

COURSE OUTCOMES	LEARNING OUTCOMES		TOPICS	REFERENCES/ BIBLIOGRAPHIES	TEACHING AIDS
	LECTURE	LABORATORY			
CO1. Operate the Electronic Chart Display and Information System (ECDIS) for navigational safety as per the operator's/ manufacturer's manual.	LO1.1. Explain the operational capability and limitations of an ECDIS in terms of the following: a. characteristics of ENC data; b. data accuracy; c. presentation rules; d. display options and other data chart formats; e. functional requirements based on the latest performance standards; f. dangers of over-reliance on an ECDIS to the safety of navigation	LO1.3 Demonstrate the basic standard functions of ECDIS	Significance of ECDIS in Navigation <ul style="list-style-type: none"> IMO Performance Standards Standard safety functions Operational Capabilities and Limitations in Navigation Chart Information 		
	LO1.2 Explain the basic functions of operational control of ECDIS				
	LO1.4 Differentiate between information layers, user chart layers, and event graphic	LO1.5 Select the display information layer appropriate to a given situation			
	LO1.6. Explain the difference between a Vector Navigation Chart (VNC) and a Raster Navigation Chart (RNC)				
CO2. Monitor, interpret, and analyse the information obtained from Electronic Chart Display and Information System (ECDIS), taking into	LO2.1. Explain the significance of information derived from Electronic Navigational Charts (ENCs) to identify various navigational data such as course over ground (COG), speed over ground (SOG), and estimated time of arrival (ETA)	LO2.2. Display the information from Electronic Navigational Charts (ENCs) to identify various navigational data to ensure safety of navigation	Operational Use of ECDIS <ul style="list-style-type: none"> Electronic Navigational Charts (ENCs) 		

account the limitations of the equipment, all connected sensors (including Radar and AIS where interfaced), and the prevailing circumstances and conditions.	LO2.3 Explain the advantages and disadvantages of RADAR, RADAR Targets, AIS overlays, and other interfaced equipment to the effective use of ECDIS in relation to the safety of navigation	LO2.4 Monitor the position of the ship to determine her safe passage using a validated pre-planned route	<ul style="list-style-type: none"> • Various Navigational Data • Respond to Alarms 	
	LO2.5 Explain the information related to safety of navigation, that may be obtained from the equipment interfaced with the ECDIS			

Notes:

- (1) The MHEIs are to develop Part D: Detailed Teaching Syllabus and Instructional Materials (IMs), and Part E. Course Assessment and Assessment Tools (ATs) which satisfactorily meet the requirements of the course as prescribed in the course outcomes and learning outcomes.
- (2) If there are additional course outcomes and learning outcomes, indicate the justification(s) below the template.
- (3) The MHEI may re-arrange the sequence of delivering the Course Outcomes along with its associated learning outcomes, provided that such re-arrangement is reasonable considering requisites and progressive learning.

NAV6 – COURSE DESCRIPTION

Provides basic theoretical knowledge and practical exercises on the various elements and functionalities of an ECDIS as an aid to navigation, such as electronic charts, performance standards, interfaces and overlays, and route monitoring.

