



Indian Institute of Technology

Course Details Report

Course No: OE5025

Course Name: Design of Ship Outfit Systems

Course Type:

Theory

Description:

To enable the students to get knowledge in the design of ship accommodation area and outfit systems.

Course Content:

Accommodation- Rules and regulations, standards, access, modular arrangements, manholes, doors, gangways, ladders, heating, ventilation, air-conditioning, galley, mess, etc. Cargo handling system – equipments, hatches, cranes, derricks, mast and rigs, Anchors – types and operation, chain length, chain locker, windlass; Mooring system – types, fittings on deck and on berth, winches, capstans, types of ropes used. Cargo hold arrangements – vents, sounding pipes, cleaning devices, COW system, inert gas system. Life saving and fire fighting systems, rules and regulations, railings and awnings. Practicals: 1. Design and modelling of the ship general arrangement and systems using FORAN or similar software.

Text Books:

1. D.G.M. Watson, "Practical Ship Design", Elsevier (2002) 2. Thomas Lamb, "Ship Design and Construction", SNAME (2003) 3. Apostolos Papanikolaou, Ship Design: Methodologies of preliminary design, SNAME, 2014.

Reference Books:

1. Schneekluth, H; Ship Design for Efficiency and Economy, Butterworths, 1987. 2. Taggart; Ship Design and Construction, SNAME, 1980. 3. Indra Nath Bose, Energy Efficiency and Ships, SNAME, 2012. 4. Antony F Molland, A Guide to ship design, construction and operation, SNAME, 2008