

HIGHER NITEC IN MARINE ENGINEERING

Core Modules

Quality Engineering

On completion of the module, students should be able to conduct preliminary safety inspection, perform hazard identification and risk assessment. Students should also be able to verify general arrangement drawings, monitor quality control systems, perform inspection work on brazed joints, heat treatment of materials, cable arrangement, electrical circuits, and perform dimensional checks of engineering components.

Ship Systems

On completion of the module, students should be able to service, maintain propulsion components system, pneumatic and hydraulic control system components and perform inspection work on deck machinery and alignment of marine machinery.

Marine Propulsion System

On completion of the module, students should be able to troubleshoot and rectify faults in marine propulsion systems, recondition engine components, perform defect diagnosis, measure and adjust engine functional clearances.

Marine Workshop Technology

On completion of the module, students should be able to produce 2-D CAD drawings, perform basic arc welding, gas cutting, machine screw threads and components most commonly used in shipboard repairs. Students should also be able to design, modify and fabricate jigs and fixtures.

Marine Auxiliary Systems

On completion of the module, students should be able to inspect, troubleshoot and rectify machinery components of marine auxiliary systems typically installed on board marine vessels.

Marine Control Systems and Instrumentation

On completion of the module, students should be able to produce electrical single-line drawings, maintain DC and AC equipment, check simple magnetic circuits and systems' parameter, adjust governor setting, and perform functional tests on control systems typically installed on marine vessels.

Industry Attachment

Students will undertake a 6-month industry attachment at shipyards, marine related workshop or work place to gain hands-on marine related practical training.