

HIGHER NITEC IN TECHNOLOGY – MARINE & OFFSHORE TECHNOLOGY

Course Code: HTMRO

COURSE OBJECTIVE

This course provides students with broad-based skills and knowledge to perform marine and offshore vessel fabrication works involving preliminary design of pipe routing plan, testing and inspection activities of machinery alignment, supervision on welding and fabrication works, dimension control of fabrication, assisting in system testing, commissioning, and planning of work activities.

COURSE STRUCTURE

S/N	Module Details	Module Code	Module Objectives
C1	Quality Engineering 70 hrs (T) 50 hrs (P) Credits: 8 Prerequisite: Nil	MR4007FP	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.
		Equivalent Codes MR4003PA MR4007PA MR4007PAR	
C2	Ship Systems 60 hrs (T) 60 hrs (P) Credits: 8 Prerequisite: Nil	MR4008FP	On completion of the module, students should be able to service, maintain propulsion components system, pneumatic and hydraulic control system components; perform inspection work on deck machinery and alignment of marine machinery.
		Equivalent Codes MR4004PA MR4008PA MR4008PAR	
C3	Welding Technology 60 hrs (T) 60 hrs (P) Credits: 7 Prerequisite: Nil	MR4009FP	On completion of the module, students should be able to interpret welding procedures, perform butt, fillet, groove weld joints using submerged arc welding, shield metal arc welding, flux-cored arc welding, gas tungsten arc welding in flat, horizontal and vertical positions. Students should also be able to rectify weld defects, perform non-destructive tests on weld metals and do operational calibration of welding machine.
		Equivalent Codes MR5001PA MR5006PA MR5006PAR	
C4	Fabrication Technology 70 hrs (T) 50 hrs (P) Credits: 8 Prerequisite: Nil	MR4011FP	On completion of the module, students should be able to produce 2-D CAD drawings and sketches of 3-D assembly drawings. Students should also be able to plan resources and work schedules, perform structural markings, read lines plan drawings, carry out development of plates and pipes, material surface inspections, nesting and take-off and prepare load for lifting operations.
		Equivalent Codes MR5003PA MR5008PA MR5008PAR	
C5	Pipe Design and Systems 50 hrs (T) 70 hrs (P) Credits: 7 Prerequisite: Nil	MR5007FP	On completion of the module, students should be able to produce P & ID drawings, isometric drawings of pipe routing plan and prepare pipe cutting plans. Students should also be able to perform pipe spool assembly, dimension checks on pipe spools, and perform leak tests on piping systems.
		Equivalent Codes MR5002PA MR5007PA MR5007PAR	
C6	Offshore Technology 70 hrs (T) 50 hrs (P) Credits: 9 Prerequisite: Nil	MR5009FP	On completion of the module, students should be able to produce electrical single-line drawings, maintain DC and AC equipment, perform dimension control and level checks of offshore structures, co-ordinate the erection of temporary supports, perform leak and
		Equivalent Codes MR5004PA MR5009PA MR5009PAR	

S/N	Module Details	Module Code	Module Objectives
			watertightness tests and assist in system testing and commissioning.

Abbreviations: T - Theory, P - Practical

CREDITS FOR CERTIFICATION

Total of 47 credits from successful completion of 6 modules.

VENUE

ITE College Central

Note:

- 1) The training schedule of lessons is subject to change.
- 2) Depending on the demand, not all the modules in the CET *Higher Nitec* in Technology courses will be offered in each intake. Where the modules are offered and there is insufficient enrolment, the classes will be cancelled and a full refund will be given to the affected students.