LEVEL VI COURSES

6021 – SHIPBUILDING TRAINING - I

Teaching Schedule Per Week			Progressive Assessment		Examination Schedule (Marks)		
					Report	Seminar/viva	Total
Training	Report	Credits					
24 wks.	2 wks.	30	50	50	100	100	300

Pre-requisite	Source
60 credits	SHB

Semester	Theory	Test	Total	TW	PR	Gr Total
	–	–	–	150	150	300

Rationale: - The objective of the training is to correlate theory and practice. Through training the students will be able to get hands on experience in the various job activities associated with ship construction and obtain practical knowledge and experience in the installation, operation and maintenance of marine machinery. The infrastructure, equipment and practices of the ship building industry is unique and the training would enable the students to acquaint themselves with these and relate them to the theory learnt. In addition, they will be exposed to industrial environment, obtain experience in working under factory discipline, associate with workers and understand their psychology and work habits, and get familiarised with various materials, processes and shop floor practices.

COURSE CONTENTS

The students are expected to familiarise themselves with the following activities and jobs at the shipyard and are expected to perform at least 4 to 5 of the following jobs/assignments during the training period.

1. LOFTING

Preparation of offset, fairing of full scale lines, preparation of templates.

2. STEEL PREPARATION

Shot blasting, priming, marking, cutting using pug cutting machine, edge preparation, use of grinding wheel.

3. FABRICATION

Welding, arc welding, gas welding, erection of sub assembly, structural components, preparation of skids, alignment of sub-assemblies.

4. OUT-FITTING

Pipe-fabrication, preparation of templates, system assembly, pressure testing, commissioning of system. Rudder installation, propeller mounting, chock fasting, shaft alignment. Machinery installation, fabrication of machinery seating, machinery alignment, testing and commissioning.

5. LAUNCHING

Side Launching, end launching, crane launching, and dock launching.

6. MATERIAL HANDLING

Mobile cranes, EOT'S, Gantrys, trolleys, Pallets.

7. SHIPYARD PRACTICES

Material estimation, work scheduling, material planning, material procurement, project management, quality control, compliance with statutory requirements and classification society

Notes-

1. Orientation for industrial training at the institute	-	1 day
2. Training in the industry		24 - Weeks
3. Report writing and preparation for seminar presentation in the Institute		2 Weeks

Report: The students are required to maintain a daily diary as a day to day record of their attendance at the factory, indicating clearly the activities/jobs performed by them during the day. Doing the daily diary, the students will prepare a report detailing all the job activities performed at the yard and in full detail the specific projects undertaken by them. The report will also cover the layout of the yard, facilities and infrastructure, orders on hand, types of ships under construction, capabilities of the yard, etc. Management aspects such as material organisation, planning systems and procedures, material storage and usage, estimation and costing etc, are also to be covered in the report. The report is to be in typed format complete with illustrations and drawings.

Evaluation Schedule:

Progressive assessment (By Institute – 50%, By Industry Trainer – 50%)		100 Marks
Report (By external examiners)		100 Marks
Seminar/Viva/Oral (By external examiners)		100 Marks
	Total	300 Marks