

6022 - SHIPBUILDING TRAINING - II								
Teaching Schedule Per Week			Progressive Assessment		Examination Schedule (Marks)			
Training	Report	Credits			Report	Seminar/viva	Total	
24 weeks	2 wks	30	50	50	100	100	200	
Pre-requisite		Source	Semester		Theory	Test	Total	Gr Total
120 credits		SHB			—	—	—	200

(Updated upto 05-10-2001)

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 job/assignments during the training period.

##### 1. Fabrication

Stockyard, steel preparation shop operation, management. CNC steel cutting operation, marking system of plates, assembly, recording of weights.

##### 2. Out Fitting

Engine Room machinery installation and alignment, setting to work and commissioning of machinery and machinery trials. Deck machinery installation, commissioning and trials.

##### 3. Launching

Launching calculations, preparation for launching, pre-launching checks, precaution. at launching & launching ceremonies, types of launching, advantages and disadvantages.

##### 4. Ship Repair

Survey of hull, renewal of wasted areas, preparation of templates, welding procedures. Propeller, rudder and shaft survey, repair procedures. Machinery removal and replacement after repairs. Overhaul of pumps, pipes, valves, etc.

##### 5. Ship Repair Procedures and Practices

Estimation, work scheduling, material planning & procurement, compliance with Classification Society and Statutory requirements, work procedures, billing

#### 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. During the day the students will prepare a report detailing all the job activities performed at the yard and in full 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, materials and usage, estimation and costing etc., are also to be covered in the report. The report is to be in a format complete with illustrations and drawings.

**Evaluation Schedule:**

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

