

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. E. SEMESTER: V**  
**MARINE ENGINEERING**

Subject Name: **Ship Construction**

Subject Code: **151804**

<b>Teaching Scheme</b>				<b>Evaluation Scheme</b>		
<b>Theory</b>	<b>Tutorial</b>	<b>Practical</b>	<b>Total</b>	<b>University Exam (Theory) (E)</b>	<b>Mid Sem Exam (Theory) (M)</b>	<b>Practical (I)</b>
2	0	0	2	70	30	50

<b>Sr. No.</b>	<b>Course Content</b>
1.	<p><b>Loading of Tonnage:</b></p> <p>Definition of free board and various assigning conditions, Loadline Surveys, tonnage regulations, calculation as per 1969 convention, details of markings permanently carved.</p>
2.	<p><b>Shipyards Practice:</b></p> <p>Layout of shipyard, Mould loft, fabrication of assembly, sub assembly, units in construction, role of Surveyors in construction, role of Surveyors in construction of Ship; Keel laying, Launching, Seatrial.</p>
3.	<p><b>Ship Types:</b></p> <p>Tankers, bulk carriers, container ships. LNG, LPG and chemical carries, Lash ships, Passenger ships, Dredger, Tugs etc.- Constructional details and requirements.</p>
4.	<p><b>Offshore Technology:</b></p> <p>Drilling Ships and platforms, supply/ support Vessels-types and constructions, Dynamics Positioning, Deep Sea diving system, fire fighting arrangement, Cable laying vessels.</p>
5.	<p><b>Ship Surveys:</b></p> <p>Survey rules, Functioning of ship classification Societies, Surveys during construction, Periodical surveys as per statutory regulations, retention/suspension of class of a ship, constructional features and rule guidelines for a merchant vessel as per Marpol regulations.</p>

6.	<b>Statutory Certificates and their validity:</b>  Ships registration formalities, Intact Stability Criteria under damaged conditions (constructional point of view in compliance with statutory regulations), Enhanced Survey requirements, HSSC.
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### **Reference Books:**

1. Ship Construction by D.J.Eyer, Butterworth Heinemann Publishers
2. Ship Design and construction by Thomas Lamb, Sname Publisher 1980
3. Ship Construction by H.J Pursey, Nautical Publisher
4. Ship Construction for marine students by E.A Stokoe, Atlantic publisher
5. Ship construction sketches and Notes by Kemp Young, Shroff publisher
6. Basic ship Theory by K.J.awson and E.C.Tupper, ISBN: 978-0-7506-5398-5