OE3046: SHIP STRUCTURAL DESIGN

Course Content:

Review on Shipbuilding materials, joining techniques, structural design steps, basic approach and use of classification rules. Ship framing systems; Structural systems and components at bottom, side, deck, bulkheads, fore-end, aft-end, engine room and their design using classification rules. Design of superstructures, accommodation area, forecastle, hatch covers, chain locker, rudder, cargo handling systems, nozzle, etc. Practicals: 1. Structural design and drawing of mid-ship section, fore-peak, aft-peak, engine room, bulkhead, rudder 2. Shell expansion drawing

TextBooks:

1. **Taggart;** Ship Design and Construction, SNAME, 1980.
2. **Eyres D.J.;** Ship Construction, William Heinemann Ltd, London, 2011.
3. **Okumoto,Y.** Design of Ship Hull Structures- A practical guide for Engineers, Springer – Verlag, 2009.

ReferenceBooks:

1. **Jensen, J.J**, Load and Global Responses of Ships, Elsevier, 2001
2. **Bai, Y**. Marine Structural Design, Elsevier, 2003
3. **Paik, J.K and Thayamballi, A.K**., Ultimate Limit State Design of Steel-Plated Structures, John Wiley, 2003

Prerequisite:

FREE ELECTIVE – II

FREE ELECTIVE – III

FREE ELECTIVE – IV

FRE ELECTIVE – V

HONOURS ELECTIVE – I -

OEXXX – NO COURSE NUMBER