



HYDROSTATICS AND STABILITY

PROF. HARI V. WARRIOR

Department of Ocean Engineering
IIT Kharagpur

TYPE OF COURSE : Rerun | Core | UG/PG

INTENDED AUDIENCE : Naval Architecture

COURSE DURATION : 12 weeks (26 July'21 - 15 Oct'21)

EXAM DATE : 24 Oct 2021

COURSE OUTLINE :

Very basic course for Naval Architecture students and Marine Engineers. But it is also essential to advanced engineers and scientists in the field

ABOUT INSTRUCTOR :

Prof. Warrior is a Naval Architect from the Indian Institute of Technology, Madras. He did his postgraduate studies from USA and joined in the Department of OE & NA, IIT Kharagpur. His main expertise is on the computational fluid simulations around a ship's hull and turbulence modeling. He also does work on stability of ships and offshore platforms.

COURSE PLAN :

Week 01 : Linesplan and hydrostatics particulars

Week 02 : Archimedes principle

Week 03 : Initial stability concepts

Week 04 : GZ curves

Week 05 : Numerical integration

Week 06 : Moment of inertial calculations

Week 07 : Dynamic stability

Week 08 : Wind heeling arms

Week 09 : IMO regulations

Week 10 : Trim

Week 11 : Bilging

Week 12 : Wave Effects