Ship Construction and Basic Stability (Operational Level)

Course Length: 40 hours
Price: $400.00

This 5-day course provides the background knowledge for a thorough understanding of the calculations for vessel stability and trim, basic ship construction features and terminology, and principles of stability. Subjects include: ship dimensions, ship stresses, hull structure, rudders and propellers, displacement, buoyancy, static and initial stability, list, trim and free surface effect, principles, terms and procedures used in the determination of transverse, longitudinal and damage stability of ships. Also included is analyses of case studies involving loss of stability and how to perform trim and stability calculations. The course covers ship design and construction as it relates to all types of vessels as well. Topics include hull structure and components, vessel design process, design stresses, tonnage measurements and load line assignments. This course aims to meet the mandatory minimum requirements for knowledge, understanding and proficiency in Table A-II/2 of STCW 1995 for the function Navigation at the Officer in Charge of a Navigational Watch on vessels of 500 or more gross tonnage (ITC) Level.

Successful completion of this 40-hour Ship Construction & Basic Stability course will satisfy the Ship Construction and Basic Ship Stability training requirements for certification as Officer in Charge of a Navigational Watch on vessels of 500 or more gross tonnage (ITC).

Course Tools Required
A clear mind ready to learn and retain a large volume of information.
Paper and pencil for note taking
A scientific calculator
Plotting tools

Recommended Reading