

Topic Synopsis - SGUS Class 1 & 2 (Deck Officer)

1. Certificate in Sectoral Fundamentals for Deck Officer at Management Level

Topic 1: Ship Handling & Simulation

Simulation enhances the ability to determine the ship's position by use of landmarks, aids to navigation, including lighthouses, beacons and buoys and dead reckoning, taking into account winds, tides, currents and estimated speed.

Topic 2: Navigation

This module covers the planning and conducting a passage and determine position. Includes celestial navigation and knowledge to use celestial bodies to determine the ship's position. Delivers the knowledge to be able to operate the equipment and apply the information correctly.

Use of radar and ARPA to maintain safety of navigation.

Knowledge of the fundamentals of radar and automatic radar plotting aids (ARPA) and ability to operate and to interpret and analyse information obtained from radar, including the following:

Performance, including:

1. Factors affecting performance and accuracy
2. Setting up and maintaining displays
3. Detection of misrepresentation of information, false echoes, sea return, etc., racons and SARTs.

Knowledge of operations and limitation of Speed Log, Echo Sounder, BNWAS, VDR, and ECDIS.

Topic 3: Cargo Work

Understand Cargo handling, stowage and securing. Includes knowledge of the effect of cargo, including heavy lifts, on the seaworthiness and stability of the ship. Knowledge of safe handling, stowage and securing of cargoes, including dangerous, hazardous and harmful cargoes, and their effect on the safety of life and of the ship. Ability to establish and maintain effective communications during loading and unloading

Topic 4: Ship Stability

To obtain a working knowledge and application of stability, trim and stress tables, diagrams and stress-calculating equipment. Understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy. Understanding of the fundamentals of watertight integrity and ship construction

Topic 5: LNG Bunkering + Advanced Liquid Gas Tanker Safety

This course provides an introduction to liquefied gas tankers and imparts the basic knowledge needed to serve as a member of the crew on this type of vessel and undertake specific duties relating to cargo and cargo equipment.

The course is also designed prepare learners for the advanced course in liquefied gas tanker operations and to meet the specialised training requirements for personnel on certain types of ship under Chapter V of the STCW Convention and Code 1978, as amended.

2. Certificate in Job Specialisation for Class 1 & 2 Deck Officer

Topic 1: Meteorology

Ability to use and interpret information obtained from shipborne meteorological instruments
Knowledge of the characteristics of the various weather systems, reporting procedures and recording systems. Ability to apply the meteorological information available.

Topic 2: Marine Plant & Propulsion

The need to understand how the propulsion machinery works. A basic understanding of the 2 and 4 engines and the auxiliary systems that support the running of the engine room plant.

Topic 3: Ship Construction

General knowledge of the principal structural members of a ship and the proper names for the various parts

Topic 4: Compass

To impart knowledge of the principles of magnetic and gyro-compasses and ability to determine errors of the magnetic and gyro-compasses, using celestial and terrestrial means, and to allow for such errors.

Topic 5: Maritime Law & Personnel Management

The module deals with the knowledge of bridge resource management principles, including:

1. Allocation, assignment, and prioritization of resources
2. Effective communication
3. Assertiveness and leadership
4. Obtaining and maintaining situational awareness

3. Project

Topics related to Orals and Simulation assessment.