Modules Synopses

Module 1 - Essentials in Port Operations

This module aims to provide students with a broad knowledge of port operations with particular reference to the Port of Singapore. Emphasis is placed on the ship-shore interface with regards to the planning and organization of resources to achieve optimum performance pertaining to container and bulk operations. Students will also learn about the various aspects of port operations which include the cargo handling process flow, stowage and carriage of container and dry bulk, common port terminology, key technology and roles and responsibilities of port sector employees.

Module 2 - Safety and Security

This module aims to provide students with a deeper understanding of the key safety legislation applicable to commercial ports which include establishing and maintaining a workplace safety management system in a port environment, risk assessment/management and accident prevention measures. Students will also learn about the key global industry developments in the field of port security, port security management system and the importance of aligning and integrating the people, process and technology to ensure a robust and resilient system.

Module 3 - Maritime Business and Administration

This module incorporates the understanding of maritime business and the legal principles underlying its policies and values. The module will equip the students with the knowledge and skills of maritime economics which include the factors that influence the supply and demand of shipping services, the important role of transportation within the supply chain network and an understanding of how different aspects of marine insurance play a role in shipping. It will also discuss the various regulations that govern port terminal services and marine operations.

Module 4 – Practicum

Students will be introduced to task-based learning designed by the company supervisor/mentor and SP facilitator for the various Practicum options which include yard planning, stowage planning, control centre, container terminal supporting operations and multi-purpose port operations. The training programme will be covered in detail under the Practicum blueprint. Through these tasks activities, students will develop a better understanding of the basic elements in planning, management and operation of the ports. The project will also serve to reinforce the knowledge and skills acquired through the modules learnt in PDC1 and PDC2