

SYLLABUS

MODULE 1

Introduction to Container Shipping, Principles, Evolution and Trade Routes

The first module provides an introduction to the core elements of the container shipping industry and covers topics such as the global economic developments, origins and principles of containerisation, evolution of scheduled services and the emergence of container ports around the world.

Module Content

- The global economy, trade and transport
- Principles and concepts of containerisation
- History of container shipping trade and transport
- Evolution of liner shipping services
 - Scheduled container shipping services
 - Outline of costs and freight rates
 - Development of liner shipping conferences
 - Outline of economic regulation
- Trade routes
 - Globalisation
 - Supply and demand
 - Principal arterial routes
 - Principal container ports

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MODULE 2

Container Ship Characteristics, Terminology, Layout and Stowage Planning

This module describes the types and characteristics of container ships that are deployed in the carriage of international maritime transport including their dimensions. In addition, the module will explain the measurement and basic layout before going on to describe the stowage planning processes involved in container transport. Finally the module will discuss the role of the main shipping companies that are involved in this industry.

Module Content

- Ship types and characteristics
 - Cellular, hatchless, geared container vessels
 - General purpose vessels
 - Specialised vessels
 - Deep sea, coastal, inland waterways vessels
- Sizes and tonnages
 - Terminologies and definitions
 - Panamax, Suezmax, Malaccamax, Post Panamax
 - Future developments
- Cargo measurements and capacities
- Basic ship layout
 - Shipboard access and handling equipment
- Stowage planning
- Main shipping companies
 - Basics of ship ownership/ operations/ management

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MODULE 3

The Container: Types, Terminology, Management, Packing and Security

The third module describes and explains the types of container that are used in the carriage of a variety of cargo on board container vessels in international maritime transport. This includes aspects with regard to dimensions, types of containers, container tracking, and inventory management as well as container security in international maritime transport.

Module Content

- Container types and classification
 - Dimensions and capacities
 - ISO standards
 - Purposes
 - Marks and numbers
- Container terminology
 - Full Container Loads (FCL)
 - Less than Container Loads (LCL)
 - Door-to-door, port-to-port
 - International variations in terminology
- Container management
 - Owning versus leasing
 - Inventory control
 - Container demand
 - Tracking and tracing containers
 - Container loss, damage, maintenance and repair
- Container packing and securing
- Container security and integrity
 - Seals and locking techniques
 - Scanning
 - Safety considerations

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MODULE 4

Container Logistics, Supply Chain Principles, Port and Terminal Operations and Operators

This module describes and explains the role of container ship operations in international logistics including the evolution of ports, inland container distribution centres and ship service patterns to manage seaborne transport in the global supply chain.

Module Content

- Supply chain principles
 - Key elements of international freight transport
 - Role of containers
 - Intermodal logistics
- Port and terminal operators
 - Layout and design
 - Cargo handling systems
 - Major terminal groups
- Landside container logistics
 - Feeder services
 - Inland haulage (road, rail and barge)
 - Inland terminals and depots
- Liner service options
 - End to end
 - Round the World (RTW)
 - Pendulum
 - Hub and spoke

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MODULE 5

Container Shipping Costs, Revenue and Freight Rates

This module explores the various costs and revenue components of managing and operating scheduled container liner shipping services on a global scale.

This will include principles of calculating voyage, operating and capital costs and relate them to components of revenue in these services.

Module Content

- Operating/ voyage costs
 - Overheads and agency commissions
 - Crew, insurance, stores and maintenance
 - Port and canal charges during voyage
 - Bunker costs
- Capital and related costs
 - Ships
 - Containers
- Revenue: components of freight rates
 - Contributing factors (e.g. volume, weight, commodity type, economies of scale, competition, surcharges etc.)
 - Tariff structures: commodity, weight, volume
 - Adjustment factors (e.g. currency fluctuations, bunker charges, port congestion)
 - Terminal handling charges
 - Lump sum box rate, Freight All Kinds (FAK) rate
 - Loyalty rebates
 - Service contract rates

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MODULE 6

Container Shipping Business, Regulations and Documentation

The final module describes the business operations of container shipping companies, explaining how they manage ships through strategies such as alliances and consortia. It examines the framework of the global economy and the role of the container shipping industry in enabling the flow of international trade which is an outcome of global economic growth.

Module Content

- Basic economics of world trade
 - Supply and demand
- Alliances and consortia as operational efficiency agreements
- Conferences, discussion agreements and stabilisation agreements
- Freight forwarders, third party logistics service providers and Non Vessel Operating Common Carriers (NVOCCs)
- International and national organisations and entities
 - European Union
 - United States of America
 - Rest of the world
- Regulations on pricing in liner shipping including anti-trust laws
 - United States and the European Union
 - International rules on liner shipping pricing for services
- Documentation
 - Bills of lading
 - Other carriage contract documents
 - E-commerce
- International sales and sea transport contracts
 - INCOTERMS 2010
- Insurance
 - General average
 - Liability
- Legal aspects
 - Dispute settlement machinery
- Security
 - Container security and the ISPS Code