MASTER OF SCIENCE
IN OPERATIONS AND SUPPLY CHAIN MANAGEMENT



Master of Science in Operations and Supply Chain Management Programme

This degree enables students to analyse the latest developments in operations and supply chain practice across a variety of sectors. You should emerge equipped with the knowledge and skills to help you reach a senior managerial position and become one of the operations, logistics and supply chain strategists of the future.

Programme outline
The aim of the programme is to provide postgraduate-level education in operations and supply chain management principles, theories and practice. Designed by one of the UK's leading specialist research groups*, it offers a theoretical and practical examination of the factors necessary for effective operations and supply management in today's global and highly competitive markets. In particular, the global virtual classroom in which you study enables you to understand the practical and strategic implications of multinational supply chains and to learn directly from your professional counterparts in other parts of the world.

In addition, it demonstrates how successful operations performance can shape and influence the sales and profit ambition of a business. The intent is also to provide you with a profound understanding of the processes and techniques for developing operations strategy and managing operations and supply chain activities.

**The group was part of a 5-star rated submission in the last RAE review, general engineering category. See www.hero.ac.uk/rae*

Programme structure
The programme is composed of six core modules, two electives and one dissertation (for a total of 180 credit points).

A Core modules
- Supply Chain Operations Management
- Strategic Operations Management
- Logistics and International Trade
- Business Analysis and Assessment
- Total Quality Management
- Lean Thinking

B Elective modules
- Operations Modelling and Simulation
- e-Business Enterprise Systems
- Business Finance*
- Marketing in a Global Environment*
- Human Resource Management*
- Business Leadership*
- Information Technology Project Management*
- E-Commerce*

C Dissertation
Students refine their dissertation topic in conjunction with their Personal Dissertation Advisor, an academic supervisor who will provide support throughout the study and writing process.

Programme duration
The programme takes on average 30 months to complete. However, since students progress at their own pace, you may choose to complete your studies in as little as 24 months or spread them over 60 months.

N.B. It is possible to leave the programme with a formal qualification without completing all the required Masters modules. After four successful modules, you become eligible for a Postgraduate Certificate in Operations & Supply Chain Management, and after eight modules you qualify for a Postgraduate Diploma.

UNIVERSITY OF LIVERPOOL

in partnership with
LAUREATE ONLINE EDUCATION

MASTER OF SCIENCE IN OPERATIONS AND SUPPLY CHAIN MANAGEMENT



MSc Modules

Core modules:

Supply Chain Operations Management

Aim: To convey the principles, role and complexities of supply chain management and the techniques necessary for its optimisation.

You will examine the key principles, systems, and techniques used to assure effective supply chain management. This module covers a range of subjects including logistics, information management, inventory forecasting and management, partnerships and information technology. It will provide an understanding of the principles and role of supply chain management in organisations and the nature and importance of partnerships within the supply chain. You will also learn to apply many of the tools and techniques used to optimise supply chains.

Strategic Operations Management

Aim: To demonstrate that operations strategies can deliver competitive advantage.

You will study topics including the examination of modern business drivers and competitive performance (time compression, responsiveness, waste elimination, etc.); the achievement of competitive advantage through operations management; globalisation and supply chains; agility and efficient consumer response; and operations performance measurement. Within each topic, you will analyse leading-edge operational practice.

Logistics and International Trade

Aim: To provide a thorough grounding in modern logistics operations and management and in the nature and practice of international trade.

In the Logistics section of the module, you will examine intermodal operations, transport selection, warehousing and distribution management. In the International Trade section, key topics will include the role of the World Trade Organisation, trade restriction, import and export practice, and trade models. You will learn about purchasing policies and strategies including contract negotiations as well as make/buy and outsourcing decisions.

Business Analysis and Assessment

Aim: To develop an understanding of the processes involved in managing organisations.

This module offers a broad view of management processes, including strategic management, financial statement analysis, benchmarking (including use of the balanced scorecard), research methods and teamwork. You will also understand the interconnectivity of departments within the organisation. The module will encourage you to develop self-confidence and team skills, and will promote the use of research methods to encourage independent learning.

Total Quality Management

Aim: To provide a thorough understanding of quality management and quality assurance tools.

You will acquire an understanding of the management aspects of quality development and examine the applications of quality assurance tools. You will study subject areas including the role and function of Total Quality Management; acceptance sampling; EFQM excellence model and benchmarking; control charts; advanced quality planning; design of experiments; reliability definitions; problem solving tools; the impact of quality management on customer service and customer relationship management; and quality standards such as ISO etc.

Lean Thinking

Aim: To provide an understanding of the elements and benefits of lean thinking in business operations.

This module introduces the philosophies and principles of lean thinking and provides a working knowledge of its supporting tools and techniques. It also offers an opportunity to implement these in a realistic operations simulation. The module covers the five stages to lean, waste-free operations, including the application of mapping and continuous improvement tools. It examines standard operations and workplace organisation, operations planning and control in a lean environment and customer/supplier development to support lean operations.

Elective modules:

Operations Modelling and Simulation

Aim: To provide an understanding of the role of modelling and simulation in the development of business processes.

This module focuses on key elements of modelling and simulation, including analytical techniques of systems, statistical aspects of modelling, system dynamics and value chain and process mapping. You will be exposed to modelling tools and will learn to understand a range of analytical methods and their application, the dynamic nature of systems and their behavioural characteristics, and how real system modules are developed, tested and validated.

MASTER OF SCIENCE IN OPERATIONS AND SUPPLY CHAIN MANAGEMENT

Laureate Online Education B.V
The e-learning partner of
The University of Liverpool

Telephone: +31 (0)20 713 0000

Admissions:
admission@ohecampus.com

Enrol today visit us at
www.uol.ohecampus.com

e-Business Enterprise Systems

Aim: To demonstrate how enterprise systems are mapped with supply chain management functions and into e-business networks.

Discover the approaches and technologies of enterprise application integrations and business process management. This module provides you with an understanding of enterprise system architecture and technologies in general, and the roles and functions of enterprise systems for e-business in particular. You will learn how enterprise systems are integrated into e-business networks and the technologies that are likely to drive the next generation of e-business enterprise systems.

Business Finance*

Aim: To provide an overview of business finance in the global context.

This module introduces the terminology of business finance, the financial environment and the role of the finance manager. You will examine issues such as raising finance, capital structure, dividend policy and the risk-return relationship, as well as short term financing, working capital management, mergers and acquisition, and corporate restructuring and governance, giving you an understanding of business decisions from a financial professional's perspective.

Marketing in a Global Environment*

Aim: To introduce more advanced global marketing issues.

This module investigates advanced management concepts in the areas of market segmentation, multiple market channels, competitive intelligence, integrated marketing and e-Business. In particular, it introduces marketing concepts used by domestic and foreign companies seeking to market products globally. This module also provides an in-depth experience of the process of developing effective marketing plans, strategies and tactics in terms of theoretical as well as 'real life' perspectives.

Human Resource Management*

Aim: To provide an understanding of the principal themes of HRM and its contribution to organisational goals.

This module covers the fundamentals of HRM and its key issues and trends, including increased dependence on human capital and the shift to commoditisation. You will gain the knowledge and skills necessary to balance the needs of the organisation, the employee and organisational legislation. You will understand organisational structure, culture and strategy, with a special focus on international HRM.

Business Leadership*

Aim: To provide a theoretical and practical approach to understanding issues affecting leadership in the workplace.

You will analyse the theories and techniques of leadership and/or followership and their practical application. This module includes issues such as supervision, performance management, stress management, problem solving, concepts of human behaviour, discipline, counselling techniques and the current social issues facing the workforce.

Information Technology Project Management

Aim: To provide a full understanding of the management roles, responsibilities and techniques needed in technology projects.

This module teaches how technology project management adapts as a computer system evolves from concept to implementation. You will master all areas of the subject, including organisation, work breakdown structure and scheduling, resources and project financing, project control and evaluation, management considerations, critical success factors and risk management.

E-Commerce*

Aim: To provide an overview of key issues relating to e-Commerce.

This module offers an introduction to the fundamentals of e-Commerce, from business models through technical infrastructure and implementation to social, legal and ethical considerations. You will act as a CIO/CEO working on an e-Commerce business proposal, with evaluations from a peer review group. Learning to build an e-Business holistically in a risk-free environment will help you become a more effective and successful manager.

Dissertation

Aim: To provide an opportunity for you to produce a final, original piece of written work that demonstrates your originality in the application of theory gained during your studies. The culmination of your MSc programme, this written project demonstrates your mastery and integration of all your previous learning.

The dissertation is the cornerstone of the UK university system. It is an original, scholarly work that applies your new knowledge and experience and allows you to prove your proficiency in the techniques you have studied. It must have merit beyond the scope of your particular need.

UNIVERSITY OF LIVERPOOL

in partnership with
LAUREATE ONLINE EDUCATION