



Course information 2023-24

MN3197 Operations management

Operations management is a key function in every organisation. It is concerned with the processes that transform inputs into goods and services. This course provides an introduction to key frameworks and techniques in operations management.

Prerequisites

If taken as part of a BSc degree, courses which must be passed before this course may be attempted:

MN1178 Business and management in a global context

AND

MT105A Mathematics 1

AND

ST104A Statistics 1

Aims and objectives

The main aim of this course is to introduce students to key concepts, theories and techniques used in operations management, and their practical applications. The course draws on both qualitative and quantitative frameworks.

By the end of the course, students will:

- have a sound understanding of some of the key ideas and tools of operations management
- be able to critically analyse the operations of manufacturing and service organisations
- appreciate the strategic importance of operational effectiveness for organisations

Learning outcomes

At the end of the course and having completed the essential readings and activities students should be able to:

- Develop an understanding of operations management in organisations
- Explain fundamental frameworks and techniques in operations management
- Apply these frameworks and techniques to solve problems and analyse practical applications
- Identify operational issues and recommend solutions, and evaluate the suitability of alternative solutions

Assessment

This course is assessed by a three-hour and fifteen-minute closed-book written examination.

Essential reading

The readings for this course are from academic journals, the main textbook below and other sources.
Belloc, P., & Crane, R. (2021). Operations and supply chain management (16th ed.). McGraw-Hill Education International ed.; McGraw-Hill.

For full details, please refer to the readings within each unit of the course.

Syllabus

This is a description of the material to be examined.

Designing processes, managing and improving operations to deliver goods and services in line with customer expectations are key challenges for most organisations. This course will introduce students to the crucial managerial decisions involved in effective and efficient operations for both manufacturing and service organisations. Through a well-balanced syllabus between theory and practice, the students will be provided with a strong foundation for operations management using qualitative and quantitative frameworks.

Key topics to be considered include:

- Operations strategy
- Sustainable operations
- Manufacturing and service processes
- Process analysis
- Forecasting
- Supply chain management
- Inventory control
- Quality management
- Lean operations

Students should consult the appropriate *EMFSS Programme Regulations*, which are reviewed on an annual basis. The *Regulations* provide information on the availability of a course, where it can be placed on your programme's structure, and details of co-requisites and prerequisites.