

# WM9F6-15 Logistics and Operations Management

**22/23**

**Department**

WMG

**Level**

Taught Postgraduate Level

**Module leader**

Mujthaba Ahtamad

**Credit value**

15

**Module duration**

2 weeks

**Assessment**

Multiple

**Study location**

University of Warwick main campus, Coventry

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## Description

### Introductory description

Operations Management involves transforming inputs (capital, labour and materials) efficiently and effectively into outputs valued by the end customer in manufacturing or service environments. Logistics is recognised as a key function in meeting market requirements quickly, flexibly and without incurring punitive inventory costs. To be competitive, companies need to manage operations and logistics both internally and externally across their supply chains.

### Module aims

This module will give students a comprehensive understanding of the tools and techniques involved in Operations and Logistics management. This will enable students to critically evaluate which tools, techniques and technologies are most applicable in different industrial contexts.

### Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

This module aims to help students better understand Logistics and Operations Management. It will cover an introduction to logistics and transport services, and types of operations and interoperability. An operations management perspective will be explored in forecasting demand, capacity management, scheduling and sequencing and inventory management. Planning & control systems and methodologies (e.g. Material Requirements Planning (MRP), Manufacturing Resource Planning (MRPII), Enterprise Resource Planning (ERP), Just In Time) will be explored. Examples of applications of logistics and operations management in a range of industries, including manufacturing and service environments will be covered.

## **Learning outcomes**

By the end of the module, students should be able to:

- Explain the interrelationships and interdependencies between capacity, inventory and delivery performance.
- Critically evaluate how to manage capacity, inventory and delivery to achieve effective and efficient operational performance.
- Compare and contrast different tools and techniques for the planning and control of logistics and operations management in order to justify their use in a variety of operational environments.
- Critically appraise how appropriate technologies can be applied to improve logistics and operations management within a supply chain.
- Critically assess how best to optimise an organisation's supply chain using methods such as Lean/Agile

## **Indicative reading list**

As an indicative list, we are providing the existing Talis link for the 10 credit version of this module: <https://rl.talis.com/3/warwick/lists/937C7104-7AEA-AFDB-28AF-92762C8DD7F8.html?lang=en-GB> . When a new Talis link has been generated for 22/23, this entry will be updated to provide that Talis link instead of this indicative list link.

## **Subject specific skills**

Critical thinking in subject knowledge, application of tools in subject specific areas, practical application of operations and logistics management.

## **Transferable skills**

Critical thinking, problem solving, communication, professionalism, team working.

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## **Study**

## **Study time**

<b>Type</b>	<b>Required</b>
Lectures	10 sessions of 1 hour 30 minutes (10%)
Seminars	10 sessions of 1 hour 30 minutes (10%)
Online learning (scheduled sessions)	(0%)
Online learning (independent)	60 sessions of 1 hour (40%)
Assessment	60 hours (40%)
Total	150 hours

### **Private study description**

No private study requirements defined for this module.

### **Costs**

No further costs have been identified for this module.

### **Assessment**

You do not need to pass all assessment components to pass the module.

#### **Assessment group A**

	<b>Weighting</b>	<b>Study time</b>
Post Module Assignment Written assignment	80%	50 hours
In module assessment	20%	10 hours

An in-module quiz (10%) with multiple-choice questions prior to the module starting. Then an Oral presentation at the end of the module, for group work, prepared during the seminar.

#### **Assessment group R**

	<b>Weighting</b>	<b>Study time</b>
Post Module Assignment Written assignment	100%	

### **Feedback on assessment**

In module assessment feedback: Quiz Scores and in-module presentations scores, will be included in the feedback given on the written post module assignment.

Written assignment feedback: marks returned for in-module assessment and for the written assignment. Written feedback of approx. 250 words will be provided for the written post module

assignment using the WMG feedback template. This feedback will be focussed upon the strengths and weaknesses of the work with regard to the module learning outcomes and the post-module assignment marking guidelines. Suggestions for improvement will also be provided.

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## **Availability**

### **Courses**

This module is Core for:

- Year 1 of TWMS-H1S3 Postgraduate Taught Engineering Business Management (Full-time)

This module is Optional for:

- Year 1 of TWMS-H1S9 Postgraduate Taught Management for Business Excellence (Full-time)