

WM9F6-15 Logistics and Operations Management

24/25

Department

WMG

Level

Taught Postgraduate Level

Module leader

Mujthaba Ahtamad

Credit value

15

Module duration

4 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

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/penalty 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:

- Analyse 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 in a business or sector.

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.

Interdisciplinary

Covers a range of interdisciplinary topics, from Engineering, Management, Decision-Making in Business.

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, collaborative working.

Study

Study time

Type	Required
Lectures	15 sessions of 1 hour (10%)
Seminars	15 sessions of 1 hour (10%)
Online learning (independent)	15 sessions of 1 hour (10%)
Other activity	15 hours (10%)
Private study	30 hours (20%)
Assessment	60 hours (40%)
Total	150 hours

Private study description

Students encouraged to read online materials available on moodle and reading list.

Other activity description

Unsupervised case-study work.

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A1

	Weighting	Study time
LOM - Written Assignment	80%	48 hours
A comprehensive assignment which will provide questions to assess the learning outcomes (1, 2 and 4) of the module. It will ask students to critically analyse and evaluate a series of topics on Logistics and Operations Management.		
Reading & Lecture Engagement Test	20%	12 hours
A test to determine engagement with reading and lecture content, will be provided via moodle. Learning outcomes 3 - will be examined in this test. This test may include multiple choice questions.		

Feedback on assessment

Reading & Lecture Engagement Test results will be provided on completion via moodle, and can be released via tabula as per guidelines. Written feedback for the LOM -Written Assessment, will be provided using the University feedback template (updated in 2023). This feedback will identify the marking criteria against each Learning Outcome, and where necessary a brief paragraph/statement will be provided commenting on the overall strengths and weaknesses of the work and where applicable, any improvements/remedial work needed in the resubmission.

Availability

Courses

This module is Core for:

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