

WM9F4-15 Logistics & Operations: Strategy & Management

23/24

Department

WMG

Level

Taught Postgraduate Level

Module leader

Philip Cullen

Credit value

15

Module duration

2 weeks

Assessment

Multiple

Study location

University of Warwick main campus, Coventry

Description

Introductory description

Operations strategy is concerned with how the organisation deploys its operational resources over the long term to help it respond to broad questions such as how resources which deliver the company's products and services should be deployed to achieve its corporate objectives. These long-term decisions are focussed around procurement, logistics, capacity, location, processes, technology, and timing. 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 all their supply chains.

Module aims

This module will give students an understanding of the way in which operations strategy is both derived from, and informs and supports, the organisational/business strategy. This will enable the student to translate operations strategy into a series of logistics and operations policies and procedures. Thus students will be informed and enabled to critically evaluate and apply a range of tools, techniques and technologies suitable for different industrial and service 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.

The interrelationship between the organisation's business and operation's strategy and its influence in creating and evaluating the logistics and operations management functions.

Planning & control techniques for 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)

The role of Total Quality Management methodologies, including ISO9000, Six Sigma, EFQM within logistics and operations management.

Examples of applications of logistics and operations management in a range of industries, including manufacturing and service environments.

Learning outcomes

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

- Describe the strategic role of logistics and operations management and its importance in designing, delivering and improving the logistics and operations functions.
- 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 operations management within a supply chain.
- Critically assess how best to optimise an organisation's supply chain using agile methods to increase resilience.

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

Knowledge, critique and practical application of operations strategy, operations management, logistics, associated supply chain management

Transferable skills

Critical thinking, problem-solving, self-awareness, communication, professionalism, teamwork and working effectively with others, information literature, digital literacy and professionalism.

Study

Study time

Type	Required
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)	45 sessions of 1 hour (30%)
Assessment	75 hours (50%)
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

	Weighting	Study time
Post Module Assignment Written assignment	80%	65 hours
In-module assessment Oral presentation of a combination of individual work, prepared in advance of the seminar, and group work, prepared during the seminar.	20%	10 hours

Assessment group R

	Weighting	Study time
Post Module Assignment	100%	
Written assignment		

Feedback on assessment

In module assessment feedback: during the module in (lectures/seminars) formative oral feedback will be provided on the in-module assessment and marks included in the feedback given on the written post module assignment.

Written assignment feedback: marks returned for in-module assessment and for written assignment. Written feedback of a minimum of 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.

Availability

There is currently no information about the courses for which this module is core or optional.