

WM9F3-15 Storage and Warehousing Techniques

22/23

Department

WMG

Level

Taught Postgraduate Level

Module leader

Gary Bilsbarrow

Credit value

15

Module duration

1 week

Assessment

100% coursework

Study locations

University of Warwick main campus, Coventry Primary

Distance or Online Delivery

Description

Introductory description

A well-managed warehouse is recognised as a potential major source of competitive advantage as opposed to just another source of cost within the supply chain. To achieve this competitive advantage, it is important to choose the right type of operation, processes, equipment and technology, and then understand and continuously improve performance through appropriate measures and controls. Staff motivation and safety are also important aspects within today's warehouse.

Module aims

This module will provide a thorough insight into warehouse operations, processes, equipment, technology and methods to continuously improve performance through appropriate measures and controls. All of these areas incorporate real-life examples, industrial exposure, class exercises and case studies to provide an understanding of the role of the warehouse in today's supply chain and its internal and external relationships and impact.

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 role of the warehouse in today's supply chain.
- Types of warehouse operation and warehouse processes.
- Warehouse operations exercise or observation.
- Warehouse IT, automation and technology.
- Warehouse layout and equipment.
- Warehouse design and simulation exercise.
- Warehouse costs and performance measures.
- Health and safety and environmental issues.
- Procurement and management of 3rd party services.
- Resource planning and labour management.
- The future of warehousing.
- Industrial exposure.

Learning outcomes

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

- Evaluate warehouse roles, functions, operations, procedures and processes and based on this provide a comprehensive explanation and informed judgement regarding the use of different types of warehouses and distribution centres across today's supply chain.
- Select appropriate techniques to improve warehouse processes and operations, proposing sound recommendations and critiques about how technology, equipment and automation can be applied.
- Propose and analyse the criteria required to decide on the most appropriate location for a warehouse within a supply chain and distribution network.
- Determine how to resource a warehouse, including an informed analysis of the costs for space, labour and equipment.
- Interpret a complex warehouse operational requirement in order to design a practical and efficient warehouse layout.

Indicative reading list

Richards, G; Warehouse Management, 3rd Ed, Kogan Page London 2017 ISBN 9780749460747

Rushton, A.; The Handbook of Logistics and Distribution Management, Kogan Page 2018 ISBN 9780749476779

Heinrich, M; Warehousing and Transportation Logistics, Kogan Page London 2018 ISBN 9780749482206

Richards G, Grinsted S; The Logistics and Supply Chain Toolkit, 2nd Ed, Kogan Page London 2016 ISBN 9780749475581

Van den Berg, J; Highly Competitive Warehouse Management Management, Outlook Netherlands 2012 ISBN 9781466268609

Subject specific skills

Understanding of the subject, deep industrial knowledge, awareness of key practice and principles, understanding of industry structure and future challenges, the warehouse as an integrated element of the supply chain, technological application for improved efficiency, resourcing and costing of warehouse operations, warehouse design and layout elements, IT and integrated technology for warehouse operations, warehouse location analysis.

Transferable skills

Communication, dependability, teamwork, organisation and planning, adaptability, technology and information literacy, collaboration, problem solving, analytical thinking, critical thinking, communication, decision making, sustainability, professionalism, organisational and industry awareness.

Study

Study time

Type	Required
Lectures	10 sessions of 1 hour (7%)
Seminars	20 sessions of 1 hour (13%)
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 must pass all assessment components to pass the module.

Assessment group A

	Weighting	Study time
Assessed work as specified by department. Post-module assignment.	80%	58 hours
The post modular assessment will require students to write a report answering a single large question or few small questions aligned with the learning outcomes of the module.		
Assessed work as specified by department. Group work.	20%	2 hours
The in module assessment will focus on the performance of students during in-class group based and or individual based activities, resulting in presentations delivered by the students on relevant learning outcomes. The majority of preparation time is included within the seminar time.		

Feedback on assessment

Oral feedback will be provided after the in module assessment, which will be focussed upon the learning outcomes.

Written feedback will be provided for the post module assignment. 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

Courses

This module is Core for:

- MSc in Supply Chain and Logistics Management