

WM9F1-15 Procurement and Inventory Management

24/25

Department

WMG

Level

Taught Postgraduate Level

Module leader

Tarek El-Said

Credit value

15

Module duration

4 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

As the global division of work is still increasing in all industries to improve speed, process integration and customer satisfaction there is a growing need for a modern sourcing system. Procurement and inventory management form the interfaces between different value chain members in today's product as well as service supply chains. As spending in procurement is often one of the biggest parts of a company's budget and accurately managing inventory offers cost cutting as well as service improvement potential, procurement and inventory management become integral to effectively managing any supply chain.

This module will put the emphasis on the design and management of processes and control systems of the inbound supply chain mapped against everchanging and dynamic market structures. The contents covered in this module include procurement processes and strategies, ethical procurement and sustainable sourcing practices, risk pooling and multi-stage inventory control systems, forecasting and predictive analytics models, value of collaboration and streamlined information and financial flow in supply chains, supplier relationship management as well as elementary and advanced methods for analysis and planning.

Module aims

The Procurement and Inventory Management module aims to introduce learner to two critical overlapping functions within the supply chain and provide learners with the ability to assess and evaluate different strategies, concepts, processes, models, methods, and technical systems in the areas of procurement and inventory management to design a strategic procurement process, supply network, and multistage inventory control systems. This module also aims to enable learners to manage the precise synchronisation of supply and demand within a value chain through balancing inbound and outbound material flows with sales and customer demand to deliver high service levels. The design has been mapped against the course level learning outcomes.

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.

- Procurement and inventory management basics and their role in the supply chain
- Basic methods for analysis and planning in procurement and inventory management
- Sourcing and supplier selection systems
- Strategic procurement and inventory management for enhancing supply chain resilience and sustainability
- Static and dynamic stock-keeping and replenishment policies
- Supplier relationship management and collaboration in the supply chain
- Supplier evaluation and performance management
- Data driven decision making for procurement and inventory management
- Forecasting and predictive analytics for supply and demand optimisation

Learning outcomes

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

- Critically evaluate different procurement and inventory management strategies, processes, and organizational concepts and their links to further areas of the logistics system.
- Develop and evaluate supplier selection systems under different supply chain scenarios within the procurement and inventory management processes.
- Implement advanced techniques to calculate adequate stock levels for different stock categories considering logistics and financial aspects
- Manage procurement and inventory risks arising from dynamic market structures to achieve a more resilient, sustainable supply chain.
- Monitor and assess procurement and inventory performance through the use of specialised performance measurement tools and techniques.

Indicative reading list

<https://rl.talis.com/3/warwick/lists/FE39CE88-A446-07C5-8CBE-5E8D60B61163.html>

Subject specific skills

Understanding of procurement and inventory management terminology, deep industrial

knowledge, awareness of key practice and principles, understanding of industry structure and future challenges with a sustainable/resilient lens, ability to evaluate the role of procurement and inventory management in a supply chain, proficiency to analyse different procurement and inventory management strategies, ability to monitor and assess procurement and inventory performance, and capability to assess procurement risks. Utilisation of data analytics enabling informed, and data driven decision making in procurement and inventory management.

Transferable skills

Verbal and written communication, presentation, negotiation, teamwork, reflective practice, adaptability, leadership, terminology literacy, and capability to work on and analyse databases on software.

Study

Study time

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

Private study description

Online Learning (independent) refers to the completion of the reading material and quizzes for the in-module work.

Students will be encouraged to explore the reading list which includes essential and recommended reading material. Students will be encouraged to utilise the CPD tools and range of resources from the CILT and CIPS websites as part of their student and affiliate memberships.

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
Development of a strategic procurement and supplier selection system	50%	30 hours
Students will be asked to develop a strategic procurement and supplier selection system for an industry with a focus on supplier relations, performance management, and risk mitigation. The question will have multiple sections which students will iteratively work on with formative feedback on part of it each week.		
Reflection on the use of inventory control policies and tools within the Wolfhound Simulation exercise	50%	30 hours
Students will be asked to provide a reflection on their utilisation of the different inventory control policies and tools within their game play of the Wolfhound Simulation exercise. The question will have multiple sections which students will iteratively work on with formative feedback on part of it each week.		

Feedback on assessment

There will be several opportunities to provide formative feedback on the work during the teaching block. There will be scheduled office hours for student support. Written feedback will be provided against each learning outcome in the assessments.

Availability

Pre-requisites

To take this module, you must have passed:

- All of
 - [WM9F5-15 Supply Chain Management](#)

Courses

This module is Core for:

- Year 1 of TWMS-H1SD Postgraduate Taught Supply Chain and Logistics Management (Full-time)
- TWMS-H1TD Postgraduate Taught Supply Chain and Logistics Management (Part-time)
 - Year 2 of H1TD Supply Chain and Logistics Management (Part-time)
 - Year 2 of H1TD Supply Chain and Logistics Management (Part-time)