

Liverpool John Moores University

Title: Manufacturing Management
Status: Definitive but changes made
Code: **7123ENG** (120125)
Version Start Date: 01-08-2019

Owning School/Faculty: Maritime and Mechanical Engineering
Teaching School/Faculty: Maritime and Mechanical Engineering

Team	Leader
Jun Ren	Y
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Academic Level: FHEQ7 **Credit Value:** 10 **Total Delivered Hours:** 20
Total Learning Hours: 100 **Private Study:** 80

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	12
Tutorial	6

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS2	Examination	70	2
Report	AS1	Coursework Assignment	30	

Aims

This module provides an introduction to manufacturing operations management. It focuses on the manufacturing plant and services covering the fundamentals of production planning, inventory control, and process modelling and control.

Learning Outcomes

After completing the module the student should be able to:

- 1 Explain current practice in purchasing, inventory management, manufacturing planning and distribution control, and customer service
- 2 Apply key production planning methods in current use in manufacturing
- 3 Apply fundamental quality control methods

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Examination	1	2	3
Coursework assignment	2		

Outline Syllabus

Demand management & forecasting. Material control. Electronic interfaces and scheduling tools.

Manufacturing environment types and relationship to planning systems. Definition and scope of planning. Master production scheduling: the master scheduling process, rough-cut capacity planning fences, final assembly scheduling. Operations planning: Bill of Material structure and design, ERP, MRP II and Materials requirements planning, scheduling and inventory control. Impact of software.

Inventory management systems, Economic Order Quantity (EOQ) modelling.

Information flow and modelling, and applications to manufacturing operations.

Learning Activities

Lectures, tutorial and practicals

Notes

The module investigates manufacturing management techniques including many of the requirements of a modern industrial based manufacturing centre