

Warning: An incomplete or missing proforma may have resulted from system verification processing

Title: OPERATIONS AND MANAGEMENT PRINCIPLES
 Status: Definitive
 Code: **6007ENGFRI** (117022)
 Version Start Date: 01-08-2018
 Owing School/Faculty: Maritime and Mechanical Engineering
 Teaching School/Faculty: Maritime and Mechanical Engineering

Team	Leader
Jun Ren	Y
Russell English	

Academic Level: FHEQ6 **Credit Value:** 20 **Total Delivered Hours:** 50
Total Learning Hours: 200 **Private Study:** 150

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	36
Tutorial	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Exam	50	2
Essay	Essay	Essay 1	25	
Essay	Essay	Essay 2	25	

Aims

To develop an understanding of modern manufacturing planning and organisation in the context of Global manufacturing. To understand the pivotal role of managers as knowledge workers in planning and controlling organisations.

Learning Outcomes

After completing the module the student should be able to:

- 1 Use the principles of control of resources in a modern manufacturing organization
- 2 Apply the planning and control of information, data and resources in the efficient execution of manufacturing.
- 3 Critically review the characteristics of a manufacturing company in terms of manufacturing organization in the wider external environment
- 4 Apply ideas from current issues in management, including ethics and corporate responsibility
- 5 Apply decision making tools in service and manufacturing companies.
- 6 Recognise different managerial problem settings and make appropriate responses

Learning Outcomes of Assessments

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

Exam	1	2	4	5
Essay 1	3			
Essay 2	6			

Outline Syllabus

Demand management: forecasting, patterns of demand; qualitative and quantitative methods.

Operations planning: Aggregate Production Planning, Master production scheduling, Materials requirements planning.

Inventory management: ABC analysis, EOQ modelling, Application of EOQ.

Modern operations management: ERP, MRPII and Lean/Agile manufacturing.

Managing people in a changing environment; theories of motivation, delegation, conflict management., leadership.

Managers' social ethical and legal responsibilities; family friendly policies, corporate social responsibility, employment law

Decision making: scarce resources, impact of PESTL factors

Management of resources: budgetary planning and control, quality issues

Learning Activities

This module is taught through a combination of lectures, tutorial, small group work, video case studies and workshops, use of relevant software where appropriate

Notes

The module deals with modern, world class service and manufacturing principles. The work explores: The relationship between manufacturing data and organisation in terms of planning, scheduling and cost, lean/agile manufacturing, and modern management principles in world class organisations.