Module Specification

Module Summary Information

1	**Module Title**	Operations Management
2	**Module Credits**	20
3	**Module Level**	6
4	**Module Code**	ENG6071

5	**Module Overview**

The module provides you with an understanding of the factors which control and constrain the performance of manufacturing and other operational systems including topics such as Risk Analysis and Decision Making Process, Material Flow Analysis, Maintenance and Replacement, Development of a Manufacturing Strategy.

6	**Indicative Content**

Line Balancing: Single Line Product Applications

Multi / Mixed model Line Balancing

Decision Theory – Decision Trees

Capital Investment Appraisal I

Capital Investment Appraisal II

Manufacturing Strategies

Integrated Manufacturing Systems MRPII, Push Pull Systems, JIT

Integrated Manufacturing Systems – ERP, OPT

Supply Chain Management

Demand Dynamics

Simulation Techniques for the Supply Chain

Application of Simulation – Probability Modelling

7	Module Learning Outcomes On successful completion of the module, students will be able to:	
	1	Identify and critically evaluate manufacturing, maintenance and replacement strategies with respect to their relevance to company supply chain positioning.
	2	Analyse the performance of the material flow systems within a business, identifying key performance indicators, how they are measured and how improvements may be identified and implemented.
	3	Undertake a baseline audit to establish target performance indicators and recommend system improvements, measuring quality performance at different stages of the product and service life cycle.
	4	Evaluate the use of simulation and modelling techniques to logistics based problems in a range of industry sectors.

8	Module Assessment		
Learning Outcome			
	Coursework	**Exam**	**In-Person**
1-4	**70%**		**30%**

9	Breakdown Learning and Teaching Activities
Learning Activities	**Hours**
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	48
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	0
Private Study (PS) includes preparation for exams	152
Total Study Hours:	200