

Module Outline

Part 1- as validated

1. Title	Engineering Operations Management and Business Improvement
2. Level	6
3. Credits	20
4. Indicative Student Study Hours	36 H Lectures 164 H Self-directed learning
5. Core (must take and pass), Compulsory (must take) or Optional	Compulsory

5. Brief Description of Module (purpose, principal aims and objectives)

The adoption by private industry and public organisations interest in improvement philosophies, e.g. Six Sigma and Lean Production, has led to an increased awareness of strategies for business improvement.

This module aims to provide students with an understanding of how an engineering or manufacturing organisation's future may be closely connected to continuously improving its business processes. The module content is designed to develop the students' knowledge and understanding of the principles and application of operations management in the engineering industry. Students will have the opportunity to analyse, evaluate and apply the impact of operations management and business improvement on refining the management of resources and performance of an engineering project or process.

Module 02H: Engineering Operations management and Business Improvement

Learning Outcomes - On successful completion of this module a student will be able to:

	Subject Specific Learning Outcomes
1	Provide an evaluation of how business performance can be sustainably improved in the areas of product design, engineering, process, customer service and financial performance.
2	Analyse and evaluate the duties and responsibilities of an Operations Manager in the engineering industry, including ethical and sustainable decision making.
3	Develop and implement a sustainable strategy to improve the performance of a business unit.

	Generic Learning Outcomes
4	Use appropriate methods to address problems that may have many interacting factors.
5	Apply knowledge in unfamiliar contexts, synthesising ideas or information to generate appropriate solutions.

7. Assessment

Pass on aggregate or Pass all components

(modules can only be pass all components if this is a PSRB requirement)

Pass on aggregate

Summary of Assessment Plan

	Type	% Weighting	Anonymous Yes / No	Word Count/ Exam Length	Learning Outcomes Coverage	Comments
<u>Note: Formative assessments are available during booked tutorial sessions.</u>						
1.	Case Study Presentation	40%	Yes	20 minutes	LO 1, 4	
2.	Case Study Report	60%	Yes	2000 words	LO 2, 3, 5	

Further Details of Assessment Proposals

Give brief explanation of each assessment activity listed

Formative Assessment:

Formative assessments provide you with preliminary guidance, feedback, and feedforward on your proposed submissions. You should aim to book tutorial sessions and send your lecturers any work or areas of concern ahead of the session. This ensures you receive the best guidance possible during your session. Please note, the quality of work sent across will directly influence the quality of feedback received, so ensure the work is detailed and in context.

In addition to tutorial sessions, you will also participate in in-class exercises which constitute part of the formative assessments. These exercises are designed to reinforce the module content and

provide immediate feedback on your understanding. Your case study presentation below will also serve as an opportunity for you to receive formative guidance towards the case study report.

Case Study Presentation:

The student will choose an organisation and, within it, identify a business unit where they can give a commentary on opportunities for strategic business improvement. The improvement may relate to design, manufacturing, engineering or service and could be in the areas of product, process, development, marketing, engineering or people. The student will prepare a strategic plan that sets out objectives for improvement in the long, medium, and short term. The plan will identify tactics and actions to achieve those objectives and overcome any forecast resistors.

Case Study Report:

The Case Study Report builds on the presentation and enables the student to document the strategic improvement plan as a written document. Furthermore, the student is able to draw on tutor feedback on the presentation, identifying limitations to the investigation, the business risks associated with the improvement options chosen and actions to lead a team and mitigate against those risks whilst recognising the complexity of operational management challenges.

8. Summary of Pre and / or Co Requisite Requirements

Not applicable

9. For use on following programmes

BEng Engineering