

Summary Information

Module Code	6465ELE
Formal Module Title	Engineering Management
Owning School	Engineering
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

Learning Methods

Learning Method Type	Hours
Online	11
Seminar	11

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	This module is designed to develop the core management techniques required in modern industry.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Apply decision making techniques to select a solution to a problem
MLO2	2	Apply a fundamental knowledge of intellectual property law to protect a solution
MLO3	3	Model product cost, sales and profit
MLO4	4	Explain fundamental marketing and sales strategies and contract law

Module Content

Outline Syllabus	Decision making tools. Selecting solutions from a range of options. Defining and structuring a project. Developing a specification to meet a customer need. Organisational structures and functions. Product/process analysis visualisation tools (IDEF, Value Stream Mapping) Project planning methods; introduction to current standards (reference to standards such as PRINCE2). Fundamental principles of intellectual property law. Trade secrets, patents and publication. Marketing and sales strategies and fundamentals of contract law. Modelling product cost, sales, and profit. Economic modelling, sensitivities, forecasting cash flow (NPV) and investment appraisal. Management of people and teams.
Module Overview	
Additional Information	UNESCO Sustainable Development Goals Quality Education Industry, Innovation and Infrastructure Partnerships for the Goals UK SPEC AHEP 4CEng. M9 Use a risk management process to identify, evaluate and mitigate risks (the effects of uncertainty) associated with a particular project or activity. M10 Adopt a holistic and proportionate approach to the mitigation of security risks. M11 Adopt an inclusive approach to engineering practice and recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion. M14 Discuss the role of quality management systems and continuous improvement in the context of complex problems. M15 Apply knowledge of engineering management principles, commercial context, project and change management, and relevant legal matters including intellectual property rights. M18 Plan and record self-learning and development as the foundation for lifelong learning/CPD. IEng. B9 Use a risk management process to identify, evaluate and mitigate risks (the effects of uncertainty) associated with a particular project or activity. B10 Adopt a holistic and proportionate approach to the mitigation of security risks. B11 Recognise the responsibilities, benefits and importance of supporting equality, diversity and inclusion. B14 Recognise the need for quality management systems and continuous improvement in the context of broadly-defined problems. B15 Apply knowledge of engineering management principles, commercial context, project management and relevant legal matters. B18 Plan and record self-learning and development as the foundation for lifelong learning/CPD. Where this module is part of a Degree Apprenticeship programme, the knowledge learning outcomes are K4, the skills learning outcomes are S5, S10 and S13

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Coursework assignment	100	0	MLO1, MLO2, MLO3, MLO4

Module Contacts