

Professional Engineering

Module Information

2022.01, Approved

Summary Information

Module Code	5502NCCG
Formal Module Title	Professional Engineering
Owning School	Engineering
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Teaching Responsibility

	LJMU Schools involved in Delivery	
LJMU Partner Taught	LJMU Partner Taught	

Partner Teaching Institution

Institution Name	
Nelson and Colne College Group	

Learning Methods

Learning Method Type	Hours
Lecture	60

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
APR-PAR	PAR	April	12 Weeks
JAN-PAR	PAR	January	12 Weeks
SEP-PAR	PAR	September	12 Weeks

SEP_NS-PAR	PAR	September (Non-standard start date)	12 Weeks

Aims and Outcomes

Aims	The aim of this module is to provide students with the professional standards for engineers and to guide them on how to develop the range of employability skills needed by professional engineers. Among the topics included in this module are: engineering strategy and services delivery planning, the role of sustainability, engineering management tools, managing people and becoming a professional engineer. On successful completion of this module students will be able to construct a coherent engineering services delivery plan to meet the requirements of a sector-specific organisation or business. They will display personal commitment to professional standards and obligations to society, the engineering profession and the environment.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Evaluate the risk evaluation theories and practices associated with the management of projects for the production of current and developing technology.
MLO2	2	Produce an engineering services delivery plan that meets the requirements of a sector-specific organisation.
MLO3	3	Develop effective leadership, individual and group communication skills.
MLO4	4	Develop personal commitment to professional standards and obligations to society, the engineering profession and the environment.

Module Content

Outline Syllabus	Strategic planning and deployment, engineering strategy and services delivery planning, the role of sustainability and supply chain management, new product development strategies, legal obligations and corporate responsibility. Engineering relationships: the relationship between engineering and financial management, marketing, purchasing, quality assurance and public relations.Engineering management tools: problem analysis and decision-making, risk management, change management, performance management, product and process improvement, project management and earned value analysis.Managing people: effective leadership styles, techniques to effectively manage teams, communication and listening skills, negotiating skills, human error evaluation, coaching and mentoring.Becoming a professional engineer: engineering social responsibility, importance of being active and up to date with the engineering profession, new developments and discoveries, methods of Continuing Professional Development (CPD)
Module Overview	
Additional Information	

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Group Assignment	60	0	MLO1, MLO2, MLO3

Reflection	Individual Presentation	40	0	MLO4
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Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Christian Matthews	Yes	N/A

Partner Module Team

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