Engineering Project

Module Information

2022.01, Approved

Summary Information

Module Code	6355ELE
Formal Module Title	Engineering Project
Owning School	Engineering
Career	Undergraduate
Credits	30
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

Learning Methods

Learning Method Type	Hours
Seminar	4
Tutorial	11

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	28 Weeks

Aims and Outcomes

Aims	The project aims to provide a supervised but student led learning activity in a relevant area of engineering or technology. It aims to develop the academic, technical and organisational skills required to undertake a substantial individual engineering project from specification to conclusion.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Conceptualise and plan a supervised but self-led project
MLO2	2	Carry out a self-managed programme of work according to good project management practices
MLO3	3	Research and analyse the established body of knowledge relevant to the project
MLO4	4	Demonstrate deep technical understanding of their project
MLO5	5	Communicate technical information clearly and concisely in written and oral forms
MLO6	6	Critically evaluate all aspects of a project and formulate justified conclusions

Module Content

Outline Syllabus	Projects may involve experiment, analysis, design and/or computation and should allow a student to demonstrate achievement of the module learning outcomes.
Module Overview	The project aims to provide a supervised but student led learning activity in a relevant area of engineering or technology. It aims to develop the academic, technical and organisational skills required to undertake a substantial individual engineering project from specification to conclusion. In the context of the MEng/BEng Control and Automation Engineering, a project with a detailed design and analysis of a control system is appropriate. For example, modelling, simulation and testing of a PID control system. The project requires you to demonstrate good project management, critical evaluation and presentation skills.
Additional Information	The project provides the opportunity to conduct a major supervised learning activity on a relevant engineering or technical topic. The project requires the student to demonstrate good project management, critical evaluation and presentation skills.In the context of the MEng/BEng Computer Technology analysis may include mathematical analysis and computer modelling. However, it is expected that a greater emphasis on programmes applications, embedded systems and communications will be included in an integrated system. All project work will have a complete analysis, mathematically based or otherwise. In the context of the MEng/BEng Electronic Engineering, a Project with a detailed design and analysis of an electronic circuit or function is appropriate. In the context of the MEng/BEng Electrical Power Engineering, a Project with a detailed design and analysis of a power electrical/electronic circuit or system is appropriate. For example, modelling of a AC Machine or Inverter.In the context of the MEng/BEng Control and Automation Engineering, a Project with a detailed design and analysis of a control system is appropriate. For example, modelling, simulation and testing of a PID control system.In the context of the MEng/BEng Electronics and Software Engineering, a Project with a detailed design and analysis of a software/hardware interface is appropriate. In the context of the MEng/BEng Electrical and Electronic Engineering, a Project with a detailed design and analysis of an electrical/electronic circuit or function is appropriate. For example, embedded electronics may be used to control a power circuits such as a controlled rectifier for a specific task.Where this module is part of a Degree Apprenticeship programme, the knowledge learning outcomes are K4, the skills learning outcomes are S6, S7, S8, S9, S11 and S13 and the behaviours learning outcomes are B1, B2, B4, B5, B7, B11, B12 and B13

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Interim Report	20	0	MLO1, MLO2, MLO3, MLO5

Essay	Final Report	50	0	MLO2, MLO3, MLO4, MLO5, MLO6
Presentation	Presentation, Viva and Poster	30	0	MLO4, MLO5, MLO6

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Guangming Zhang	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings