

## Design and Project

### Module Information

2022.01, Approved

#### Summary Information

Module Code	4503NCCG
Formal Module Title	Design and Project
Owning School	Engineering
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

#### Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

#### Partner Teaching Institution

Institution Name
Nelson and Colne College Group

#### Learning Methods

Learning Method Type	Hours
Lecture	24
Tutorial	25

#### 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 aims of this module are twofold: To introduce students to the methodical steps that engineers use in creating functional products and processes; from a design brief to the work, and the stages involved in identifying and justifying a solution to a given engineering need. On successful completion of this module students will be able to prepare an engineering design specification that satisfies stakeholders' requirements, implement best practice when analysing and evaluating possible design solutions, prepare a written technical design report, and present their finalised design to a customer or audience. To enable students to conceive, plan, develop and execute a successful engineering project, and produce and present a project report outlining and reflecting on the outcomes of each of the project processes and stages.
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**After completing the module the student should be able to:**

### Learning Outcomes

Code	Number	Description
MLO1	1	Create a plan for a design solution and implementation project to meet a realistic stakeholder brief
MLO2	2	Formulate possible technical solutions to address design specification.
MLO3	3	Conduct project activities to generate outcomes which provide a solution to the identified brief
MLO4	4	Produce a report covering the selected design solution, and the progress and outcomes of the project
MLO5	5	Present an evaluation of your design and project outcomes to a technical audience

## Module Content

Outline Syllabus	Analysis of engineering problems Customer and stakeholder requirements and expectations Development of design specification Design processes Development and assessment of potential solutions Project execution, tracking and monitoring Success criteria and evaluation Ethical considerations in Engineering projects Presentation to different audiences
Module Overview	
Additional Information	

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Project Report	80	0	MLO1, MLO2, MLO3, MLO4
Presentation	Presentation	20	0	MLO5

## Module Contacts

### Module Leader

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

### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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