

## Group Design Project

### Module Information

2022.01, Approved

#### Summary Information

Module Code	7000FETGDP
Formal Module Title	Group Design Project
Owning School	Engineering
Career	Postgraduate Taught
Credits	60
Academic level	FHEQ Level 7
Grading Schema	50

#### Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

#### Learning Methods

Learning Method Type	Hours
Seminar	22
Tutorial	11

#### Module Offering(s)

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

#### Aims and Outcomes

Aims	The Group Design Project aims to apply engineering, technology and scientific knowledge to a real-world design problem.
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**After completing the module the student should be able to:**

## Learning Outcomes

Code	Number	Description
MLO1	1	Critically analyse customer requirements and apply scientific principles and methodology to develop product specifications
MLO2	2	Plan and manage design work and processes within a team and apply relevant project management techniques to ensure that design solutions are derived on time to meet customer need.
MLO3	3	Apply advanced problem-solving skills, engineering knowledge and understanding to develop rigorous and creative solutions and to analyse and evaluate them in terms of functionality, sustainability, environmental, economic and social impact.
MLO4	4	Work flexibly and effectively within a group and be able to adapt to changing requirements.
MLO5	5	Demonstrate effective written and oral communication skills and an ability to confidently present work to a variety of audiences.

## Module Content

Outline Syllabus	Detailed ideas will be explored and developed through design, experimentation, computer modelling and/or manufacture. The Group Design Project will encompass the wider aspects of social, economic, political, legislative, environmental, cultural, ethical and sustainability issues required in the modern environment. Students will work in groups and will meet regularly with an academic supervisor and any internal or external stakeholders. Groups will develop an effective team-working ethic and project management skills. They will present their work through regular meetings with their supervisor and prepare and submit progress reports and oral presentations. Establishment of an effective team, managed through regular consultation with an academic supervisor. Establishing project requirements in conjunction with an external or internal client. Project planning and control to ensure an efficient, timely and effective outcome which meets client expectations. Design, delivery and execution of a technical design project, according to a managed plan. Presentation of design solutions in a concise and professional way to an audience including the client, peers and academic staff.
Module Overview	
Additional Information	The project provides the opportunity to conduct a major learning activity on a relevant engineering, technology or science-based topic. The project requires the group to demonstrate a good team-working ethic, excellence in project management, engineering and technology application and critical evaluation and presentational skills within a team working environment. Assignment 1 will be tutor assessed. Individual contributions will be identified within the body of each of those reports. Assignment 3 will be tutor assessed, with each group member responsible for demonstrating their contribution. Assignment 2 will be tutor and peer assessed. Individual members will be responsible for an equitable contribution to the final report. Peer assessment will be graded based upon pre-published criteria submitted as an addendum to the approval documents. United Nations Sustainable Development Goals: 4. Quality Education 5. Gender Equality 8. Decent Work and Economic Growth 9. Industry, Innovation and Infrastructure 16. Peace, Justice and Strong Institutions 17. Partnerships for the Goals

## Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Presentation	Business Case Pitch	20	0	MLO4, MLO5
Report	Design and Progress Report	30	0	MLO1, MLO2, MLO4
Report	Completion & Delivery Report	50	0	MLO2, MLO3, MLO4, MLO5

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Gerard Edwards	Yes	N/A

### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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