

Liverpool John Moores University

Title: Group Design Project
Status: Definitive
Code: **7113MSE** (120735)
Version Start Date: 01-08-2018

Owning School/Faculty: Maritime and Mechanical Engineering
Teaching School/Faculty: Maritime and Mechanical Engineering

Team	Leader
Allan Carrier	Y
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Academic Level: FHEQ7 **Credit Value:** 20 **Total Delivered Hours:** 24
Total Learning Hours: 200 **Private Study:** 176

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Tutorial	24

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Design Proposal and Project Plan	20	
Report	AS2	Written and Oral Presentation of Solution	80	

Aims

This module aims to build upon the Level 6 Mechanical Engineering Design module, by providing an authentic design project in conjunction with an internal or external client group or company (typically a research group or local industry). It will require students to demonstrate substantial independent initiative, working with the client to develop and communicate a design specification and project plan. The participants will select appropriate engineering and design processes and techniques to solve the

problem.

Learning Outcomes

After completing the module the student should be able to:

- 1 Work with a client to establish a set of requirements and specifications
- 2 Actively manage the design process, while monitoring and reporting progress to a client
- 3 Communicate design information and data effectively with a client
- 4 Determine appropriate analytical approaches and apply them to the design of a solution which meets the client requirements
- 5 Demonstrate professional interpersonal skills with both a client and a design team
- 6 Identify relevant standards and apply them to the design process and validate designs to ensure compliance

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Design Proposal & Project Plan	1				
Written & Oral Presentation	2	3	4	5	6

Outline Syllabus

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 plan

Presentation of design solutions in a concise and professional way to an audience including the client, peers and academic staff

Learning Activities

This module will be student centred and led, but will be supported by tutorial sessions with an academic advisor.

Notes

The project provides the opportunity to conduct a major learning activity on a relevant engineering or technical topic. The project requires the student group to demonstrate good project management, engineering skills application, critical evaluation and presentational skills in a team working environment.

