MODULE DESCRIPTION FORM

DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING

ME525 MENG GROUP PROJECT - AEROSPACE

Module Registrar: Dr A McLaren andrew.mclaren@strath.ac.uk	**Taught To (Course): Cohorts for whom class is compulsory**	
Other Lecturers Involved: DMEM staff for Project Management and MAE Supervisors	**Credit Weighting: 40**	**Semester: 1 and 2**
Compulsory class	**Academic Level: 5**	**Suitable for Exchange: N**

Required prerequisites

Note: It is the responsibility of ALL students to ensure that they satisfy the prerequisite knowledge for this module BEFORE adding as part of curriculum selection. If unsure, please contact the Module Registrar or discuss with your Programme/Year Adviser of Studies.

Years 1 – 4 of appropriate Aero-Mechanical Engineering Degree

Project dependent: please check with supervisors

Module Format and Delivery (HOURS i.e., 1 credit = 10hrs of study):

Lecture	Tutorial	Laboratory	Groupwork	External	Online	Project	Assignments	Private Study	**Total**
			380		20				400

Educational Aim

This module aims to give students an authentic experience of managing and contributing to a complex group project. This will include an opportunity to demonstrate mastery of the technical aspects of the project, in addition to demonstrating competence in project management, technical risk management and safety risk assessment.

Learning Outcomes

On completion of the module the student is expected to be able to

LO1 Appreciate the principles of project management and planning

LO2 Reflect on their role in a team and their interaction with team members

LO3 Appreciate the importance of technical risk and health and safety management

LO4 Demonstrate experience in the practice of engineering principles.

Syllabus

Students will be formed into groups and be allocated a project topic, supervised by a member of staff. All students will take part in intensive workshops on project management, technical risk management and safety risk assessment. These will be supported by online resources. Each group will then write a statement of purpose detailing the deliverables and schedule for the project. This will be agreed with the supervisor, who will take on the role of client. The statement of purpose will form a contract between the group and the client.

Students will carry out the project, and report to the assessment team in December (interim presentation/report) and at the conclusion of the project (first week of the April/May exam period). Groups will be assessed on the extent to which they have met the deliverables set out in the contract, as well as on the quality of reflection on the group process and project management experience.

Assessment of Learning Outcomes

Criteria

For each of the Module Learning Outcomes the following criteria will be used to make judgements on student learning:

LO1 Appreciate the principles of project management and planning
C1 Show an ability to develop a detailed project plan
C2 Be able to analyse the critical path of a project
C3 Understand project estimating and project control

LO2 Reflect on their role in a team and their interaction with team members
C1 Critically analyse their contribution to the project
C2 Consider the interaction between team members
C3 Reflect of the influence of team structure on team effectiveness

LO3 Appreciate the importance of technical risk and health and safety management
C1 Understand the need for technical risk management
C2 Apply appropriate methods to support risk analysis
C3 Appreciate the role of uncertainty and modelling
C4 Appreciate the obligations of health and safety law

LO4 Demonstrate experience in the practice of engineering principles
C1 Apply or develop appropriate methodologies required for project development
C2 Master the technical aspects of the project

The standards set for each criterion per Module Learning Outcome to achieve a pass grade are indicated on the assessment sheet for all assessment.

Principles of Assessment and Feedback
(within Assessment and Feedback Policy at: https://www.strath.ac.uk/professionalservices/staff/policies/academic/)

The following principles have been addressed in the design of the assessment.

Deliver high quality feedback information that helps learners self-correct.
The assessment is by oral presentations and dialogue, which provides instant feedback on group performance in a two-way communication process. Students should note that regular meetings with their project supervisor will provide individual on-going formative feedback throughout the project, and they should make effective use of these meetings.

Ensure that summative assessment has a positive impact on learning.
The summative assessment in through oral presentations, after which feedback/mark sheets are completed by each assessor. These are returned to each group within a week of the assessment. Groups are encouraged to discuss any issues with the assessors.

Give choice in the topic, method, criteria, weighting or timing of assessments.
Project deliverables and deadlines will be defined by the group through a statement of purpose. Progress at each oral presentation is assessed against these criteria. Each group will define the detailed work on their project in negotiation with the supervisor (client). Peer assessment allows students to engage in assessment.

Assessment Method(s) Including Percentage Breakdown and Duration of Exams *(individual weightings)*

L/Outcomes	Assessment is by project work, reports and oral examinations, as follows:	
	Interim assignment/presentation/oral exam	30% (including 10% supervisor mark)
	Final report/presentation/oral exam/showcase video/archive	70% (including 10% supervisor mark)
	All learning outcomes are assessed by all assessments	
	For this module, peer assessment will be applied to the group assignment (full module mark comprised of interim and final assessments). Students will evaluate their peers' contributions to the assignment using Myplace. The students' grade will be determined by combining the staff grade for that assignment with the students' weighted contribution – determined from each member's evaluation of the student.	

Indicate which learning outcomes (L01, L02 etc) are to be assessed by exam/coursework/project as required.

Coursework / Submissions deadlines (*academic weeks*):

Statement of purpose, semester 1 week 4
Interim assignment, semester 1 exam diet
Final report/presentation/showcase video/archive, semester 2 week 10

SUBMISSION DEADLINES WILL BE STRICTLY APPLIED. LATE SUBMISSION OF REPORTS/PAPERS OR NON-ATTENDENCE AT ORAL WILL BE RECORDED AS "ABSENT" AND ZERO MARKS AWARDED. Any personal circumstances that may cause late submission should be recorded and processed following the usual procedure.

Resit Assessment Procedures:

A group that fails to meet the threshold level for a pass will be allowed to complete further work^^ over summer, with submission prior to the July/August exam diet. This will be assessed for consideration by the August/September Board of Examiners.

^^Students must contact the module Registrar for details as soon as results confirm that a resit is required.

PLEASE NOTE:
Students must gain a summative mark of 50% to pass the module. Students who fail the module at the first attempt will be re-assessed during the July/August exam diet. This re-assessment will consist entirely of oral examinations. No marks from any previous attempts will be transferred to a new resit attempt.

Recommended Reading

No specific recommendations. (Students will be expected to research extensively in support of their project)

Additional Student Feedback
(Please specify details of when additional feedback will be provided)

Feedback is individually given to each group. Additional feedback is provided to each group after each assessment in the form of written feedback sheets.

Session: 2024/25

Approved:

Programme Lead/Director Signature: Dr G Houston-Scott

Date of Last Modifications: 19/08/24

(MAE template updated July 2024)

MODULE TIMETABLE

Module Code:	**ME525**	**Module Title:**	**MEng Group Project - Aerospace**

Brief Description of Assessment:

Statement of work (SoW) (S1)
Interim assignment/presentation (Wk 4, S1)
Final report/presentation/promotional materials (S2), all other timings defined by student groups at outset of project.

SUBMISSION DEADLINES WILL BE STRICTLY APPLIED. LATE SUBMISSION OF REPORTS/PAPERS OR NON-ATTENDENCE AT PRESENTATION(S) WILL BE RECORDED AS "ABSENT" AND ZERO MARKS AWARDED.

Assessment Timing

Indicated on the table below are the start/submission dates for each assignment/project and the timing of each exam/assessment.

Please note: Timings can and will change, this should only be used as a guide.

Semester One	W&D Wk	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	Exam Period
	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Coursework Submit SoW	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Coursework Submit Interim Assignment

Semester Two	C&D Wk	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	Exam Period
	Presentation Interim Oral	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Coursework Submit Final report & other materials	Choose an item. Choose an item.	Presentation Final Oral