MODULE DESCRIPTION FORM

DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING

ME900 PROJECT

Module Registrar: Dr Bilal Ahmad b.ahmad@strath.ac.uk	**Taught To (Course): Cohorts for whom module is compulsory**	
Other Lecturers Involved: Project supervisors	**Credit Weighting: 60**	**Semester: Appropriate to specific cohort.**
Compulsory class	**Academic Level: 5**	**Suitable for Exchange: N**

Required pre-requisites

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.

n/a

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

Lecture	Tutorial	Laboratory	Groupwork	External	Online	Project	Assignments	Private Study	**Total**
2	9							589	600

Educational Aim

To provide students, an opportunity to bring their knowledge and skills together and deploy them in a significant practical investigation for solving complex problems in engineering. The investigation focusses on the critical evaluation of the problem, the collection and analysis of research data, the use of appropriate engineering analysis tools in tackling unfamiliar, novel problems, the generation of an innovative design for products, systems, components or processes to fulfil new needs, the use of theory or experimental research, the adaptation of engineering analytical methods, the demonstration of engineering principles or testing of ideas, and the reporting of procedures and findings.

Learning Outcomes

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

LO1 Specify and/or articulate an engineering problem, critically review the existing literature pertaining to that problem, understand concepts relevant to the discipline, and formulate a project plan with clear objectives, milestones and deliverables.

LO2 Collect and analyse research data, use appropriate engineering analysis tools, apply appropriate engineering analysis methods or adapt analytical engineering methods for solving complex problems and innovative design for products, systems, components or processes, and use theory or experimental research as well as fundamental knowledge to investigate new and emerging technologies.

LO3 Manage independently, by exercising initiative and personal responsibility, a sizeable project, including the completion of milestones and deliverables as planned after the evaluation of risks and their mitigations; plan self-learning and improve performance; and demonstrate a high level of professional and ethical conduct in engineering.

LO4 Perform detailed analysis of implemented methodologies and assess their limitations, interpret generated results in the context of the engineering profession, make sound and justified conclusions and recommendations for further work, promote sustainable development in engineering, demonstrate an advanced level of knowledge and the understanding of a wide range of engineering materials and components, and take into account a range of commercial and industrial constraints. Be aware of relevant regulatory requirements governing engineering activities.

Syllabus

The module will teach the following:

Project specification, project planning, the critical assessment of literature, technical writing, defining and implementing methodologies, assessment of methodologies, presentation of the results of experiments, modelling or analysis, and the interpretation of results in a broad engineering context

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
C1. Satisfactory communication of aim, objectives and context, and accurate and relevant background material via the interim presentation and the final project report.

LO2
Accurate and complete description of the work achievement and novelty, and the results in the final project report.

LO3
C1. Completion and submission of formal project deliverables including the interim presentation and the final report, within appropriate timescales.
C2. Demonstrate a satisfactory level of initiative, independent thinking, self-learning, and planning and understanding evidenced from meetings with the supervisor and from the interim presentation.

LO4
C1. Demonstration of a satisfactory level of engineering achievement and an advanced level of knowledge and the understanding of a wide range of engineering problems via deep and sound discussion, and conclusions and recommendations for further work based on results apparent from the final report.

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/)

Assessment is performed as:

Feedback is given in different forms:

Satisfactory performance will be determined through the interim presentation and the final project report with continuous feedback from the supervisor via project meetings.
Time management will be encouraged via regular project meetings with the supervisor and by assessing progress against the project plan.
One-to-one feedback will be given in the form of a continuous discussion of progress on the project with the supervisor.
Continuous feedback from the supervisor and feedback on the interim presentation from the two assessors will give a realistic opportunity for improving performance, where such performance in the early stages falls below that which is required to succeed in this module.
Summative assessments in the form of the interim presentation and the final project report will be performed.
Students failing the summative assessment will have the opportunity to discuss their performance in general terms with their supervisor.
Interaction and dialogue between the student and the supervisor will be an integral part of the project supervision.
Self-assessment of progress will be facilitated by discussions with the supervisor and the second assessor during the interim presentation.
Choice in the topic, method, criteria, weighting or timing of assessments may be provided but cannot be guaranteed.
Students will be invited to give feedback on the assessment methods and criteria via the staff-student committee.
Mutual support and, where appropriate, group discussions will be encouraged.
The module will be delivered in a supportive, encouraging and motivational atmosphere.

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

Examination				Interim Presentation		Project Thesis and Conduct Mark	
Number	Month(s)	Duration	***Weighting***	Number	***Weighting***	Number	***Weighting***
				1	10%	1	90%
*				* LO1, LO3		* LO1, LO2, LO3, LO4	

* ***L/Os:*** *Indicate which Learning Outcomes (L01, L02, etc) are to be assessed by exam/coursework/practical/project as required.*

Coursework / Submissions deadlines (*academic weeks*):

Interim Presentations will be delivered between week 6 and 10 of the full time project.
The project thesis should be submitted by the deadline communicated during the information session in March, with submission required after around 14 weeks work on the project.

Resit Assessment Procedures:

In exceptional cases only, where a student gains a mark of at least 45% at first attempt, resubmission may be possible as a result of decision from the Board of Examiners.

PLEASE NOTE:
Students must gain a summative mark of 50% to pass the module.

Recommended Reading

Recommended by the allocated supervisor

Session: 2024/25

Approved:

Programme Lead/Director Signature: Dr A McLaren

Date of Last Modifications: 19/08/2024

(MAE template updated July 2024)

MODULE TIMETABLE

Module Code:	**ME900**	**Module Title:**	**PROJECT**

Brief Description of Assessment:

Interim Presentations will be delivered between week 6 and 10 of the project and worth 10%. Start date of the project will be communicated during the information session in March
Project thesis worth 90% should be submitted by the deadline communicated during the information session in March.

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 could change during unforeseen periods of disruption; this should only be used as a guide.

Semester Three	WK1	WK2	WK3	WK4	WK5	WK6	WK7	WK8	WK9	WK10	WK11	WK12	WK13	WK14
	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.	Presentation	Presentation	Presentation	Presentation	Presentation	Choose an item. Choose an item.	Choose an item. Choose an item.	Choose an item. Choose an item.	Course work Submit