

## MODULE DESCRIPTION FORM

### DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING

### ME420 INDIVIDUAL PROJECT – Aerospace Engineering

Module Registrar: Dr Stuart Grey <a href="mailto:stuart.grey@strath.ac.uk">stuart.grey@strath.ac.uk</a>	Taught To (Course): Cohorts for whom class is compulsory		
Other Lecturers Involved: All Project Supervisors	Credit Weighting: 40 (ECTS 20)	Semester: 1 and 2	
Assumed Prerequisites:	Compulsory class	Academic Level: 4	Suitable for Exchange: N

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

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

#### Educational Aim

The aerospace individual projects aim to expose the students to real aerospace engineering/research problems so that they can independently apply their knowledge and intellectual ability to solve them. This module provides an opportunity for the students to demonstrate their engineering skills and knowledge, critical thinking, technical writing and presentation abilities, maturity and independence at a level expected from a near-graduate level student.

#### Learning Outcomes

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

- LO1 Analyse and evaluate research in the field of Aerospace Engineering over an extended period.
- LO2 Made a technical contribution to the field of study and research associated with the project
- LO3 Developed skills in technical writing to an appropriate standard and in the correct style
- LO4 Communicate and discuss the evolution of the project, its aims, outcomes and conclusions with a panel of fellow professionals

#### Syllabus

The student will carry out appropriate research and scholarship to meet the learning outcomes.

#### 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 Able to critically review the relevant literature to the project
- C1 Able to effectively plan their own time and creation of deliverables

##### LO2

- C1 Able to communicate their technical contribution to supervisor and panel

##### LO3

- C1 Able to create a concise and effective technical paper
- C2 Able to create a comprehensive, technically founded thesis

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/staff/policies/academic/> )

**Help clarify what good performance is.**

Regular feedback will be obtained through meetings with the supervisor, to give clear guidance about performance and progress. This will tend to be informal in nature, but students should recognise this as feedback, and be encouraged to reflect on it.

**Encourage 'time and effort' on challenging learning tasks.**

Regular meetings with the supervisor will encourage the student to work steadily over the whole project to achieve a high quality end result. The first oral exam in December will give two independent assessors an opportunity to give feedback on the quantity and quality of work.

**Ensure that summative assessment has a positive impact on learning.**

Students will be shown the assessment criteria in advance, and given guidance on the numerical marking scheme. This will allow them to focus effort on achieving good learning outcomes with the aim of achieving a high mark.

**Facilitate the development of self-assessment and reflection in training**

Students will be encouraged to reflect on their progress throughout the project, and plan their work effectively to meet the deadline. A written project plan will be required at the December oral exam to facilitate time management and focus in the second semester.

**Encourage positive motivational beliefs and self-esteem**

Completion of an individual project can be highly motivating and a source of satisfaction for the students.

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

Examination				Coursework		Practical		Project	
Number	Month(s)	Duration	Weighting	Number	Weighting	Number	Weighting	Number	Weighting
Oral	Nov	15mins	15%					1	50%
Oral	Mar	30mins	35%						
* LO1, LO2, LO3, LO4				*		*		* 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):**

First oral November, 1-page project summary to be submitted at this time.  
Second oral March, Technical paper to be submitted in advance.  
Thesis to be submitted April.

**SUBMISSION DEADLINES WILL BE STRICTLY APPLIED. LATE SUBMISSION OF REPORTS/PAPERS OR NON-ATTENDANCE AT ORAL WILL BE RECORDED AS "ABSENT" AND ZERO MARKS AWARDED. Any personal circumstances that may cause late submission should be recorded and processed according to standard University procedures.**

**Resit Assessment Procedures:**

In exceptional circumstances, further work over the summer followed by submission of a revised technical paper (prior to commencement of the August exam diet) and an oral examination may be permitted.

**PLEASE NOTE:**

**Students need to gain a summative mark of 40% to pass the module. Students who fail the module at the first attempt will be re-assessed during the August diet. This re-assessment will consist of project resubmission and oral exam.**

**Recommended Reading**

Reading and research appropriate to specific project topic.

**Additional Student Feedback**

*(Please specify details of when additional feedback will be provided)*

Date	Time	Room No
TBC	TBC	Check timetable webpages for details

Feedback will be provided to students after the 1<sup>st</sup> Oral examination to allow reflection on progress in semester 1 and to aid planning for 2<sup>nd</sup> semester.

Regular meetings should be held with the project supervisor at which recent work and progress should be discussed. Feedback on progress can be provided during the meeting. Plans for future work, immediate and longer term should be discussed at each meeting to ensure successful project outcome.

Session: 2020/21

**Approved:**

**Course Director Signature: Dr Stuart Grey**

**Date of Last Modifications: 10 September 2020**

(Updated August 2020)

## MODULE TIMETABLE

**Module Code:**

**ME420**

**Module Title:**

**Individual Project - Aerospace**

### Brief Description of Assessment:

First oral November 15mins (1page project summary to be submitted in advance)

Second oral March 30mins (Technical paper to be submitted in advance)

Thesis to be submitted April.

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.

### Assessment Timing:-

Indicate on the table below the start/submission dates for each assignment/project and the timing of each exam/assessment using the dropdowns provided. Dropdowns can be left blank. Add extra notes below the dropdowns.

**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.	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 (Abstract)	Class Test (Oral)

Semester Two	C&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.	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 (Tech Paper)	Class Test (Oral)