

MODULE DESCRIPTION FORM



DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING

ME415 STRATEGIC ANALYSIS OF ENGINEERING BUSINESS CASE STUDIES

Module Registrar: Dr I Kokkinakis ioannis.kokkinakis@strath.ac.uk	Taught To (Course): BEng(Hons) / MEng MAE, MEng EME Cohorts for whom class is compulsory / optional		
Other Lecturers Involved: Industrial mentors, Prof D Nash (and others)	Credit Weighting: 10	Semester: 1	
Assumed Prerequisites: 16288 – Professional Studies	Compulsory class	Academic Level: 4	Suitable for Exchange: Y

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

Lecture	Tutorial	Laboratory	Groupwork	External	Online	Project	Assignments	Private Study	Total
6	18		30				20	26	100

Educational Aim

This module aims to provide students with an introduction to the concept of the conscious pursuit of competitive advantage by business.

Learning Outcomes

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

- LO1 understand that business decisions are not simple technically-based evaluations, even in the engineering sector,
- LO2 understand that strands of i) finance, ii) people, iii) marketing and iv) production intertwine to form an often complex web in which the generation of profit is not straightforward,
- LO3 understand that this analysis of the business case should be a team effort, with inputs of appropriate literature research to the basic data,
- LO4 understand that expression of one's ideas in a semi-formal meeting is an integral and essential part of a professional engineer's competence.

Syllabus

The module will teach the following:

The class will meet weekly for 3-hour periods in semester 1. Attendance at all meetings of the class is a mandatory condition of the award of the credits for the class. The initial weeks of the first semester will consist of introductory lectures, demonstration of case study techniques and introduction to mentors.

Students will work in groups before the meetings in the following weeks to analyse and prepare for presentation, engineering business case studies from a selection of sources. Each student will present an analysis of their own aspect of the case. A discussion of the presentation will ensue, moderated by industrial mentors, who will award a group mark for the case analysis and an individual mark for each presentation.

Students will grade each other with the peer marking form and this grading may modulate individual marks.

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 understand that business decisions are not simple technically-based evaluations, even in the engineering sector,
 C1 understands source case study material,
 C2 identifies key issues and moves beyond what is given or expected,
 C3 draws conclusions that are insightful.

LO2 understand that strands of i) finance, ii) people, iii) marketing and iv) production intertwine to form an often complex web in which the generation of profit is not straightforward,
 C1 understands key issues relevant to the above strands,
 C2 shows selectively what is important,
 C3 synthesises all aspects of the business case study.

LO3 understand that this analysis of the business case should be a team effort, with inputs of appropriate literature research to the basic data,
 C1 works as part of a team and develops team working strategies,
 C2 performs as part of the team to collect and analyse relevant literature,
 C3 presents ideas and proposals as part of the team.

LO4 understand that expression of one's ideas in a semi-formal meeting is an integral and essential part of a professional engineer's competence,
 C1 develops a succinct presentation with given presentation guidelines and presents to an audience,
 C2 uses a relevant technical language with ideas and concepts presented very lucidly,
 C3 improves on presentation style with feedback given by industrial mentors.

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/>)

The group performance assessment is done according to the assessment sheet given in the class website. The individual presentation performance is assessed according to the given presentation guidelines. The students are expected to spend a significant time outside the class to prepare case study presentations as part of a team. Rehearsal of each presentation before the actual presentation day is essential for a successful presentation. The mentors return an informal verbal feedback during the class discussion and a marking sheet with written feedback is given to each group that can help the group for their next presentation. Group feedback sheets are returned 1 week after the group presentations. This arrangement streamlines the feedback so that groups presenting later do not gain an advantage. Marks analysis for previous years did not show any significant advantage of presenting later.

The summative assessment is given according to the marking schedule which is available on the class website. The students are required to act on the feedback given to improve their next presentation. The mentors encourage discussion of the case studies in detail and students are required to reflect on their presentation based on the feedback. The students are informed on the weighting and the timing of their group presentations in detail and should contact class registrar well in advance if problems arise for a particular presentation day (e.g. university official sports activity timing clash).

Students submit peer marking forms with an assessment of each team member's contribution to the team. If the average peer mark is below 50% for a team member then the individual mark may be weighted or modulated by the peer mark. Peer marking sheets are confidential and will not be released to other team members.

Due to the ongoing COVID-19 situation (2020/21) and the anticipated inability of live group presentations from taking place, the students assessment will mainly focus on the quality of the pre-recorded video narrative and, more importantly, the technical level of the test-case analysis they carried out.

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

Examination				Case Study Presentation		Practical		Peer Marking	
Number	Month(s)	Duration	Weighting	Number	Weighting	Number	Weighting	Number	Weighting
				2	90%			1	10%
*				* LO1-4		*		* LO1-4	

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

Coursework / Submission deadlines (*academic weeks*):

Case study to be before discussion. Individual peer marking forms to be submitted confidentially on Myplace immediately after each group's second presentation.

Resit Assessment Procedures:

Submission of additional case study analysis work prior to commencement of the August exam diet.

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 40% to pass the module. Students who fail the module at the first attempt will be re-assessed prior to the August diet. This re-assessment will consist entirely of a coursework. No marks from any previous attempts will be transferred to a new resit attempt.

Recommended Reading

*****Purchase recommended **Highly recommended reading *For reference**

None

Additional Student Feedback

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

Date	Time	Room No
Mentor marking sheets with feedback returned two weeks after each group's presentation.	Based on presentation date	Online

Session: 2020/21

Approved:

Course Director Signature: Dr Stuart Grey

Date of Last Modifications: 10 September 2020

