

Module Code	MEU44E02
Module Name	MEU44E02 Mechanical, Biomedical, Engineering with Management Project
ECTS Weighting	15 ECTS - Derogation
Semester taught	Semester 2
Module Coordinator/s	B: Prof. Tim Persoons (persoont@tcd.ie) Bio: Prof. David Hoey (dahoey@tcd.ie) EwM: Prof. Rocco Lupoi (lupoir@tcd.ie)
<u>Module Learning Outcomes</u> with reference to the <u>Graduate Attributes</u> and how they are developed in discipline	<p>On successful completion of this module, students should be able to:</p> <p>LO1. Contribute to the development of scientific/technological knowledge in one or more areas of their stream of Engineering.</p> <p>LO2. Identify, assess and synthesize existing literature, state of the art and research findings for an unfamiliar problem.</p> <p>LO3. Apply a range of standard and specialised engineering methods to provide innovative and appropriate solutions to complex engineering problems.</p> <p>LO4. Design and conduct experiments and, under guidance in a peer or team relationship, to analyse and interpret data.</p> <p>LO5. Discuss and critically evaluate project findings, reflect on the strength and limitations of the work done and assess the implications of the project outcomes for engineering practice.</p> <p>LO6. Write a dissertation to professional and academic standards using appropriate graphics and references, and present to peers and respond effectively to questions and criticism.</p> <p>Graduate Attributes: levels of attainment</p> <p>To act responsibly - Attained</p> <p>To think independently - Attained</p> <p>To develop continuously - Attained</p> <p>To communicate effectively - Attained</p>
Module Content	The MEU44E02 engineering project is a capstone project for students exiting at the year 4 stage. There is the expectation for a high level of technical sophistication in the project appropriate for an Engineers Ireland level 8 accredited programme.

Teaching and Learning Methods	Self-directed learning with regular on-line meetings with project supervisor.				
COVID-19 Conditions	It may not be possible to run all of the proposed experimental projects due to space restrictions imposed by the pandemic guidelines. Furthermore, in the event of total lockdown of campus, each project supervisor has devised an off-campus plan B approach for their project. Further details on individual projects are available from the respective project supervisor.				
Assessment Details Please include the following: <ul style="list-style-type: none"> • Assessment Component • Assessment description • Learning Outcome(s) addressed • % of total • Assessment due date 	Assessment Component	Assessment Description	LO Addressed	% of total	Week due
	Project Plan	Two-page summary outlining nature of project (1 page) and plan of work (1 page); supervisor feedback	1-6	5	4 th Feb 2022
	Presentation	5-minute oral presentation on project, followed by 5 minute questions/feedback from academic/technical staff	1-6	15	4 th Mar 2022
	Thesis	As per detailed guidelines at end of this document: max 40 pages not including appendices	1-6	80%	14 th Apr 2022
Reassessment Requirements	See module coordinator				
Contact Hours and Indicative Student Workload Error! Bookmark not defined.	Contact hours: weekly meetings with supervisor Approx. 10				
	Independent Study: Approx. 300				
Recommended Reading List	https://student-learning.tcd.ie/learning-resources/writing/index.php				
Module Pre-requisite					
Module Co-requisite	ME4E03 Research Methods or MEU44BM4 Experimental and Research Methods				
Module Website	https://www.tcd.ie/Engineering/undergraduate				