

Module descriptor for MEU44E02: Biomedical Engineering Project

Module code	MEU44E02
Module name	Biomedical Engineering Project
ECTS weighting	15 ECTS - Derogation
Semester taught	Semester 2
Module coordinator/s	Assistant Professor Brooke Tornifoglio Professor Conor Buckley Professor Mark Ahearne Professor David Hoey
Module learning outcomes (LO) with reference to the graduate attributes and how they are developed in discipline	<p>On successful completion of this module, students should:</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 To act responsibly - Enhanced To think independently - Enhanced To develop continuously - Enhanced To communicate effectively - Enhanced</p>
Module content	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 meetings with supervisor. Weekly clinics will be held for all BAI students to meet with all supervisors together initially before breaking into smaller groups. Weekly clinics are mandatory and students will be asked to give brief updates on progress via informal presentations each week.

Assessment details	Component	Description	LO	% of total	Week due*
	Project plan	Two-page summary outlining nature of project (1 page) and plan of work (1 page); supervisor feedback given	1-6	5	2
	Interim Presentation	5-minute oral presentation on project, followed by 5 minutes questions/feedback from academic/technical staff	1-6	15	6
	Thesis	As per detailed guidelines at the end of this document: max 40 page not including appendices	1-6	80	12

*subject to change, all assessments and deadlines will be in line with MMBE discipline deadlines communicated through Blackboard

Reassessment requirements	See module coordinator
Indicative student workload	Contact hours: weekly meetings with supervisor via clinic hours; approx. 15 Independent study: approx. 300
Recommended reading list	
Module pre-requisite	None
Module co-requisite	ME4E03 Research Methods or MEU44BM4 Experimental and Research Methods
Module website	
Other schools/departments involved in delivery of this module?	N/A
Module approval date	2026
Approved by	Brooke Tornifoglio
Academic start year	2026
Academic year of date	2026/2027