Module Title:	Robotics Project
Language of Instruction:	English

Credits:	10

NFQ Level:	6

Module Delivered In	2 programme(s)

Teaching & Learning Strategies:	This module will be delivered through a mix of lectures and class-based activities and project work, including project deliverables and a professional write up.

Module Aim:	This module aims to introduce students to project based learning and develop their oral and written communication skills. The module will introduce students to project planning and structured engineering design, while engendering an awareness of ethical and safety issues in engineering. The students will participate actively in writing activities (individually and in collaboration) that model effective scientific and technical communication in the workplace.

Learning Outcomes
On successful completion of this module the learner should be able to:

LO1	Apply project-based learning to solve unforeseen problems
LO2	Apply theoretical knowledge in solving problems encountered in a team project
LO3	Discuss any ethical issues, environmental impacts and health and safety issues associated with their project
LO4	Demonstrate good technical report-writing skills
LO5	Prepare and deliver an oral presentation
LO6	Demonstrate appropriate management techniques in the execution of their project (including time management and project planning)

Pre-requisite learning
Module Recommendations *This is prior learning (or a practical skill) that is recommended before enrolment in this module.*
No recommendations listed
Incompatible Modules *These are modules which have learning outcomes that are too similar to the learning outcomes of this module.*
No incompatible modules listed
Co-requisite Modules
No Co-requisite modules listed
Requirements *This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.*
No requirements listed

Module Content & Assessment

Indicative Content
Project Project planning, project design (including 3D design and implementation), project development, final testing, project documentation, final presentation
Written communication Readability, sources of information, logical presentation of material, use of tables and graphics, engineering documents, reports
Presentation Preparing the presentation, graphics, animation, presentation, hand-outs, preparation for questions
Ethics Professional code of ethics: code of ethics for engineers, citing information, plagiarism, referencing sources, copyright

Assessment Breakdown	%
Project	100.00%

No Continuous Assessment

Project				
Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Project	Multimedia interim presentation	1,2,3,4,5,6	5.00	n/a
Project	Interim report (to include introduction, background, progress to date, ethical considerations, project plan/Gantt chart)	1,2,3,4,6	15.00	n/a
Project	System development, implementation and test	1,2,3,6	30.00	n/a
Project	Final technical report	1,2,3,4,6	20.00	n/a
Project	Final presentation and interview	1,2,3,5,6	10.00	n/a
Project	Group work demonstration (fun class competition aiming to evaluate and asses the dynamics of a group project, managing team work, work distribution within the team, etc.).	1,2,3,4,5,6	20.00	n/a

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Lecture	Every Week	2.00
Laboratory	Every Week	5.00
Independent Learning	Every Week	11.00
	Total Hours	18.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_EEROB_B	Bachelor of Engineering (Honours) in Robotics and Automated Systems	2	Mandatory
CW_EEROO_D	Bachelor of Engineering in Robotics and Automated Systems	2	Mandatory

Programme Code	Programme	Semester	Delivery