

Module Title:	Project	
Language of Instruction:	English	
Credits:	10	
NFQ Level:	8	
Module Delivered In	No Programmes	
Teaching & Learning Strategies:	The students are supervised by a lecturer in the CAD/CAM and general workshop, for project each week. Students are encouraged to contact specific lecturers / departments within the college and external bodies with expertise in specific areas applicable to their project.	
Module Aim:	The aim of the Project is to provide the student with the opportunity to apply the knowledge and skills developed on the programme to solve an engineering problem, and in doing so extend the student's experience in communication, project management and interaction with industry	
Learning Outcomes		
On successful completion of this module the learner should be able to:		
LO1	Plan, execute and manage an industry level engineering project making use of a wide range of resources.	
LO2	Validate a product, system or design.	
LO3	Draw reasonable and objective conclusions from the process described above.	
LO4	Make interactive verbal presentations to peers, academic staff and a public audience.	
LO5	Write a professional technical report.	
Pre-requisite learning		
Module Recommendations		
This is prior learning (or a practical skill) that is recommended before enrolment in this module.		
6438	PROJ H3627	Development Project
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

Scope and title of project

The scope and title of the project will be determined by the lecturer in consultation with the student. Typical project components will include the following • design only of an engineering product or system; • design and manufacture of an engineering product or system; • mathematical modelling of an engineering system; • review of an emerging technology or review an existing product design; • Development of an engineering product or system. • During the initial weeks of the project the student will investigate the feasibility of the proposed project A project will normally include all of the following elements: • Literature survey; • Use of internal and external resources; • Theoretical analyses; • Validation of 'product', 'System', 'Process'; • Interpretation of results. • Conclusions and recommendations

Detailed Specification

In consultation with their supervisor, students will, at an early stage, prepare a detailed specification of the work to be carried out. This will include: • a statement of the objectives to be achieved; • a list of the publications to be surveyed; • suggestions on contacts to be made with external bodies; • an outline of any design, manufacturing and analytical work to be undertaken; • a suggestion on any relevant financial analysis that could be carried out; • suggestions on how the outcome of the work could be tested or validated; • a statement identifying the risks involved in carrying out the work and the steps to be taken, under the health and safety regulation, to minimise these risks. Final project specification will be approved by the lecturer following this stage

Management of Project

Supervision of Project Work One lecturer will coordinate overall project work and will distribute an agreed Project Briefing Document to each student. Log Book Students will maintain a weekly record, in a log book, of their progress. This record will contain a list of references consulted, contacts made with others both inside and outside the Institute, materials ordered, any design or analytical work carried out, items manufactured, products tested and any other project work undertaken. Log books should be submitted weekly to project supervisors for inspection. Overall Schedule In addition to the activities outlined above, students will be required to make two oral presentations on their project and to submit one written report. It is expected that the project will be completed in 24 out of the 30 weeks in the academic year. This will allow time for the students to prepare for their final examinations. An overall schedule for the major stages of project work is given in the table below: Major stages Week of submission Title of project 1 Specification and plan 3 First presentation 10 Final report 22 Final presentation 24 Communication of Results First Presentation During week 10, students will be expected to make formal presentations to staff and students on their projects. They will be encouraged to make use of an overhead projector or PowerPoint. Where PowerPoint is used, they will be required to load PCs before a session begins. They will not be allowed to use more than 10 acetate sheets or slides. Presentations will be limited to 10 minutes and will be followed by questions.

Written Report

During week 22, students will be expected to submit to their supervisor their final written report. This report will be limited to 150 pages long, inclusive of the title page, the preliminary pages, graphs, tables, diagrams, charts, photographs, references, appendices etc. Pages exceeding this limit will not be assessed. The report will be typed on one side of A4 sheets, using 12 points Times New Roman font and 1.5 line spacing. The report will contain the following: • one title page; • one page containing a declaration of originality; • one page containing acknowledgments; • a summary of the project; • a table of contents; • Table of tables • Table of figures • an introduction; • a literature survey; • the body of the report; • interpretation of results and conclusions; • a list of references and, if appropriate, an appendix; The title page will contain at the top the name of the Institute, Faculty and Department; in the middle the title of the programme, the title of the project and the author's name; in the bottom left hand corner the date of submission and in the bottom footer the page number On the acknowledgments page, the assistance given by others will be recognised. The summary page will give a very brief synopsis (less than 300 words) of the work. The introduction will define the objectives for the project, introduce the reader to the technology behind the work and, where appropriate, set the project in the context of previous work. The last appendix will contain an updated Gantt chart showing how the work progressed. Students will be advised about the College regulations on plagiarism and about the seriousness of breaching these regulations. Suitable referencing system will be used.

Assessment Breakdown

	%
Project	100.00%

No Continuous Assessment

Project

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	The final report is assessed on the following: • Conducting a literature review • Using resources inside and outside the college • Construction of a project plan • The construction of a clear methodology • Clear and unbiased interpretation of results • The ability to discuss results and methodology and contrast this with literature • The ability to draw reasonable and objective conclusions • The ability to construct a technical document and communicate effectively with a technical audience. • Effort and participation	1,2,3,5	75.00	Week 28
Project	Initial presentation 5%, Interim Presentation 10% Final Presentation 10%. Note Interim and Final Presentations are made in front of a panel of lecturers from within the department and their peers. The lecturers assess the presentation under various headings of time, structure of presentation, delivery and responses.	1,2,3,4	25.00	n/a

No Practical

No End of Module Formal Examination

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Assignment	Every Week	4.00
Assignment	Every Week	1.00
Estimated Learner Hours	Every Week	3.00
Total Hours		8.00

