



Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University



BEng Mechanical and Manufacturing Engineering - INTRA Programme

The BEng degree programme combines Mechanical Engineering and Manufacturing with an emphasis on Computer-Aided Engineering in the final year.

Programme Outline

In the first three years of study (i.e. prior to their INTRA work placement) all Mechanical and Manufacturing Engineering students complete two significant team projects; one in their first year (a multidisciplinary Mobile Robotics project) and one in their third year (a mechanical design-and-build project). They complete modules in Engineering Computation (including some advanced Excel and Excel macros), Pneumatics and Control, Design and CADD (using SolidWorks), Lean and 6 Sigma Manufacturing, Data Analytics for Engineers (including Statistical Quality Control), Project and Quality Management, and Project Development and Regulatory Compliance.

INTRA (INtegrated TRaining) Work Placements

Relevant work experience through DCU's internship programme "INTRA" (INtegrated TRaining) is a mandatory element of the BEng Mechanical and Manufacturing Engineering. Students are required to complete a six month INTRA placement at the end of third year, from April to September. INTRA Students are available for Interview from October onwards.

Work Areas

They have the ability to work in the following areas:

- Product/process design
- Project engineering
- Manufacturing system design and implementation
- Quality assurance / management
- Research and development
- Operations management
- Test engineering
- Technical documentation



Student Availability

Students are available for interview from early October onwards. For more information, contact:

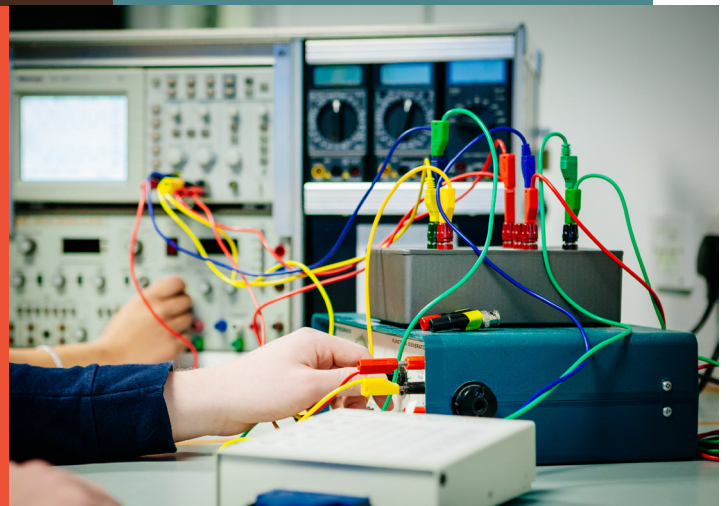
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Year 1	Year 2	Year 3	Year 4
Fundamentals of Professional Development	Engineering Mathematics III	Product Design	Fourth Year Project
Project and Technical Drawing	Design and CADD	Immunology and Cell Biology for Engineers	Advanced Engineering Materials and Manufacturing Processes
Numerical Problem Solving for Engineers	Energy – An Introduction to Thermodynamics	Mechanics of Machines 2	Finite Element Analysis
Software Development for Engineers	Strength of Materials I	Measurement and Signal Processing	Heat Transfer and Fluid Mechanics
Materials Engineering	Manufacturing Processes 1	Lean and 6 Sigma Manufacturing	Manufacturing Automation
Engineering Mechanics - Statics	Engineering Computation	Data Analytics for Engineers	Mechanical Engineering System Simulation
Introduction to Electronics	Engineering Mathematics IV	Fundamentals of Control	Mechanical Engineering System Simulation
Engineering Mathematics I	Strength of Materials II	Product Development and Regulatory Compliance	Operations Research Methods
Engineering Mathematics II	Mechanics of Machines 1	INTRA	
Basic Sciences for Engineering	Thermofluid Mechanics		
	Pneumatics and Control		
	Manufacturing Processes 2		