

FREQUENTLY ASKED QUESTIONS

What are the minimum requirements?

Admission Requirements: Leaving Certificate Grade D3 at Ordinary or Higher Level in 5 subjects including Mathematics and either English or Irish.

What are the most helpful Leaving Certificate subjects for the course?

Mathematics, Physics, Engineering, and Chemistry.

What standard of Mathematics is required for the course?

D3 or better at Ordinary or Higher Level.

Some students who apply to CIT courses may not achieve the required entry standard in Mathematics through the Leaving Certificate. For such applicants, CIT offers a second chance to reach the required entry standard through a CIT Mathematics Exam. Please see www.cit.ie for more details.

What are the typical student numbers in first year?

First year course/class size: 20

What is the course duration?

3 Years (6 Semesters)

Higher Certificate Option

Please note: Students who successfully complete Year 2 of this programme and do not wish to progress to Year 3 will receive the Higher Certificate in Building Services Engineering.

BUILDING SERVICES ENGINEERING

Building Services Engineering involves the design of the environments of the future; comfortable living and work spaces which allow people to function sustainably and effectively within the built environment. Building Services Engineers create lighting, heating and air conditioning systems for large communal spaces such as sports centres, shopping centres, hospitals or hi-tech facilities. Their job focuses on creating vibrant, dynamic sustainable environments within large building complexes, maximising the contribution from renewable energy technologies whilst minimising the total energy consumed.



ENQUIRIES TO

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BACHELOR OF ENGINEERING IN BUILDING SERVICES ENGINEERING

Course Code
CR 072



WHY BUILDING SERVICES AT CIT?

The pharmaceutical, biomedical and electronics industries are heavily represented within the Cork region and are highly serviced industries requiring a significant building services design input into new facilities and the upgrading of existing facilities. All are high tech, high energy users and all have a primary goal of energy minimisation and efficiency.

However, building services design is not restricted by geographical boundaries, a point which is clearly demonstrated by the range of international design and build projects undertaken by consultancies within the Cork region.

CIT, through its contacts with these industries and consultancies and its Building Services Engineering course, offers students a gateway to a challenging career at the forefront of energy efficient systems design.

CAREER OPPORTUNITIES

Graduates find employment in design consultancies, mechanical and electrical contractors and equipment suppliers. There is a variety of job opportunities ranging from management to pure design.

FURTHER STUDIES

Degree holders who achieve the specified level of academic performance are eligible to apply for entry to Year 4 of

- Bachelor of Engineering (Honours) in Building Energy Systems
- or the one year add-on
- Bachelor of Science (Honours) in Process Plant Technology or to Year 3 (carrying exemptions) of
- Bachelor of Engineering (Honours) in Sustainable Energy

GRADUATE PROFILE

PAUL O'SULLIVAN

Paul equates a qualification in Building Services Engineering with having a passport and a ticket. If you want to travel, there are building services projects all over the world.

Paul has worked on projects in Athens and Paris. He also worked for a Dublin based Mechanical and Electrical contractor in the tendering, installation, testing, commissioning and handover of Building Services systems.

Following this, he was appointed to a Cork based design consultancy, dividing his time between energy audits of companies, feasibility studies for energy reduction programmes and design of mechanical building services systems. He is currently employed as a lecturer on the Building Energy Systems programme at CIT



BEng in Building Services Engineering CR 072

The course is taught through the medium of formal lectures, tutorials, laboratory, practical and project work. A major services design project allows the students to demonstrate their design ability as well as their project management skills.

CIT has developed a website, <http://modules.cit.ie> which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments, and exams.

COURSE PROGRAMME

YEAR 1

Semester 1 (Sept – Dec)

Creativity, Innovation, and Teamwork
BS Electrotechnology 1
BS Mechanical 1
ICT for Eng Technicians
Introductory CAD
Thermofluids 1

Semester 2 (Feb – May)

BS Electrotechnology 2
BS CAD Elec 1
BS CAD Mechanical 1
Technological Mathematics 1
Mechanics 1
Elective
Building Services Processes
Free Choice Module

YEAR 2

Semester 3 (Sept – Dec)

BS Electrotech 3
BS CAD Mechanical 2
Fluid Systems Design
BS Mechanical 2
Technological Mathematics 2
Elective
Sustainable Energy
Free Choice Module

Semester 4 (Feb – May)

Technological Mathematics 201
BS Information Management
BS Thermofluids
Construction Technology
BS Project
BS Mechanical 3

YEAR 3

Semester 5 (Sept – Dec)

Technological Mathematics 301
BS Project – Research
BS Project Management
BS Mech 4
BS Electrotech 5
Elective
Building Energy Rating
Free Choice Module

Semester 6 (Feb – May)

Solar and Geothermal Energy
Technological Mathematics 302
BS Project – Design
BS Mechanical 5
BS Environmental Services
BS Electrotech 4