

FREQUENTLY ASKED QUESTIONS

What are the most helpful Leaving Cert Subjects?

Chemistry, Physics, Mathematics, and Biology.

If I'm not doing Chemistry or Physics, can I still apply?

YES – the fundamentals of all science subjects are delivered in the first year.

What standard of Mathematics is required for the course?

D3 or better at Ordinary or Higher Level. Numeracy, accuracy and precision are important, but advanced mathematical ability is not essential.

How is time allocated in first year?

Theory 60%, practical laboratory 40%.

How are marks allocated in first year?

Final examination 25-30%, continuous assessment 70-75%.

Is there placement during the course?

Mandatory placement in industry at home or abroad during the third year. Most placements are in the Cork area, but options may be available in other EU countries.

MINIMUM ENTRY REQUIREMENTS

- Level 7:** Leaving Certificate grade D3 at Ordinary or Higher level in 5 subjects including Mathematics and either English or Irish.
- Level 8:** Leaving Certificate with at least two subjects at minimum Grade C3 (Higher Level) together with a further four subjects (which must include Mathematics and either Irish or English) at Grade D3 (Ordinary or Higher Level).

PHYSICAL SCIENCES (COMMON ENTRY)

Pharma/Biopharma Industry

The majority of CIT science graduates gain employment in the pharmaceutical and biopharmaceutical sectors of the economy.

The Pharma/Biopharma industry is one of the pillars of the Irish economy and has experienced significant growth in recent years. Currently 13 of the top 15 companies in the world have substantial operations in Ireland: six of the top ten best selling drugs in the world are produced in Ireland, including Lipitor and Zocor. Products are manufactured for global markets.

Looking to the future, Ireland's biotechnology industry in particular is primed for growth due in part to the significant research and development investment in the sector in recent years, with combined public and industry funding of more €1 billion committed up to 2013. This is a result of a concerted effort in government policy to build a substantial foundation of world-class science and technology in Ireland's academic institutions. In particular, strong business and academic collaborations have been encouraged, and CIT Science is playing a significant part in this activity.



ENQUIRIES

Dr John Wood
Department of Chemistry
T: +353 (0) 21 4335872 or 4335870
E: john.wood@cit.ie

www.cit.ie



PHYSICAL SCIENCES (COMMON ENTRY)

Level 7 CR 300

Level 8 CR 305



THE COURSES

The School of Science at CIT offers two Level 7 BSc courses in Physical Science:

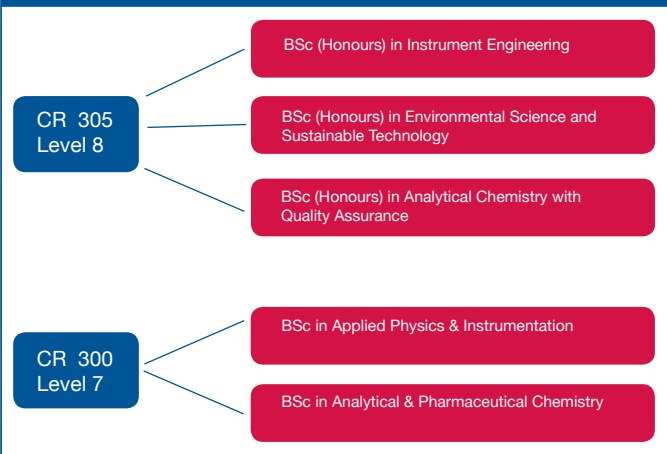
- BSc in Applied Physics and Instrumentation (CR001)
- BSc in Analytical and Pharmaceutical Chemistry (CR007)

and three Level 8 honours BSc courses in Physical Science:

- BSc (honours) in Analytical Chemistry with Quality Assurance (CR340)
- BSc (honours) in Instrument Engineering (CR360)
- BSc (honours) in Environmental Science and Sustainable Technology (CR365)

The Physical Sciences Common Entry courses (Level 7 and 8) are intended to facilitate applicants who are undecided about selecting a chemistry course or a physics course, by delaying the choice of course designation until half of their first undergraduate year has been completed. By that time, these students will have experienced theoretical and practical courses in all of the science areas, and will thus be better informed for making the important final choice of science discipline.

Progression from Physical Sciences (Common Entry)



COURSE PROGRAMME

Science courses at CIT are delivered over 3 (Level 7) or 4 (Level 8) academic years, with 2 Semesters per year. Semester 1 modules are completed between September and January, and Semester 2 modules between February and May. In general, 6 modules must be completed in order to complete a Semester, and 12 modules constitute a stage.

In Semester 1 of the first year, all Physical Sciences Common Entry students are introduced to the fundamentals of the various science disciplines, taking the following 6 modules:

- Chemical Principles
- Introduction to Physics
- Essential Mathematical Skills
- Biomolecules and Cells
- Practical Computer Technology
- Creativity, Innovation & Teamwork

At the end of Semester 1, students then select the chemistry or physics course that they intend to join in Semester 2 of the first year, and will remain with that course in subsequent years. The choice of course will be made from the following options:

Level 7 entrants

- BSc in Applied Physics and Instrumentation (CR001)
- BSc in Analytical and Pharmaceutical Chemistry (CR007)

Level 8 entrants

- BSc (honours) in Analytical Chemistry with Quality Assurance
- BSc (honours) in Instrument Engineering
- BSc (honours) in Environmental Science and Sustainable Technology

Details of the full list of modules on each programme, and the content of individual modules, can be found by accessing the following webpage, Level 7: <http://modules.cit.ie/CR 300> and Level 8: <http://modules.cit.ie/CR 305>.

COURSE STRUCTURE

Course delivery is usually by means of formal lectures and practical sessions, with about half of the working week spent in the laboratory. The courses are examined using a combination of continuous assessment (of both theory and practical work), and terminal examinations.

WORK EXPERIENCE

CIT science courses include a substantial period of work experience in industry at the end of the third year; this gives students a broader perspective of the science industry and its role. Work placement usually commences at the start of April, and frequently continues until the end of the summer period.

FURTHER STUDY, PROFESSIONAL RECOGNITION

Level 7 graduates achieving a minimum final average mark of 50% may proceed to the final year of the appropriate Level 8 BSc (Honours) programme in their chosen discipline.

Level 8 graduates achieving a minimum final grade of Second Class Honours Grade 1 are eligible for progression to postgraduate research programmes in science, at MSc and PhD level.

Graduates of the Level 8 BSc (Honours) courses of the School of Science are eligible to apply for membership of many professional bodies in their respective areas (e.g., the Royal Society of Chemistry, the Institute of Physics). The Level 8 courses are also recognised by the Department of Education & Skills as second-level teaching qualifications in their respective disciplines.