

Your degree in Analytical and Pharmaceutical Chemistry... What Next?

Graduating with an Analytical and Pharmaceutical Chemistry degree gives you a range of career opportunities. Now is the time to carefully research your options.

Chemistry is the fundamental science that deals with the “three Cs” – the composition of matter, the changes that transform matter, and the conditions under which those changes occur. The study of fundamental Chemistry allows us to increase our total knowledge and understanding of our universe, our environment, and indeed life itself. Applied Chemistry uses our understanding of fundamental Chemistry to improve the way in which we live, work, and develop.

Analytical chemistry deals with the great variety of methods used to identify and quantify the chemical components of materials, while pharmaceutical chemistry focuses on aspects of drug design, synthesis, and manufacture.

The Bachelor of Science in Analytical and Pharmaceutical Chemistry prepares students for careers as chemical laboratory technicians, who perform duties such as preparation of chemicals and samples for use, analysis of raw materials and/or products of chemical processes, setup/ maintenance/use of chemical instrumentation. Computerised instruments and information technology, generally are of great importance to the work of technicians, who may work in quality assurance, analysis, research, development and production. Career opportunities exist not only in the chemical/pharmaceutical industry, but also in such diverse areas as electronics, metallurgy, and food/beverage processing.

EMPLOYMENT

Graduates have become senior technicians, analysts, laboratory managers, and quality control supervisors. Some have progressed into company management positions over the years, and some have started and managed their own companies.

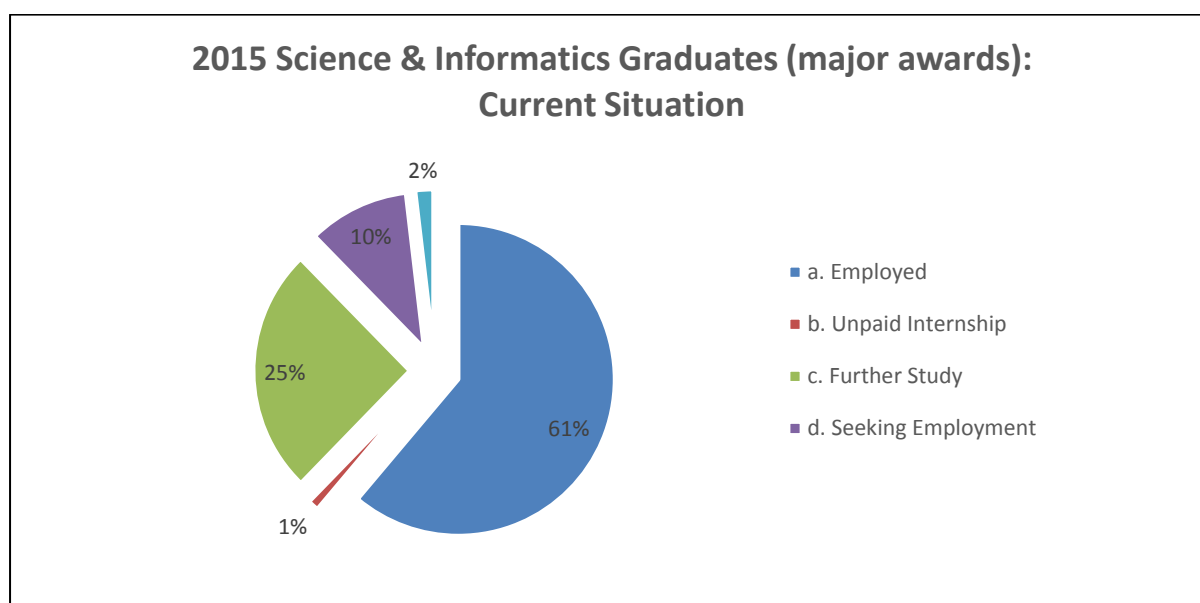
For Pharma companies globally, the expiry of patents is of key concern, however, the pharmaceutical industry in Ireland shows no sign of contracting anytime soon.

A period of work experience in industry at the end of the third year gives students a broader perspective of the industry and its role. Holders of the degree have become senior technicians, analysts, laboratory managers, quality control supervisors. Some have progressed into company management positions over the years, and some have started and managed their own companies. For Pharma companies globally, the expiry of patents is of key concern, however, the pharmaceutical industry in Ireland shows no sign of contracting anytime soon.

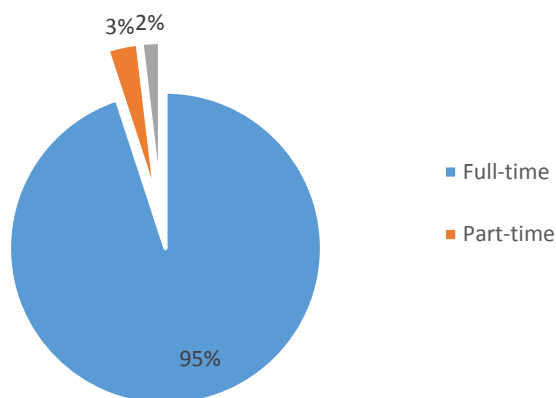
Research and development continues to play a significant role as the sector shifts towards personalised healthcare with targeted therapeutic interventions, leading to growth in innovative delivery mechanisms, companion diagnostics, niche busters and an increase in biologics.

Given recent investment announcements, it is anticipated that an additional 5,000 staff will be employed in Biologics manufacturing in Ireland over the next five years. Another 3,400 job openings will arise due to retirements and people leaving the sector. Total anticipated employment in the Biopharma industry will reach 33,200 in 2020.

What are BSc in Analytical and Pharmaceutical Chemistry graduates of 2015 doing?



2015 Science & Informatics (major awards): Employment Mode



Job Roles Graduates of BSc in Analytical and Pharmaceutical Chemistry 2015 secured:

Company	Job Role
Ifremer	Intern
Chara Partners	Lab Analyst
Eurofins Pharma	Analytical chemist
Car Partners	Lab Analyst
GlaxoSmithKline	Pharmaceutical Analyst

If you would like to know more about the First Destinations Survey please contact the Careers Office careersadmin@cit.ie

Potential Areas of Employment • Chemical Laboratory Technician • Laboratory Quality Assurance • Product Development • Pharmaceutical Production
According to the Expert Group on Future Skills Needs, a number of areas of skills in demand that are apparent across **all sectors**. These include:

- Data analytics skills
- Entrepreneurial competencies
- Skills for creativity, innovation and design
- Management skills and
- Generic skills such communications and team working

FURTHER STUDY

Graduates of the Bachelor of Science in Analytical and Pharmaceutical Chemistry who have attained a minimum final average mark of 50% may proceed to Year 4 of the Bachelor of

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CAREERS SERVICE

Science (Honours) in Analytical Chemistry with Quality Assurance (ACQUA) This in turn may lead to the option to proceed to postgraduate studies (MSc or PhD) in Chemistry at CIT or other colleges in Ireland or abroad.

Teaching The Honours Degree that follows the Bachelor of Science in Analytical and Pharmaceutical Chemistry satisfies the degree requirements of the Teaching Council. As with other recognised degrees, a postgraduate programme of Initial Teaching Education, accredited by the Teaching Council, consisting of two years full time study or 120 ECTS credits must subsequently be completed to be eligible for registration with the Teaching Council.