

CHEMISTRY

FACULTY OF SCIENCE



SCAN ME

Chemistry is often called the 'central science' because it forms the basis of every living and non-living entity in the universe. It has evolved from the time of the 16th Century alchemist to the present day chemist who uses advanced experimental and computational methods. It is the interface between the mathematical, physical and biological sciences.

Some 1200 undergraduate students from the Faculties of Science, Engineering & the Built Environment, and Health Sciences complete courses in the Department of Chemistry each year.

WHO WOULD BE INTERESTED IN THIS MAJOR?

This major would appeal to those who are naturally curious about understanding the world around them and are interested in investigating events at the atomic and molecular level.

Some chemists work in a lab, testing hypotheses with experiments while others may work on a computer developing theories or models or predicting reactions.

Many chemists develop new products such as paints, foods, pharmaceuticals, clothing or other products for industry, while others work in the biomedical and environmental sciences.

WHAT COURSES WILL YOU TAKE?

The compulsory courses listed below must be included in your selection of courses for a major in chemistry.

1ST YEAR LEVEL COURSES

- Chemistry I (or equivalent)
- Mathematics I (or equivalent)

- General Physics A
- General Physics B

2ND YEAR LEVEL COURSES

- Chemistry II: Intermediate Physical, Organic and Inorganic Chemistry

3RD YEAR LEVEL COURSES

- Chemistry III: Advanced Physical, Organic and Inorganic Chemistry

CAREER OPPORTUNITIES FOR GRADUATES

Chemistry is a popular choice of study at UCT as graduates are directly employable and are in demand in health, commercial and academic working environments. These include diverse fields such as energy production, agrochemicals, mining and minerals, pharmaceutical and medicinal industries (biotechnology, drug production and vaccines), polymers (plastics), food (quality control, wine and beer-making), secondary or tertiary educator, computational chemistry and even patent law.

Furthermore, modern-day chemistry has a responsibility towards the preservation of our environment through the practice of sustainable chemistry embodied by green chemistry principles which cuts across all the aforementioned fields, and therefore offers further career opportunities in this regard.

MINIMUM ADMISSION AND SUBJECT REQUIREMENTS

FPS of 550 (but admission only guaranteed at FPS above 660)

Mathematics 70% & Physical Science 60%
NBT in Mathematics, AL & QL to be written

