

Admission requirements

To study for a diploma you will need:

- ▶ Admission Points Score of 32 for Polymer Technology.
- ▶ Admission Points Score of 34 for Analytical Chemistry.
- ▶ Minimum National Senior Certificate (NSC) requirements for a diploma.
- ▶ English, Afrikaans or isiXhosa (home language or first additional language) on at least level 3 (40-49%).
- ▶ NSC achievement rating of at least 3 for Mathematics and Physical Sciences.

To study for a BSc degree you need:

- ▶ An Admission Points Score of 40 for direct acceptance or 30-39 subject to placement testing.
- ▶ Minimum NSC requirements for a degree.
- ▶ English, Afrikaans or isiXhosa (home language or first additional language) on at least level 3.
- ▶ NSC achievement rating of at least 4 (50-59%) for Mathematics.

Enquiries

Chemistry Department

Tel: 041 504 2286

Fax: 041 504 4236

Email: chemistry@nmmu.ac.za

Website: www.nmmu.ac.za/chem

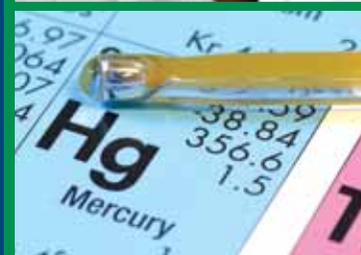
BLOEMFONTEIN.CO.ZA 0050



Nelson Mandela
Metropolitan
University

for tomorrow

Chemistry



Faculty of Science



APRIL 2010

Study chemistry

The study of chemistry involves investigation, observation, measurement, critical thinking, problem solving and scientific reasoning.

Practical laboratory work and theoretical studies form essential parts of chemistry programmes. Chemistry, being a central science, is studied together with other science subjects. Popular choices are biochemistry, microbiology, geology, physics and mathematics.

At NMMU you will receive an outstanding education in all branches of chemistry to equip you for employment in any chemical industry or research organisation around the globe.

South Africa is rich in minerals and hence there is a demand for chemists in the mining industry. Local career opportunities exist in the fine chemical, pharmaceutical, food, polymer, rubber, electrochemical, environmental and catalytic converter industries.

“ *The scientist is not a person who gives the right answers; he's one who asks the right questions.* ”

- Claude Lévi-Strauss



Research activities

The Chemistry Department has the following active research areas:

- ▶ Radiopharmaceuticals
- ▶ Green chemistry
- ▶ Polymer chemistry
- ▶ Electrochemistry
- ▶ Solid state transitions

InnoVenton is an institute of chemical technology attached to the university which does industrial chemistry research.



Careers

Appropriate chemistry qualifications will allow you to work as a:

- ▶ Chemical technician
- ▶ Laboratory analyst
- ▶ Analytical chemist
- ▶ Polymer technologist
- ▶ Teacher or lecturer
- ▶ Industrial chemist
- ▶ Production chemist
- ▶ Research chemist
- ▶ Environmental scientist
- ▶ Forensic scientist
- ▶ Quality controller
- ▶ Sales representative
- ▶ Formulation scientist

Certain careers in chemistry require further postgraduate studies.

Who does what?

- ▶ **Analytical chemists** identify and examine elements and compounds that make up a substance in order to determine the structure and composition.
- ▶ **Organic chemists** study the chemistry of the carbon compounds that make up all living things and derivative products.
- ▶ **Inorganic chemists** study metallic and non-metallic compounds consisting mainly of elements other than carbon.
- ▶ **Polymer chemists** study and develop man-made macromolecules such as plastics, paints and rubbers to improve existing products or make new ones.
- ▶ **Physical chemists** study aspects of chemistry like kinetics, thermodynamics, phase changes and electrochemistry.

