

## BPharm Degree (4 years) – proposed new content awaiting approval for implementation in 2013

### YEAR 1 (Full-time attendance)

Pharmaceutical Chemistry (ZTM101)  
Physics for Pharmacists (ZTM121)  
Computing Fundamentals (WRFC101)  
Organic Chemistry for Pharmacists (ZFC101)  
Anatomy and Physiology for Pharmacists (ZFP101)  
Physical Pharmacy (ZTM102)  
Pharmacy People and Systems (ZPS122)  
Anatomy and Physiology for Pharmacists (ZFP102)  
Biochemistry for Pharmacists (ZFB102)

### YEAR 2 (Full-time attendance)

Pharmaceutical Chemistry (ZTM201)  
Pharmaceutical Sciences (ZTM211)  
Pharmacy People and Systems (ZPS201)  
Pharmacology (ZCP201)  
Pharmacy People and Systems (ZPS202)  
Pharmacology (ZCP202)  
Clinical Pharmacy (ZCP212)  
Microbiology for Pharmacists (ZFM202)

### YEAR 3 (Full-time attendance)

Pharmaceutical Sciences (ZTM301)  
Pharmacy Profession and Environment (ZPS301)  
Clinical Pharmacy (ZCP301)  
Clinical Pharmacy (ZCP311)  
Pharmacy Profession and Environment (ZPS301)  
Clinical Pharmacy (ZCP302)  
Clinical Pharmacy (ZCP312)  
Clinical Pharmacy (ZCP322)  
Clinical Placement (ZCP300)

### YEAR 4 (Full-time attendance)

Pharmaceutical Sciences (ZTM401)  
Pharmacy Profession and Environment (ZPS401)  
Clinical Pharmacy (ZCP401)  
Pharmaceutical Sciences (ZTM402)  
Pharmacy Profession and Environment (ZPS402)  
Clinical Placement (ZCP400)  
Pharmacy Elective Project (ZRE400)  
OR  
Pharmacy Select Topics (ZCE400)

## Enquiries

For more information on the BPharm degree, contact:

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Please contact us if you would like to visit our department and talk to our staff and students - we would love to meet you and show you around our facilities.



## Bachelor of Pharmacy (BPharm) Degree

## INTRODUCTION

**Nelson Mandela Metropolitan University (NMMU) is a university for tomorrow – we nurture innovation, foster creativity, embrace technology and develop people to meet the challenges of the world of tomorrow. At NMMU we unlock people's futures. We help them to reach their full potential and realise their dreams and aspirations.**

NMMU is one of only four comprehensive universities in South Africa, offering both general and professionally oriented university programmes as well as technologically and career oriented programmes, from the entrance level (certificate) through to the research level (PhD). The university has a strong track-record in both fundamental and applied research, working extensively in partnership with business and industry.

## WHAT DO PHARMACISTS DO?

Pharmacists specialise in all aspects of medicines and are vital members of the healthcare team. A pharmacist must combine in-depth knowledge with critical thinking and problem solving skills, in order to manage medicines within the South African health care environment.

Pharmacists design, develop and formulate, manufacture, market and sell and, distribute medicines.

Most pharmacists work with patients to ensure appropriate use of increasingly potent and complex medicine and to promote safe and cost-effective use of quality medicines.

## COURSE DESCRIPTION

The 4 year full time degree programme is based on NMMU's South Campus.

On completion of the 4 years, all pharmacy graduates must complete

- One year internship (salaried) in the workplace.
- One year of compulsory community service (salaried) to enable registration as a pharmacist with the South African Pharmacy Council.

First year subjects include Chemistry, Physics, Anatomy and Physiology of the Human Body, Pharmacy People and Systems and Biochemistry.

From second year, the main disciplines are introduced, namely Pharmaceutical Chemistry (the chemistry of medicines), Pharmaceutics (how medicines are made), Pharmacy as a Profession (working in a profession, managing a business, financial management and pharmaceutical budgets, advertising and marketing, laws relating to medicines and healthcare, inter-personal communication) and Pharmacology (how medicines work).

## ENTRANCE REQUIREMENTS

The minimum requirements for a university based degree must be met.

Entrance requirements for the BPharm degree:  
**APS of 38**

**Compulsory subjects:**

\* **English level 3 (40 – 49%)**

\* **Mathematics level 5 (60 – 69%)**

\* **Physical Sciences level 5 (60 – 69%)**

Recommended - Life Science

## CAREER OPPORTUNITIES

Numerous employment opportunities exist with South Africa's national shortage of pharmacists and pharmacy support personnel. Newly qualified pharmacists can expect to earn between R20 000 and R25 000 per month.

The **community pharmacist** advises and counsels customers on minor ailments and disease management, and dispenses medicines. The **hospital pharmacist** controls, distributes and dispenses medicines, conducts medication reviews and manages large pharmaceutical budgets. In the **pharmaceutical manufacturing industry**, pharmacists supervise, manufacture, test and market medicinal products. Pharmacists apply their expertise in medicines working as risk management **consultants** in the medical aid industry. Educational institutions and multinational pharmaceutical companies employ pharmacy graduates as **lecturers and researchers**.

NMMU pharmacy students must be hard working, focused, motivated and committed. Our graduates are sought after and they consistently excel in the national pre-registration exam set by South African Pharmacy Council.

The NMMU BPharm programme is strongly patient-orientated – students interact closely with doctors, nurses and patients during clinical training sessions in various healthcare settings throughout the course. On-campus learning is enhanced with practical, real-world work experiences.