

Pharmaceutical Sciences

The Bachelor of Science in Pharmaceutical Sciences is a five-year degree program which prepares graduates with the skills to improve human health and wellbeing by providing a wide understanding of all aspects of the pharmaceutical industry. It explores the sources of medicines, their pharmacological effects, how drugs are created and dosages are formulated and analysed. This program also provides graduates the ability to communicate with healthcare professionals and patients in order to assure the best use of medicines.

The program initiates with basic sciences such as chemistry, biology, mathematics and physics. Students will also have the opportunity to improve their English language by undertaking 12-credit "EFL" courses. All these modules equip students with the knowledge needed for advanced topics in pharmaceutical sciences.

Students then develop more specialised knowledge and skills in pharmacology, pharmacognosy, microbiology, pharmacokinetic, drug design and synthesis, mechanisms of drug action, biotechnology, toxicology, dosage formulation, manufacturing and quality assurance, medicinal chemistry, therapeutics, clinical management and patient-focused clinical skills. This program also emphasizes on the development of practical skills by delivering lab-based modules enabling students to conduct independent laboratory investigations. In addition to course work, Pharmacy placement in last two semesters, exposes students to the practice environment by which students will develop a range of transferable skills and the ability to work within a multidisciplinary team.

In the final year of the program, students have a chance to undertake a research project in order to be awarded honours degree. Two types of projects are offered: an experimental or a non-experimental project (a scientific literature review on related topics).

Courses are delivered as a blended learning model which combines classroom learning with online learning tools to follow the day-to-day activities through the forums, discussions and online classes.

At the end of this program, with the broad range of knowledge and skills across the pharmaceutical sciences, students are eligible to apply for diverse positions within the areas of drug discovery, drug formulation, manufacturing, marketing, and analytical testing. Graduates may also be employed in professions outside the pharmaceutical and biotech industry including the health and consumer products industries, cosmetics, the food industry and diagnostic labs.

Graduates are also expected to be well prepared for postgraduate degrees (MSc, MRes and PhD) in pharmaceutical, medical, and basic sciences.