

Pharmaceutical Sciences, BS

The **Bachelor of Science in Pharmaceutical Sciences** is grounded in the belief that scientific knowledge, critical inquiry, and ethical responsibility are essential to the discovery, development, and responsible use of medications that improve human health. The program is designed to cultivate scientifically literate graduates who understand the interdisciplinary nature of pharmaceutical science and its role in advancing public health, biomedical innovation, and patient well-being.

Pharmaceutical science integrates principles from chemistry, biology, pharmacology, and engineering to understand how therapeutic agents are discovered, developed, formulated, and evaluated. The program emphasizes a strong foundation in the natural sciences while fostering analytical thinking, quantitative reasoning, and laboratory competence. Through this integrated approach, students learn to examine how drugs interact with biological systems and how scientific evidence informs the safe and effective use of pharmaceuticals.

The program also recognizes that modern pharmaceutical development occurs within complex regulatory, ethical, and societal contexts. Students are therefore encouraged to consider issues of safety, quality, equity, access, and responsible innovation in the development and distribution of medications. By engaging with scientific literature, laboratory experiences, and collaborative problem-solving, students develop the skills necessary to contribute thoughtfully to the pharmaceutical and biomedical fields.

Finally, the program supports diverse educational and career pathways. Graduates are prepared for advanced study in pharmacy, pharmaceutical sciences, medicine, and related health professions, as well as entry into the pharmaceutical, biotechnology, and regulatory sectors. Through rigorous scientific training and an emphasis on lifelong learning, the program seeks to prepare graduates who will contribute to the advancement of therapeutics and the improvement of health outcomes in an evolving global healthcare landscape.

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