

## Academics

### B. Pharm

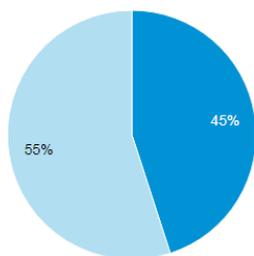
Pharmaceutical science can benefit and transform patients' lives. Spanning the worlds of chemistry and biology, it discovers, develops and analyses medicines. If you are considering a career in the pharmaceutical industry, this course will give you the knowledge and practical skills for success.

This course explores drug discovery, pharmacology, toxicology and examines the most effective ways that medicines are manufactured, packaged, stored and administered. You'll take part in innovative research, including new methods of drug delivery and drug synthesis.

Pictorial Representation to the right:

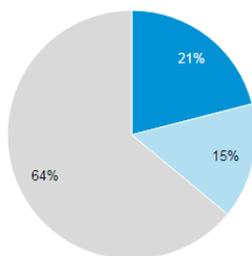
Type of assessment

Year 1



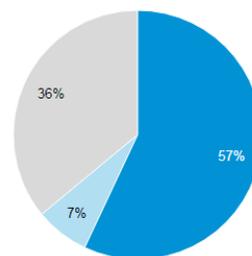
■ Coursework: 45%  
■ Exams: 55%

Year 2



■ Coursework: 21%  
■ Practical: 15%  
■ Exams: 64%

Year 3



■ Coursework: 57%  
■ Practical: 7%  
■ Exams: 36%

#### Year 1

**In 1<sup>st</sup> Year students** study Human anatomy and physiology that deals with the structure and function of human body systems. In pharmaceuticals, they prepare various medicinal products and learn prescription handling. In chemistry, they undergo rigorous training to test drug salts in medicinal products. Pathophysiology where they learn the physiological basis of various diseases. Organic chemistry imparts the knowledge to name, use and synthesize organic compounds. In biochemistry, they study the structure and function of biological molecules such as proteins, nucleic acids, carbohydrates, and lipids. Theory classes are supported by learning in laboratories.

#### Year 2

**In 2<sup>nd</sup> Year students** study Physical pharmaceutics that facilitates the students to understand the principles involved in the preparation of pharmaceutical products. The exposure to pharmaceutical engineering makes them aware of the unit operations, material handling techniques, manufacturing processes, plant layout design in pharmaceutical industries. Medicinal chemistry provides a thorough understanding of drug mechanisms of action, structure-activity relationships (SAR), acid-base and physicochemical properties, and absorption, distribution, metabolism, excretion, and toxicity (ADMET) profiles. Pharmacology provides the platform for students to learn how a drug affects a biological system and how the body responds to the drug. Pharmacognosy covers the study of cultivation, collection of natural products as the source of drugs, and their application in the pharmaceutical industry.

Year 3

**In 3<sup>rd</sup> Year students** study Industrial Pharmacy that widens the knowledge of students in the field of manufacturing, development, marketing, and distribution of drug products. Pharmaceutical jurisprudence reveals the student to important legislation related to the profession of pharmacy in India. Herbal drug technology imparts the knowledge for the manufacture of value-added plant products and their regulatory aspects.

Year 4

**In 4<sup>th</sup> Year students** learn the advanced version of core subjects, Pharmaceutical chemistry, Pharmaceutics, Pharmacology, Pharmaceutical Analysis, and Pharmacognosy. This year students are assigned elective projects where they can meld theory and skills.