

Pharmacy Programmes

Program Outcomes (POs)

The Graduate shall be able to:

PO1. **Domain Knowledge:** Demonstrate comprehension of basic principles of pharmaceutical and allied sciences in all pertinent scenarios. Exhibit skills associated with the profession of pharmacy, pharmaceutical manufacturing practices and quality control.

PO2. **Problem analysis:** Use domain knowledge, analytical and critical thinking for solving problems and taking decisions during everyday practice in profession, industry and all work environment.

PO3. **Research and Development:** Exhibit knowledge from his major domain in problem identification, critical thinking, analysis and providing solutions to pharmaceutical and allied technology disciplines.

PO4. **Modern tools usage:** Demonstrate an ability to handle/use various tools, apparatus, instrument, equipment or machinery pertinent to the pharmaceutical domain with practical knowledge on standard operating procedures and safety aspects.

PO5. **The Pharmacist and Society:** Use contextual knowledge – informed reasoning to understand medical prescription, perform patient counseling. Recognize the necessity to engage in independent and life-long learning.

PO6. **Environment and sustainability:** Demonstrate knowledge and responsibility while handling pharmaceutical techniques/ processes that have social and environmental impacts and promote sustainable development.

PO7. **Ethics:** Demonstrate exemplary professional, ethical, and legal behaviors in accordance with all drug, pharmaceutical, and pharmacy-related central, state laws and regulations.

PO8. **Individual and Team skills:** Function effectively as an individual member or leader in different teams and multidisciplinary settings. Assume a participatory or lead role in an organization's planning and execution of transformational projects to enhance its prospects.

PO9. **Communication:** Communicate effectively with the pharmaceutical scientific community, workforce and with society at large, with abilities to comprehend and write effective reports, make effective presentations and documentation.

PO10. **Project management abilities:** Demonstrate effective delegation and organizational skills. Organize work with necessary planning and execution to meet deadlines. Demonstrate knowledge and understanding of pharmaceutical, legal processes and apply them in project management.

B. Pharmacy

Program Specific Outcomes (PSOs)

The Graduate shall be able to:

PSO1. Apply the knowledge of pharmaceutical and allied sciences in design, manufacture and evaluation of drug delivery systems including cosmetics.

PSO2. Be able to perform classical and modern analysis of APIs and formulations in their quality control and enforce quality assurance standards.

PSO3. Appreciate the mechanism of action of drugs including their kinetics and adverse actions. Be able to do basic evaluation of bioactivity of drugs in in-silico models.

PSO4. Apply the knowledge of medicinal chemistry, natural drugs in drug design and synthesis. Appreciate the importance of drugs derived from natural sources.

PSO5. Act responsibly towards environment, follow ethical principles, be able to comprehend, interpret and apply laws pertinent to all spheres of pharmaceutical and allied domains.

M. Pharmacy (Pharmacology)

Program Specific Outcomes (PSOs)

The post graduate in M. Pharmacy Degree Programme (Pharmacology) shall be able to:

PSO1. Understand, apply pharmaceutical analysis principles and techniques towards Identification, structural elucidation, and quantification of drugs using modern analytical instruments.

PSO2. Understand, apply, cellular and molecular pharmacology, pathophysiology and pharmacotherapy of certain diseases and mechanism of drug actions.

PSO3. Understand, appreciate and apply concepts about various aspects of regulations and ethical requirement for the usage of experimental animals, CPCSEA guidelines for laboratory animal facilities, and toxicity studies.

PSO4. Understand, appreciate and apply concepts of principles of drug discovery, clinical research and pharmaco vigilance, Research Methodology & Biostatistics systematically in research.

PSO5. Act responsibly towards environment, follow ethical principles, be able to comprehend, interpret and apply laws pertinent to all spheres of pharmaceutical and allied domains. imbibe the spirit of being an entrepreneur.

Pharm. D

Program Outcomes (POs)

The post graduate in Pharm.D. and Pharm. D. (PB) Programme Degree Programme shall be able to:

1. **Caregiver:** Provide patient centred care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities)
2. **Decision Maker:** Develop problem-based learning approach and analytical thinking in his/her academic and professional life.
3. **Learner** - Develop, integrate, and apply knowledge from the foundational sciences (i.e., pharmaceutical, social/ behavioral/ administrative and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient centred care
4. **Teacher:** Population based care - Describe how population based care influences patient centered care and influences the development of practice guidelines and evidence-based best practices
5. **Communicator:** The students are in an ideal position to provide a link between prescriber and patient, and to communicate information on health and medicines to the public. The students must be knowledgeable and confident while interacting with other health professionals and the public.
6. **Leader:** In multidisciplinary areas where other health care providers are in short supply pharmacist should assume a leadership position in the overall welfare of the patient and the community. Leadership involves compassion and empathy as well as vision and the ability to make decisions, communicate, and manage effectively. A student whose leadership role is to be recognized must have vision and the ability to lead.
7. **Manager:** Medication use systems management - Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems
8. **Knowledge:** Demonstrate knowledge of pharmacy practice and the ability to acquire, manage and use current information for problem solving, patient-specific, population-specific, evidence-based care to promote safe and optimal pharmacotherapy outcomes.
9. **Skills:** Apply critical thinking skills, including investigation, application, analysis, creativity, synthesis and evaluation of information, data and documents related to drug, poison, clinical investigations, pharmaceutical care and practices.
10. **Researcher:** The students are able to use the evidences effectively in order to advise on the rational use of medicines in the healthcare team. By sharing and documenting experiences, the students can also contribute to the evidence base with the goal of optimizing patient care and outcomes. As a researcher, the student is able to increase the accessibility of unbiased health and medicines-related information to the public and other healthcare professionals.

Program Specific Outcomes (PSOs)

The post graduate in Pharm.D. and Pharm. D. (PB) Programme Degree Programme shall be able to:

1. Identify and assess drug related problems relative to specific patient cases
2. Appreciate and utilize pharmaceutical and pharmacokinetics mathematics to perform accurate medication calculations.
3. Understand and comply with central and state laws related to pharmacy practice.
4. Apply and assess the literature and other research resources to provide evidence-based drug information that meets the needs of patients and other health care providers.
5. Discuss how patients and care givers can obtain the most cost-efficient medications and related pharmaceuticals per patient-specific health insurance coverage options

