



PEO's for M. Pharmacy (Pharmaceutics) Program

PROGRAM EDUCATIONAL OBJECTIVES

Commitment

Learning

Leadership

Expertise

Teamwork



Program Outcomes for M. Pharmacy (Pharmaceutics) Program

- PO.1.1** Postgraduates will acquire adequate scientific information regarding basic principles of Pharmaceutical and Medicinal chemistry, Pharmaceutics including Cosmetology, Pharmacology and Pharmacognosy. They will also have hands on training of practical aspects of Synthesis of APIs and its intermediates along with Formulation and Development, Analysis and Quality assurance of various pharmaceutical dosage forms including those of herbal origin as per standards of official books, WHO, and other regulatory agencies.
- PO.1.2** Postgraduates will develop an ability to plan, visualize and work on multidisciplinary tasks. They will be able to demonstrate necessary skills (eg. working independently, time management and organizational skills). They will demonstrate an adaptable, flexible and effective approach towards organizational development.
- PO.1.3** Postgraduates will be able to think logically and solve the problems, will develop an ability to conduct, analyze and interpret data of pharmaceutical experiments in various departments (Eg: Drug discovery, Formulation & Development, Production, Quality control & Quality assurance etc) as per the needs of pharmaceutical industries.
- PO.1.4** Postgraduates will master the key concepts in the discipline of their interest in pharmaceutical sciences. They will demonstrate these skills to use modern pharmaceutical tools, software, and equipments to analyze & solve problems.
- PO.1.5** Postgraduates will develop leadership and interpersonal skills such as influencing others, negotiating and working with others, conflict management and leading others through the problem-solving process. They will be able to lead and function both individually and as a member of a team.
- PO.1.6** Postgraduates will apply theoretical and practical skills developed through classroom, laboratories and team project experiences and thus will develop confidence and will be able to i) do specialized research in the core and applied areas of pharmaceutical sciences. ii) manufacture, analyse and assure the drug based formulations. iii) promote and market the pharmaceuticals and iv) train the budding pharmacist to become self-reliant pharmacist and a health care professional.



- PO.1.7** Postgraduates will demonstrate knowledge of professional and ethical responsibilities as per pharmaceutical jurisprudence. The graduates will swear by a code of ethics of Pharmacy Council of India in relation to community and shall act as integral part of a health care system. They will demonstrate honesty, integrity, ethical understanding, and respect for others and will carry out their professional responsibilities by adhering to high ethical standards.
- PO.1.8** Postgraduates will acquire excellent interpersonal oral communication and writing skills. They will be able to demonstrate knowledge and proficiency with current audio-visual presentation technologies and develop an ability to communicate scientific knowledge in non-expert/lay term by adopting various modes of scientific communications (e.g., abstract, manuscripts, project reports, oral and poster presentations etc). This will allow effective exchange of professional information.
- PO.1.9** Postgraduates will demonstrate the impact of pharmacy knowledge on the society and also will be aware of modern issues. They will create awareness of healthcare issues through interactions with others and will gain a sense of self-respect towards community and citizenship.
- PO.1.10** Postgraduates will be able to demonstrate a high-level of understanding of the key stages in drug discovery, development, and commercialization. This will lead to the manufacturing of drugs and pharmaceuticals considering its impact on the environment and surrounding.
- PO.1.11** Postgraduates will be able to demonstrate knowledge and skills in all disciplines of Pharmaceutical sciences and develop a sound pharmaceutical care plan to manage medication-related problems. They will retrieve, evaluate, and apply current drug information in the delivery of pharmaceutical care and assure safe and accurate preparation and dispensing of medications.



Program Specific Outcomes for M. Pharmacy (Pharmaceutics) Program

- PSO.1.1** Impart knowledge on the novel drug delivery systems, approaches, criteria for selection of polymers and drugs and their formulation and evaluation.
- PSO.1.2** Know various preformulation elements, industrial management and GMP considerations, Pilot Plant Scale Up Techniques, Stability testing, sterilization and packaging of dosage forms.
- PSO.1.3** Impart knowledge and skills in generic drug development, various regulatory filings the approval process, and concept of generics across the globe.
- PSO.1.4** Impart knowledge and skills for dose calculations, dose adjustments and apply biopharmaceutics theories in practical problem solving. The pharmacokinetic models, bioequivalence and potential clinical pharmacokinetic problem analysis.
- PSO.1.5** Skill development in Pharmaceutical research, Pharmacoinformatics, in drug development in Computational modeling, Preclinical development, clinical development, Artificial Intelligence and Robotics, and Computational fluid dynamics.
- PSO.1.6** Knowledge and skills necessary for cosmetics and cosmeceuticals, their safety and efficacy and current technologies in cosmetic industry.
- PSO.1.7** Knowledge in use of advanced instrumentation, formulation and evaluation of controlled release formulations, floating drug delivery systems, transdermal drug delivery systems, micromeritics, and mathematical simulations.
- PSO.1.8** Expertise in technical skill and knowledge in computer simulations, population modelings, in vitro and in vivo studies.
- PSO.1.9** A talent pool would be created by involving students in research projects and to make students undertake research projects under faculty guidance for publication.
- PSO.1.10** Promote ambitious desire to undertake higher studies and career growth.