

Program Educational Objectives (PEOs)

PEO 1: To provide graduates with profound knowledge in various fields of Pharmaceutical Sciences according to the needs of Pharmaceutical industry, community and Hospital Pharmacy with necessary skillset.

PEO 2: Graduates will be able to acquire theoretical and practical concepts in Pharmacodynamics, Pharmacokinetics, Drug properties, synthesis, molecular modeling, formulation & development, analytical aspects in research and extend this knowledge to create novel Herbal & Synthetic Pharmaceutical products for the benefit of life.

PEO 3: The philosophy of the institute is to prepare students to excel in postgraduate programmes and also to succeed in Pharmaceutical industry or in the profession wherever the student chose through innovative teaching methodologies that engage students in self-learning.

PEO 4: Graduates will be prepared to become better communicators and leaders of Pharma and health sectors with ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, and an ability to relate issues in Pharmaceutical Sciences to a broader social context.

PEO 5: Graduates will be equipped with integrity and ethical values and update their knowledge by organizing/attending the workshops, seminars and conferences at National and International level.

PEO 6: Graduates of the program will be able to evaluate pros and cons, benefits and deficiencies of the matter they studied in pharmaceutical technology and ideology they observed in the field of Pharmaceutical Sciences.

Consistency of PEOs with Mission of the Institute

PEO Statement	M1	M2	M3
PEO 1: To provide graduates with profound knowledge in various fields of Pharmaceutical Sciences according to the needs of Pharmaceutical industry, community and Hospital Pharmacy with necessary skillset.	3	3	2
PEO 2: Graduates will be able to acquire theoretical and practical concepts in Pharmacodynamics, Pharmacokinetics, Drug properties, synthesis, molecular modeling, formulation & development, analytical aspects in research and extend this knowledge to create novel Herbal & Synthetic Pharmaceutical products for the benefit of life.	3	3	2
PEO 3: The philosophy of the institute is to prepare students to excel in postgraduate programmes and also to succeed in Pharmaceutical industry or in the profession wherever the student chose through innovative teaching methodologies that engage students in self-learning.	3	2	2
PEO 4: Graduates will be prepared to become better communicators and leaders of Pharma and health sectors with ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, and an ability to relate issues in Pharmaceutical Sciences to a broader social context..	2	3	3
PEO 5: Graduates will be equipped with integrity and ethical values and update their knowledge by organizing/attending the workshops, seminars and conferences at National and International level.	3	3	2
PEO 6: Graduates of the program will be able to evaluate pros and cons, benefits and deficiencies of the matter they studied in pharmaceutical technology and ideology they observed in the field of Pharmaceutical Sciences.	3	2	2

Note: M1, M2, ...,Mn are distinct elements of Mission statement. Correlation levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

M1: Fundamentals Knowledge, Understand Concepts & Learning the core subjects

M2: Develop Self-learning strategies, Leadership Skills & Research Concepts

M3: Inculcate ethical values, Innovative Practices and technologies

PEO Statement	Mission Statement	Mapping Score	Justification
<p>PEO 1: To provide graduates with profound knowledge in various fields of Pharmaceutical Sciences according to the needs of Pharmaceutical industry, community and Hospital Pharmacy with necessary skillset.</p>	<p>M1: Fundamental Knowledge, Understand Concepts & Learning the core subjects</p>	<p>3</p>	<ul style="list-style-type: none"> • Qualified & Expertise Faculty Members • Equipped laboratory and computing facility • Provision of adequate information resources (Library, Virtual Library) • Industrial visit and projects
	<p>M2: Develop Self-learning strategies, Leadership Skills & Research Concepts</p>	<p>3</p>	<ul style="list-style-type: none"> • Exposed by handling lab equipment • Use of modern teaching methodologies (ICT PBL etc.)
	<p>M3: Inculcate ethical values, Innovative Practices and technologies</p>	<p>2</p>	<ul style="list-style-type: none"> • Exposing to hospital & Community Pharmacy • Guest Lectures & Industrial Visits

<p>PEO 2: Graduates will be able to acquire theoretical and practical concepts in Pharmacodynamics, Pharmacokinetics, Drug properties, synthesis, molecular modeling, formulation & development, analytical aspects in research and extend this knowledge to create novel Herbal & Synthetic Pharmaceutical products for the benefit of life.</p>	<p>M1: Fundamental Knowledge, Understand Concepts & Learning the core subjects</p>	3	<ul style="list-style-type: none"> • Developing structured lesson plan and lab manuals • Evaluate by conducting continuous assessment for generic subjects • Students are trained in core subject practicals, Assignments and continuous assessment
	<p>M2: Develop Self-learning strategies, Leadership Skills & Research Concepts</p>	3	<ul style="list-style-type: none"> • Hands on training through workshops, practical session and industrial training
	<p>M3: Inculcate ethical values, Innovative Practices and technologies</p>	2	<ul style="list-style-type: none"> • Explored to take up review projects in the core department
<p>PEO 3: The philosophy of the institute is to prepare students to excel in postgraduate programmes and also to succeed in Pharmaceutical industry or in the profession wherever the student chose through innovative teaching methodologies that engage students in self-learning.</p>	<p>M1: Fundamental Knowledge, Understand Concepts & Learning the core subjects</p>	3	<ul style="list-style-type: none"> • Incorporating innovative teaching methodologies for the generic subjects • Peer learning methodologies and participation in journal club
	<p>M2: Develop Self-learning strategies, Leadership Skills & Research Concepts</p>	2	<ul style="list-style-type: none"> • Research and review paper presentation in state level/national level seminar,

			workshops & conferences
	M3: Inculcate ethical values, Innovative Practices and technologies	2	<ul style="list-style-type: none"> • Industrial training • Exposure to research paper presentation/Journal Club
<p>PEO 4: Graduates will be prepared to become better communicators and leaders of Pharma and health sectors with ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, and an ability to relate issues in Pharmaceutical Sciences to a broader social context.</p>	M1: Fundamental Knowledge, Understand Concepts & Learning the core subjects	2	<ul style="list-style-type: none"> • Extensive Placement training, inculcate ethical values, communication skills & teamwork skills • Exposed to curricular activities like blended learning, mini projects
	M2: Develop Self-learning strategies, Leadership Skills & Research Concepts	3	<ul style="list-style-type: none"> • Exposed to co-curricular activities like pharma quiz, online courses from NPTEL/MOOC/ Course Era
	M3: Inculcate ethical values, Innovative Practices and technologies	3	<ul style="list-style-type: none"> • Involved in Professional activities like NSS/ Industrial Visit, News Letter

<p>PEO 5: Graduates will be equipped with integrity and ethical values and update their knowledge by organizing/attending the workshops, seminars and conferences at National and International level.</p>	<p>M1: Fundamental Knowledge, Understand Concepts & Learning the core subjects</p>	3	<ul style="list-style-type: none"> • Faculty Expertise, Guest Lectures and seminars • Student participation at institution level e-poster presentation (Research & Review)
	<p>M2: Develop Self-learning strategies, Leadership Skills & Research Concepts</p>	3	<ul style="list-style-type: none"> • Exposed to updates in pharmaceutical sciences by newsletter and inculcate research interest
	<p>M3: Inculcate ethical values, Innovative Practices and technologies</p>	2	<ul style="list-style-type: none"> • Participation in co-curricular activities like global observance day, Health day and Industrial Visit
<p>PEO 6: Graduates of the program will be able to evaluate pros and cons, benefits and deficiencies of the matter they studied in pharmaceutical technology and ideology they observed in the field of Pharmaceutical Sciences.</p>	<p>M1: Fundamental Knowledge, Understand Concepts & Learning the core subjects</p>	3	<ul style="list-style-type: none"> • Exposed to databases, reference books and e learning resources of the core subjects • Journal club activities, training for national level competent exams
	<p>M2: Develop Self-learning strategies, Leadership Skills & Research Concepts</p>	2	<ul style="list-style-type: none"> • Exposure to national and International seminars/ conferences • Research and

			review project framework
	M3: Inculcate ethical values, Innovative Practices and technologies	2	<ul style="list-style-type: none"> • Industrial visit • Placement training • Newsletter

PROGRAM OUTCOME

(B.PHARMACY- VISTAS SYLLABUS)

1. Pharmaceutical Knowledge: Apply the knowledge of chemical and life sciences for discovery of various drugs for the treatment of wide range of health issues.
2. Problem Analysis: Categorize and analyse the pathophysiological conditions of various diseases and make use of principles involved in development of drugs from natural and synthetic sources.
3. Design/Development of solutions: Utilise the various resources from synthetic & natural origin and develop a lead molecule for the treatment of particular ailments with minimal side effects for the safety of public/environment.
4. Conduct investigations of complex problems: Make use of research based knowledge, research methods including design of experiments, analysis and interpretation of data for the synthesis of novel drug molecules.
5. Modern tool Usage: Choose and apply appropriate techniques, resources and modern software tools including prediction and modelling of lead molecules with appropriate considerations of toxic effects.

6. The Pharmacist and society: Apply the drug information by the contextual knowledge to create awareness about health, safety and legal issues among the population and also for exercising the responsibilities relevant to the pharmacy profession.
7. Environment and sustainability: Summarize the impact of societal and environmental factors for development of novel drug molecules by make use of contextual knowledge to develop sustainable methodologies for designing of the drug molecules from natural sources.
8. Ethics: Apply ethical principles and work towards professional ethics and render the responsibilities as per the norms of pharmacy profession.
9. Individual and team work: Function effectively as an individual, as a member or leader in diverse teams and in multidisciplinary settings.
10. Communication: Communicate effectively on emerging research topics among the students and academicians in order to explore thrust research areas, design documentation, make effective presentations, give and receive clear instructions.
11. Project Management and finance: Illustrate knowledge and interpret the theoretical aspects of pharmaceutical management and apply these to one's own work, as a member or a leader in a team, to handle the projects and in multi disciplinary environments.
12. Life-long learning: Recognize and utilize the advanced technological developments and adapt in the independent and lifelong learning within the broadest context.

PROGRAM OUTCOMES

(B.PHARMACY- PCI SYLLABUS)

1. Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.
2. Planning Abilities: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.
3. Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.

4. Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.
5. Leadership skills: Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and wellbeing.
6. Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).
7. Pharmaceutical Ethics: Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.
8. Communication: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.
9. The Pharmacist and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.
10. Environment and sustainability: Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
11. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.

PROGRAM SPECIFIC OUTCOMES

PSO1: To develop the knowledge in technical or professional careers in various pharmaceutical industry and/ or institute and /or Health care system through excellent real time exposure to rigorous education.

PSO2: To apply the skills of manufacturing, formulation/preparation and quality control of various pharmaceutical preparations.

PSO3: To design the modern tools to integrate health care systems, design an effective product with commercial advantage and societal benefit, perform risk analysis and become entrepreneur.