

Vision

Striving to excel in pharmaceutical education, research & innovation to develop outstanding professionals catering to the health care needs of the humankind.

Mission

The institute aims to develop employable students, researchers and entrepreneurs by inculcating critical thinking, problem solving ability, ethical values and leadership skills. Institute provides vibrant environment for continuous learning by strengthening industrial collaboration for developing competent professionals.

B.PHARM-PROGRAM EDUCATIONAL OBJECTIVES

PEO 1: To acquire effective knowledge of pharmaceutical sciences leading to hold key position in industry and health care sector

- PEO 2: To attain practical training and technical expertise in pharmaceutical sciences
- PEO 3: To inculcate professional and ethical standards with effective interpersonal communication skills.
- PEO 4: To develop interdisciplinary pharmaceutical approach towards societal benefit, problem solving and lifelong learning.
- PEO 5: To adapt and implement best practices in the profession by enrichment of knowledge and skills in research and critical thinking.

B.PHARM-PROGRAMME OUTCOMES

No.	Program Outcomes
PO1	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.
PO2	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
PO3	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.
PO4	Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations
PO5	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 well-being.
PO6	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).
PO7	Pharmaceutical Ethics: Honor 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.
PO8	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
PO9	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
PO10	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.
PO11	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



NIRMA UNIVERSITY INSTITUTE OF PHARMACY

Information Brochure Consultancy and Testing services

NIRMA EDUCATION AND RESEARCH FOUNDATION (NERF) AND NIRMA UNIVERSITY

Nirma Education and Research Foundation (NERF) is the outcome of one of the philanthropic pursuits of Dr. Karsanbhai K. Patel, the legendary business personality who inspires aspiring entrepreneurs all over the country. NERF was established with an objective of providing world class education with a focus on professional areas like engineering, management, pharmacy, etc. Functioning with the mission of developing students as excellent professionals as well as good citizens, the foundation has been rated high by national and international institutions, persons and organizations.

Nirma University was established in the year 2003 by the initiative of the Nirma Education & Research Foundation. It is the first private

university of Gujarat. It has been also recognized by the University Grants Commission (UGC) under section 2(f) of the UGC Act and accredited by national Accreditation Council and Assessment (NAAC). Dr. Karsanbhai K. Patel, Chairman, Nirma Group of Companies and Chairman, NERF is the President of the University. It has been consistently ranked among the top private universities in India. It has course offerings in Technology, Management, Commerce, Law, Architecture, Pharmacy & Science. We have been recently awarded "A" grade by prestigious NAAC, which makes us first private university of Gujarat to achieve the honour.

ABOUT THE INSTITUTE OF PHARMACY

The Institute of Pharmacy was established in 2003 with a view to promote excellence in pharmaceutical education and to prepare young men and women to meet the challenges in the area of Pharmaceutical industries, education, research & development and marketing. Currently it offers under graduate (B. Pharm.), post graduate (M. Pharm.) in addition to Doctoral Programme in various branches of Pharmacy. The institute is poised to face global challenges of the pharmaceutical industry and education with the changed perspectives. In April 2018, the institute was ranked 18th among all pharmacy colleges of India under NIRF announced by Ministry of Human Resource Development - Government of India.

SALIENT FEATURES OF THE INSTITUTE

The Institute of Pharmacy is situated on the Nirma University Campus. The Institute has world class infrastructure with Hi-Tech Laboratories, Lecture Theaters, Spacious Seminar Hall and Auditorium, well stocked Library Resource Centre, and Wi-Fi enabled campus.

The institute has modern instruments like High Pressure Homogenizer, Particle seize analyzer, FT-IR florescence, Spectrophotometer, UV-Spectrophotometer, HPLC Binary gradient with PDA detector, HPLC quaternary gradient with auto-sampler, GC, Supercritical Fluid Chromatography and Extraction, HPTLC and RAMAN Spectrophotometer for elemental composition, chromatography, diffraction, particle/ material characteristics including various spectroscopes. The laboratory provides analytical support and intellectual input to both in-house and externally funded R & D projects.

THURST AREAS:

DEPARTMENT OF PHARMACEUTICS

- ➤ Novel & Targeted Drug Delivery systems
- ➤ Formulation Development & Optimization of dosage form using QbD
- ➤ Nanoparticulate & Microparticulate drug delivery systems
- > Rapidly disintegrating dosage forms

- Dissolution enhancement of poorly soluble APIs
- Antimicrobial activities of active pharmaceutical ingredients and dosage forms
- Formulation Design, Development & delivery of different types of dosage forms for various APIs.
- ➤ Third Party Evaluation for New Equipment, Excipients and solving problems related to formulation development
- ➤ Testing Work for Rheological Analysis of Injectable Dosage Forms, Diffusion study of topical dosage forms, Chew-out testing of Medicated Chewing Gum etc.

DEPARTMENT OF PHARMACOLOGY

- In-vitro and in-vivo evaluation of Novel Chemical Entities (NCEs), various oral, parenteral and topical formulations, herbal drugs, Nutraceuticals, dietary supplements and polyherbal formulations
- Development of new experimental models for pharmacological evaluation of drugs
- Pharmacological safety and efficacy studies with special reference to anticancer, neuroprotective, cognition enhancement, antiepileptic, antidepressant, antistroke, antianxiety, antifungal, antiarthritic, antiulcer, antidiabetic, anti-obesity, antioxidant, Hepatoprotective and wound healing activity etc.

- Genotoxicity and mutagenicity testing studies
- Surgical Models like Partial Abdominal Aortic Constriction for Cardiac Hypertrophy, intracerebrovascular injury for neurodegenerative disorders, Middle Cerebral Artery Occlusion for Stroke, Ovariectomy Model for Osteoporosis etc.

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

- > Synthesis of potentially useful Novel Chemical Entities.
- Drug Design using Pharmacophore Modeling, Docking, Virtual Screening, QSAR (traditional and 3D) etc.
- Development of eco-friendly Process Chemistry.
- ➤ Liquid Phase Combinatorial Synthesis of Small Molecules.
- > Asymmetric Synthesis.
- ➤ Total Synthesis of Natural Products.

DEPARTMENT OF PHARMACEUTICAL ANALYSIS

- ➤ Development and validation of stability indicating assay methods for APIs and formulations.
- ➤ Dissolution method development and validation for different types of dosage forms.

- ➤ Development and validation of bioanalytical methods for biological fluids.
- ➤ Application of Quality by Design approach in Analytical method development.
- ➤ Solid state analysis by spectroscopic methods like FTIR Raman Spectrometer etc.
- Super critical fluid extraction and quantification of phyto constituents.
- > Standardization of polyherbal formulation.
- ➤ Isolation and identification of biomarkers from plants and herbal formulations.

DEPARTMENT OF PHARMACOGNOSY

- Extraction, isolation and characterization of phyto-constituents
- Estimation of phyto-constituents in herbal drugs, extracts and formulations
- Quality control & standardization of herbal formulations
- ➤ Pharmacological screening of herbal drugs with special reference to anti-diabetic, hepato-protective, anti-obesity, anti-oxidant, anti-asthmatic and wound healing activity
- Development of new herbal and polyherbal formulations, new herbal cosmetics like shampoo, creams etc., nutraceuticals & dietary supplements.

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