



गृह मंत्रालय
MINISTRY OF
HOME AFFAIRS



National Forensic Sciences University

Knowledge | Wisdom | Fulfillment

An Institution of National Importance under
Ministry of Home Affairs, Government of India



School of Pharmacy

Academic Programs

M. Pharm. Forensic Pharmacy

M.Sc. Pharmaceutical Chemistry

M. Pharm. Pharmaceutical
Quality Assurance (PCI Approved)

M. Sc. Environmental Science
(Environmental Forensic)

M. Sc. Chemistry
(Forensic Analytical Chemistry)

Post-graduation diploma for Industrial Safety,
Hygiene and Environmental Management

About National Forensic Sciences University

National Forensic Sciences University, erstwhile Gujarat Forensic Sciences University, is the brainchild of Govt of Gujarat. It was established by the Hon'ble Prime Minister of India, Shri. Narendra Modiji, then Chief Minister of Gujarat, in 2009 with the sole objective of creating professional experts in the field of Forensic sciences.

Since its inception, the university has been scaling new heights with its extraordinary and exemplary performances in the field of academic for Forensic Sciences. Based on the impressive successes achieved by this university within a short span of eleven years, the Government of India has recognized its services to the student communities and the professionals of national and international origin and has accorded the status of Institution of National Importance and the also as a central university in October 2020 through Act, 2020 (32 of 2020).

Gandhinagar Campus is the first campus of the National Forensic Sciences University at Sector-9, Gandhinagar, Gujarat, and currently serves as the headquarters of the university. 'Apart from Gandhinagar campus, there are 5 more campuses all over India, 1 campus outside the country, and 3 academies which include Delhi, Tripura, Goa, Bhopal, Dharwad, Pune, Manipur, Guwahati, and Uganda in South Africa.' There are around 103 courses in total. In the Gandhinagar Campus of the National Forensic Sciences University is running 59 courses in Twelve schools, namely, the School of Doctoral Studies and Research, School of Forensic Science, School of Cyber Security and Digital Forensics, School of Management Studies, School of Engineering and Technology, School of Pharmacy, School of Behavioral Sciences, School of Forensic Psychology, School of Medico-Legal Studies, School of Police Science and Security Studies, School of Law, Forensic Justice and Policy Studies and the School of

Open Learning. Maintaining excellence in education, research, and training with appropriate facilities within this campus encourage collaborations across multiple disciplines and skill sets. The Gandhinagar Campus, an Ultramodern Campus, is constructed near the DFS premises on a government-allocated land of 50,000 square meters. The Campus Director heads the Gandhinagar Campus, and each school is headed by the Dean and Associate Dean.

School of Pharmacy, NFSU Gandhinagar Campus

School of Pharmacy, established under the National Forensic Sciences University at Gandhinagar campus, deals with the non-conventional arena of Forensic Science. The school offers six high-demand academic programs. The school has an excellent team of faculty members with a tremendous academic and research record. The school is well equipped with state-of-the-art laboratory facilities along with cutting-edge modern instruments, which play a pivotal role in providing practical knowledge to the students, in addition to the theoretical knowledge imparted to them by our faculties. The students here are actively engaged in different projects under the expert guidance of our highly trained and skilled faculty members. The programs M.Pharm. Forensic Pharmacy and M.Sc. Environmental Sciences are also taught at the Dharwad campuses.

The jurisprudence and investigative sciences with the new scope of forensics are imperative to the social and economic aspects, with huge storage of expertise. The academic programs offered at the School of Pharmacy are at developing expertise in allied sciences with an emphasis on forensic specialization to fulfill the shortage of experts in these domains.

Objectives

- Establish state-of-the-art infrastructure, and instrumental & smart amenities to offer need-based training to students in order to meet the standard practices.
- Ensure that education and research programs going on in the School are addressing the current and arising needs of Forensic Pharmacy, Forensic Chemistry and Environmental Forensics.
- Provide enthusiastic, dedicated, outstanding and diverse faculty and support staff to budding Forensic Professionals for their overall growth as Experts in their respective fields.
- Move towards Educational Excellence with hands-on practical training, Integration and Synergy of Research, Innovation, Passion for Learning and Discovery, and inter-professional and external collaborations.
- Develop an indispensable partnership of Students and Faculty for advancement, discovering solutions, implementation, and excellence for each endeavour.
- Achieve an innovative teaching-learning process for the students to meet the advancement of current forensic needs by incorporating modern and innovative training along with ethical codes.

Programs offered and their importance

M. Pharm. Forensic Pharmacy: Forensic Pharmacy is an aspect of pharmacy that exclusively deals with pharmaceutical applications of forensic sciences. This includes covering topics imperative to the pharmaceutical sciences while briefly covering forensic science. In the later stages of the program, emphasis is given to the applications of pharmacy in forensic science. Apart from this, the program offers specialization in pharmacology & toxicology and novel drug delivery systems. The highlight of this program is that the students get hands-on training in advanced instrumental analysis, which is highly specialized and focused on developing students as skilled pharmacists with the ability to operate modern analytical instruments used in Forensic Science and pharmaceutical industries.

M. Pharm. Quality Assurance [Pharmacy Council of India (PCI) approved]: This program is designed to provide students with a basic understanding of QA and QC, GMP, regulatory agencies, and documentation. The course contains the appropriate, most recent, and updated information and knowledge about the quality assurance and quality control needs of the healthcare industry (pharmaceutical, biotechnology, healthcare product-food supplement, cosmetics, etc.).





M.Sc. Environmental Science: This program has been developed with a curriculum covering a wide array of environmental aspects with an emphasis on research to solve environmental problems and develop expertise in this area. In India, NFSU is the first and only university offering specialization in the forthcoming novel area of Environmental Forensics, which is a novel area and enables students to critically evaluate issues related to environmental governance, law, and sustainability. They are also trained for efficient environmental decision-making and management systems.



M.Sc. Chemistry: This program helps analytical chemists to use their knowledge of chemistry, instrumentation, computers, and statistics to solve problems in almost all areas of chemistry and for all types of industries. For example, their measurements are used to assure the safety and quality of food, chemicals, pharmaceuticals, and water; to assure compliance with environmental and other regulations; to support the legal process; to help physicians diagnose diseases;

and to provide measurements and documentation essential to trade and commerce.

M.Sc. Pharmaceutical Chemistry: This course is designed to cater to the needs of the Pharmaceutical and Chemical Industry. At its core, pharmaceutical chemistry is the study and development of new drugs. After completion of the course, students will learn the principles of drug design, drug discovery, and the relationship between the molecular structure of drugs and their biological activity. Topics covered in this course include how candidate drug structures are selected for synthesis, structure-activity relationships, Physicochemical properties of compounds and how these may be employed to assist in the selection of drug candidates, and organic synthetic methods that are of relevance to the preparation of drug-like molecules. Students will also learn how to apply this knowledge to identify abusive drugs and Narcotic and Psychotropic substances.

Post-graduation diploma for Industrial Safety, Hygiene, and Environmental Management with Specialization in Forensic Incidence Investigation:

The program, post-graduation diploma in Industrial Safety, Hygiene, and Environmental Management with a specialization in Forensic Incidence Investigation, has been set up at the school with the goal of preventative forensics and the main objectives of safeguarding human lives and properties, especially for the high-risk



industrial sector and other such occupations. Students of this diploma program will be trained for legislation related to industrial safety, hazard Identification, risk assessment and implementation of risk management techniques, safety management, safety engineering, advanced safety technology, safety issues of different high-risk industries and their management, ergonomics, industrial hygiene, construction safety, safety implication of hazardous chemical storage and transportation, industrial waste management, environmental impact assessment, process safety in chemical engineering.



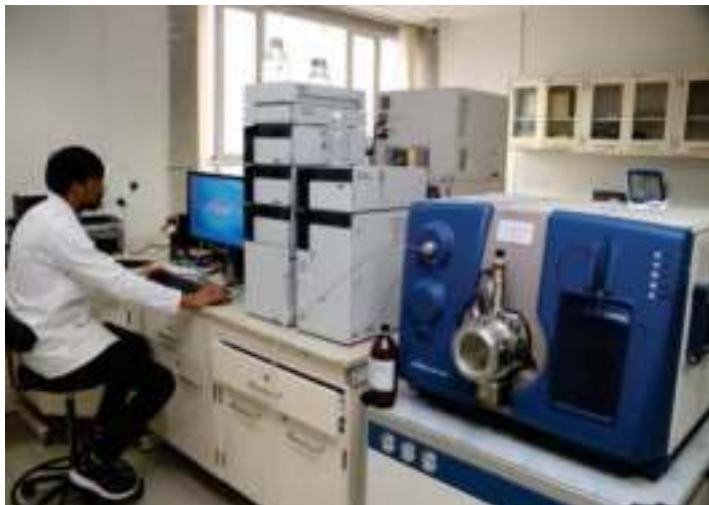
Resources and Infrastructure

The School of Pharmacy has excellent classrooms and conference/seminar halls with high-tech presentation facilities. The classrooms are air-conditioned and equipped with overhead projectors, LCD projectors, and computers with internet facilities. The school has well-equipped research laboratories. In addition to research laboratories, the Institute has Central Instrumental Laboratories (CIL) and a Computer Centre. The school is well connected with an

excellent Central library with many books and journals. It also has a well-equipped animal house approved by CPCSEA, New Delhi. We have some of the state-of-art instruments available that have been listed below.

The school has established an excellent facility for the separation and qualitative/ quantitative examination of analytes from various matrices, which can be forensic samples, food samples, pharmaceuticals, various industrial products, petroleum products, artifacts, as well as environmental samples. Also, dedicated research is conducted to develop new methodologies for examining various analytes from different matrices and understanding the mechanisms. The high-end research thrusts areas like advanced pharmaceutical analysis, material development and characterization, pre-clinical research, and toxicological studies are possible at the school because of the availability of all the required sophisticated instruments and characterization facilities. The school has established a discernible facility for sampling and analysis from environmental components, including air, water/ wastewater, soil, solid, and hazardous waste.





Some available highly sophisticated instruments include

MS/MS/MS

LC/MS

Automated Smart-HPLC system

Isocratic HPLC

Quaternary HPLC

Supercritical Fluid Chromatography

UV Visible spectrophotometer

UV/VIS/NIR

Spectrophotometer

Chiral Detector

Spectrofluorometer

FT-IR spectrophotometer

Spectrofluorometer

Gel electrophoresis

Laboratory and High-Speed Centrifuge

FT-IR with image microscope

Fluorescence microscope

Inverted microscope

GC-MS/MS

ICP-OES

Raman spectrophotometer

ELISA Reader

Probe Sonicator

Lyophilizer

Rotary Vacuum Evaporator

Highspeed Homogenizers

Brooke Field Viscometer

Langendorff apparatus with NIBP system

Electroconvulsometer

Plethysmometer

Data Acquisition system

PCR

RT-PCR

Chemical Synthesis facility

Gel-DOC system

Autosampler Dissolution Apparatus

Biosafety cabinet

CO2 Incubator

Planetary Ball Mill

Chemical Vapor Deposition System (CVD)

Differential Scanning Calorimetry (DSC)

Particle Size and Zeta Potential Analyzer

Cyclic Voltammetry

Electrospinning unit

Spin coater with vacuum pump

UV/Ultrasound/Microwave Synthesizer

Powder X-ray diffractometer (XRD)

Atomic Force Microscope (AFM)

Parallel Synthesizer

Respirable Dust Sampler

Stack Emission Monitoring Kit

Independent gaseous sampler

P.M. 2.5 Sampler

Sound level meter

Flame photometer

Nephelometer

Soil Sampling and testing facility

B.O.D. Incubator

C.O.D Digester

TOC Analyzer

Admission Information

Sr. No.	Name of Course	Eligibility Criteria	Duration	Seats	Tuition Fees* (per Sem) (INR)
1.	M.Pharm. Forensic Pharmacy	Bachelor of Pharmacy from a recognized university with a minimum 55% or equivalent marks or equivalent grade (50 % or equivalent marks for SC/ST and PwD category)	2 Years	30 seats - NFSU Gandhinagar campus 20 seats- NFSU Dharwad campus	65,000
2.	M.Pharm. Pharmaceutical Quality Assurance (PCI Approved)	Bachelor of Pharmacy from a recognized university with minimum 55% marks (50 % or equivalent marks for SC/ST and PwD category)	2 Years	15 seats-NFSU Gandhinagar Campus	65,000
3.	M.Sc. Environmental Science	Bachelor's degree in environmental science or any discipline of science (except mathematics and statistics) /B.E./ B.Tech in Civil, Chemical, and Environmental Engineering and allied branches with 55% or equivalent marks. (50 % or equivalent marks for SC/ST and PwD category).	2 Years	15 seats (Gandhinagar campus) 20 seats (Dharwad campus)	65,000
4.	M.Sc. Chemistry	Bachelor's degree with chemistry as one of the subjects with 55% or equivalent marks. (50% or equivalent marks for SC/ST and PwD category)	2 Years	15 seats-NFSU Gandhinagar Campus	65,000
5.	M.Sc. Pharmaceutical Chemistry	Bachelor's degree in any discipline of Science/ Pharmacy/Medicine/ Engineering with minimum 55% or equivalent marks. (50 % or equivalent marks for SC/ST and PwD category)	2 Years	15 seats-NFSU Gandhinagar Campus	65,000
6.	P.G. Diploma in Industrial Safety, Hygiene & Environmental Management	Bachelor's/master's degree in any discipline of Science /Engineering/ Technology with minimum 50% or equivalent marks (45 % or equivalent marks for SC/ST and PwD category)	1 Year	20 seats-NFSU Gandhinagar Campus	20,000

*Tuition fees mentioned do not cover other additional fees as decided by the university administration.

Faculty Profile

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Dr. Jasmin Kubavat

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Dr. Mahesh Vasava

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Ms. Garvita Parikh

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Excellent classrooms and conference/ seminar hall with high-tech presentation facilities



Events at School of Pharmacy

The School of Pharmacy also conducts several national events related to chemistry, pharmaceutical, and environmental sciences. These events are organized in order to disseminate knowledge as well as promote networking. In all such events, students are encouraged to volunteer which not only increases their exposure to eminent personalities in their field but also builds their soft skills.

The School of Pharmacy had organized Pharmacy Week 2022 on the World Pharmacists Day (23rd September) from 19th -23rd September 2022. Various events were organized, such as science quiz, photography, debate competition, skit, rangoli making, short videos, and E-poster making. Mr. Padmin Buch (Senior Domain Expert- Project & Intellectual Property Rights (IPR), Ex-director-Troikaa Pharmaceuticals) also delivered an expert lecture on the latest trends in the pharmaceutical industry. The week was a success and the students and faculty enjoyed thoroughly.





National Forensic Sciences University (NFSU), Gandhinagar Campus has participated in Panchamrit for Climate change-Youth Outreach Fortnight organized by the Department of Climate Change, Government of Gujarat, from 17th to 30th September 2022. Under the program, a series of events were organized, including slogan writing,

group discussion, elocution competition, essay writing, and innovative ideas for combating climate change (I2C3) for students of NFSU. Students from all the schools at NFSU Gandhinagar participated in all the competitions with great enthusiasm. Similarly, National Seminar on Current Trends in Environmental Sciences: Issues and Challenges on 19th October 2022 at NFSU Gandhinagar. Dr. Bharat Jain, Member Secretary, Gujarat Cleaner Production Center, graced the inaugural function as Chief Guest. Dr. H.V.C. Chary Guntupalli, Scientist-E/Additional Director, Ministry of Environment, Forest & Climate Change, Integrated Regional Office, Bhopal, Dr. S. K. Nema, Scientist H and Head of Atmospheric pressure Plasma Division, FCIPT, Institute for Plasma Research, Gandhinagar and Dr. Rohit Srivastava, Associate Professor, Pandit Deendayal Energy University, Gandhinagar had delivered keynote lectures. A poster presentation event was organized, and participants from various universities presented their research work.

A 7-day training programme on "Current Trends in Food and Drug Analysis: Emphasis on Forensic Perspective" was organized by the School of Pharmacy from 16-22nd November 2022 funded by DST-STUTI in collaboration with the Institute of Chemical Technology, Mumbai. The exclusive programme aimed to provide hands-on training on food & drug analysis using sophisticated instruments. The interactive sessions focused on different approaches for the analysis of Food adulteration, and Food contamination. The program also focused on the area of analysis of drugs, quality control of the drugs and drug substances, natural products, and biological substances.



The School of Pharmacy and NIPER-A jointly organized "Capacity Building Program for Drug Regulators: A Step Towards Continual Learning" on 20-21st February 2023. More than 85 officers got trained in this training. Dr. H. G. Koshia, Drug Commissioner, FDCA, and Prof. (Dr.) Naveen Kumar Chaudhary, Campus Director, NFSU-Goa Campus, addressed the officers.



Our students are placed at the following companies:





National Forensic Sciences University, Sector 9, Gandhinagar, Gujarat, India



079-239 77114/142/135



<https://nfsu.ac.in/about-campus>



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