

SCHOOL OF FORENSIC SCIENCE

NATIONAL FORENSIC SCIENCES UNIVERSITY

Education through Investigation

ABOUT University

National Forensic Sciences University (erstwhile Gujarat Forensic Sciences University) was established by the Government of India through Act, 2020 (32 of 2020) on 1st October 2020 and also accorded the status of an "Institution of National Importance". Established under the aegis of the Ministry of Home Affairs, Govt. of India, the objective of NFSU is to promote forensic science in conjunction with applied behavioural science, law, criminology, and other allied areas and technologies. University has headquarter located at Gandhinagar, Gujarat and other campuses at Delhi, Goa, Tripura, Bhopal and Dharwad along with academies at Pune, Guwahati, and Manipur.

Through thirteen Schools, nine Centres of Excellence, and state-of-the-art infrastructures, NFSU is producing skilled human resources for the different domains of forensic investigation and promoting research and innovation. Being as world's first and only forensic university, NFSU is also providing consultancies and imparting training to different stakeholders of the criminal justice delivery system thus strengthening the forensic capabilities globally.



Message From Hon'ble Vice Chancellor

It gives me immense pleasure to state that National Forensic Sciences University with the status of an Institution of National Importance (INI) is the world's first and only university dedicated to Forensic and allied sciences. School of Forensic Science (SFS) has been an epitome of excellence in forensic education and research since its inception. Through its unique curriculum, State-of-the Art infrastructures and diverse pool of qualified and scholastic faculties, SFS caters intellectually and culturally inspired academic environment.

The School of Forensic Science is transcending with a resolute to create skilled human resource for criminal investigation through world class teaching, research, training and innovations. As the types of crimes and modus operandi of criminals are continuously changing, qualified and skilled forensic experts are need of the hour to investigate and analyze forensic evidences to support criminal justice delivery system. As the motto of university is "Education through Investigation" School of Forensic Science is strengthening the investigative capabilities across the world by its unique academic programs and centers.

We will be delighted to welcome all interested in joining us and in fostering an academic atmosphere at the university campuses. We look forward to seeing you at the National Forensic Sciences University and being a part of our family.

Padma Shri. Dr. J. M. Vyas
Vice-Chaneellor
National Forensic Sciences University

VISION



- To fulfill the acute shortage of forensic experts in the country and the world.
- To make the world a better and safer place to live.
- To carry out research in the area of Forensic Science, Crime Investigation, Security, Behavioral Science and Criminology.

MISSION



- Education through investigation.
- To impart high quality education of international standards.
- To carry out research in the area of Forensic Science, Crime Investigation, Security, Behavioral Science and Criminology.



Message From

Dean

It's a matter of great pleasure to unveil brochure of School of Forensic Science and extend warm greetings on behalf of our school. School of Forensic Science being the torch bearer will guide on the path towards advanced learning in the domain of Forensic Sciences. This school was established with the vision to empower students with scientific intellect, intensive training in scientific skill and practical experience. Through theoretical and application-based learning in our courses for Forensic students, we aim to transform the learning experience and enhance human-resource skilling across academic, industrial, public, and private organizations.

School of Forensic Science has extended its academic outreach globally by collaborating with renowned foreign universities. Students, Research Scholars and Faculties regularly upgrade their skills through foreign exchange programs and internships. We have state-of-the-art infrastructure and experienced faculty who have consistently engaged in teaching and research. We envision providing advanced solutions to complex problems using legal, forensic, and technological frames.

I am confident that our attempts to build a strong connection between theory, academics, and practical training will be meaningful for everybody; and I am sure that you will find our programs and initiatives meaningful in the context of industry-relevant niche skills requirements.

All the best in your learning journey! I look forward to your association with NFSU!

Prof. (Dr.) Satish Kumar

Dean, School of Forensic Sciences
National Forensic Sciences University
Gandhinagar Campus.

GANDHINAGAR CAMPUS





CAMPUSES

Gujarat

Delhi

Goa

Tripura

Bhopal

Pune

Guwahati

Manipur

Dharwad

ABOUT School

School of Forensic Science (SFS), NFSU, Gandhinagar Campus has been established with the sole aim of creating much required expertise in the field of forensic science and shorten the skill gap that exist in this domain. SFS has been a canopy of the most significant core branches of Forensic Sciences and Crime Investigation since its inception. SFS firmly believes in strengthening and empowering the research culture and scientific environment.

Currently, SFS offers five years integrated program B.Sc.-M.Sc. Forensic Science (Integrated) and two years Post-Graduate programs in the domain of Forensic and allied sciences like M.Sc. Forensic Science, M.Sc. Forensic Biotechnology, and M.Sc. Multimedia Forensics. The school also runs one-year Post Graduate Diploma programs in core Forensic Science subjects such as Fingerprint Science and Forensic Document Examination . Curriculums of these courses are designed by distinguished academicians, forensic experts, scientists and industrialists of national and international repute to meet the requirements of both academia and industries. School of Forensic Science provides equal opportunities to all the students to explore its ultra-modern laboratories, instrumentation facilities and access to the latest technologies used for criminal investigation. Research publications, extramural research grants and patents are the testimony that students and faculties of SFS are actively engaged in cutting edge research in different domains of forensic and allied sciences.

SFS also harness the creative potential of students and promotes their entrepreneurial skills through the Students Start-Up Innovation Policy (SSIP). Apart from being hired by several national and international organizations, students of SFS are exhibiting their academic acumen by qualifying for highly competitive national level examinations, such as, UGC and CSIR NET etc. Apart from rendering its services to the society through consultancies, SFS is also engrossed in imparting extensive training to In-service officers from various law enforcement government organizations in India and foreign countries.



ABOUT THE PROGRAMS

M.Sc. Forensic Science

M.Sc. Forensic Biotechnology

M.Sc. Multimedia Forensics

B.Sc. - M.Sc. Forensic Science (Integrated)

P.G. Diploma in Fingerprint Science

P.G. Diploma in Forensic Document Examination

P.G. Diploma in DNA Forensics

P.G. Diploma in Forensic Ballistics

P.G. Diploma in Crime Scene Photography

P.G. Diploma in Crime Scene Management

M.Sc. FORENSIC SCIENCE

The M.Sc. Forensic Science Program seeks to educate and mould future scientists. It is one of the School of Forensic Science's key strengths. The curriculum provides skill-based training in the gathering, handling, and analysis of evidence for the purpose of justice and ensures making of qualified scientific investigators. Synergistically with the curriculum, new ways for easier, smoother, full proof methods of inquiry for more prudent results; with no defects or reliable ones, has been done in every field of forensic sciences. Future forensic professionals are introduced to a set of five specialisations namely physics, toxicology, finger prints and questioned documents, biotechnology and multimedia forensics. The course covers both theoretical and practical knowledge in all forensic science disciplines, demonstrating proficiency in laboratory techniques like forensic chemistry and molecular biology.

M.Sc. FORENSIC BIOTECHNOLOGY

It is essential to build a specific skill set in forensic science that includes both biological and technological expertise. A very interdisciplinary branch of biology called biotechnology has completely changed civilization. Now more than ever, the criminal justice delivery system needs forensic experts with the skills to appraise biological evidence, apply cutting-edge technology, and conduct forensic analysis. The two-



year (4 semesters) Master of Science programme in forensic biotechnology exposes students to modern biotechnological domains such as DNA Forensics, Forensic Proteomics, Wildlife Forensic, and others. Thus, creating a skilled task force for forensic investigations in the country.

M.Sc. MULTIMEDIA FORENSICS

Combating the "new age crimes" is now essential for the forensic investigation's future. Thus, it is of utmost importance to update from contemporary remedies to keep up with the quick shift in the types of crimes perpetrated nowadays. By extracting and analysing the digital fingerprints on the digital evidence with the aid of cutting-edge software that helps in authentication and scientific examination of the same, multimedia forensics focuses on the prevention and detection of crime. The National Forensic Sciences University's two-year M.Sc. programme in Multimedia Forensics trains students from a range of backgrounds for careers in forensic audio, video, and picture analysis using cutting-edge techniques and technology required to combat crime in the digital era.

B.Sc. - M. SC. FORENSIC SCIENCE

In accordance with the New Education Policy (NEP) 2020, NFSU has initiated a five-year integrated BSc-MSc programme in forensic science. This program calls for the entry of students at the undergraduate level. This unique program intends to produce professional, moral graduates who are

capable of applying their skills in problem-solving, legal analysis and application, quantitative reasoning, research, and scientific laboratory practises to either advanced study or direct work. The curriculum of the programme is created in such a way that it will not only strengthen knowledge of fundamental concepts but also enhance laboratory skills in various domains of forensic science.

P.G. DIPLOMA IN FINGERPRINT SCIENCE



An entirely dedicated database of the fingerprints of civilians and criminals in most countries across the globe highlights how fingerprints can be used as a starting point of the forensic investigations. The real-world crimes are sometimes also solved using fingerprint matches. NFSU has initiated the one year P.G. diploma to create a work force dedicated to examining fingerprints. The program aims to impart detailed knowledge about fundamentals of the identification of fingerprints using advanced fingerprint recognition and comparison systems and technology.

P.G. DIPLOMA IN FORENSIC DOCUMENT EXAMINATION

An abundance of crucial information can be gathered from documents related to a criminal or civil case. The suicide note found next to the deceased—was it actually written by a killer trying to cover up his crime? The bank robber's hold-up note—does it contain invisible impressions that indicate the address of the hideout? The will of a wealthy



person—was it altered so a relative could receive a windfall?

The discipline of forensic document examination, often referred to as "questioned documents," is frequently associated with white-collar crimes such as check fraud; however, in practice, this area of forensic science can be used in a wide array of cases from medical malpractice to art forgeries to homicides.

P.G. DIPLOMA IN DNA FORENSICS

It is a specially designed flagship program of the NFSU to produce the trained manpower required for the increasing demand for DNA analysis in a criminal investigation. The program offers a unique syllabus comprising the actual requirement of forensic laboratories of the nation. The program will be conducted during weekends which will offer an excellent opportunity for existing staff of forensic laboratories to enhance their skillset. The program will add an important feather essential for the career advancement of the aspirants.

P.G. DIPLOMA IN FORENSIC BALLISTICS

This is a highly practical and hands-on training-oriented program, aiming to produce a clear understanding of how firearms and ammunition function, the science of ballistics, the role of the forensic firearms examiner, and how the forensic evidence produced in gun crime can be used to help resolve issues in relation to criminal and civil law.

P.G. DIPLOMA IN CRIME SCENE PHOTOGRAPHY

Crime scene photography and videography play a vital role in the forensic evidence collection process, which in turn helps the judiciary/investigative agencies in unbiased justice redressal. This programme focuses on the thorough, in-depth study of various advances in the field of photography and videography, especially in crime scene photography. The focus is on crime scene photography aspects which include subjects such as 3-D photography, 3-D videography, security aspects, applications areas of photography and videography, and other aspects.

P.G. DIPLOMA IN CRIME SCENE MANAGEMENT

Crime scene management skills are an extremely significant task component of investigation because evidence that originates at the crime scene will provide a picture of events for the court to consider in its deliberations. Successful crime scene investigation utilizes a step-by-step process in the discovery, preservation, and collection of physical evidence. This course examines the fundamental theories of physical evidence, legal issues, and the proper management of the collection and preservation of evidence.

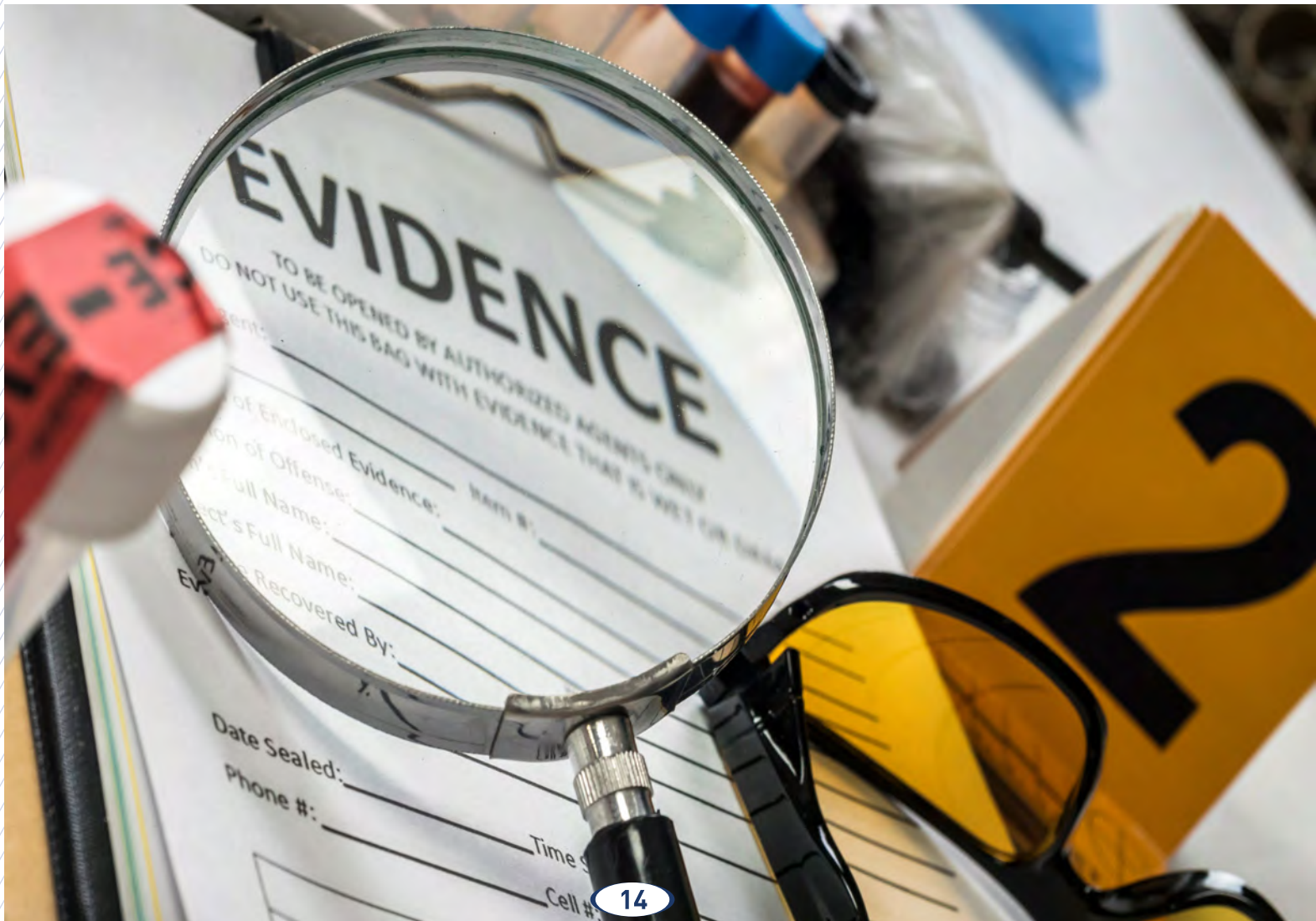
Program	Duration
M.Sc. Forensic Science	2 Year
M.Sc Forensic Biotechnology	2 Year
M.Sc. Multimedia Forensics	2 Year
B.Sc. - M.Sc. Forensic Science	5 Year
P. G. Diploma in Fingerprint Sciences	1 Year
P.G. Diploma in Forensic Document Examination	1 Year
P.G. Diploma in Crime Scene Photography	1 Year
P.G. Diploma in Crime Scene Management	1 Year
P.G. Diploma in Forensic Ballistics	1 Year

Campus	Intake Seats
Gandhinagar	60
Delhi	40
Goa	40
Tripura	30
Bhopal	30
Gandhinagar	20
Gandhinagar	20
Gandhinagar	40
Delhi	40
Goa	40
Tripura	30
Gandhinagar	20
Delhi	20
Bhopal	20
Pune (Academy)	20
Guwahati (Academy)	20
Gandhinagar	20
Delhi	20
Bhopal	20
Pune (Academy)	20
Guwahati (Academy)	20
Delhi	20
Bhopal	20
Pune (Academy)	20
Guwahati (Academy)	20
Gandhinagar	20
Bhopal	20
Pune (Academy)	20
Manipur	20



PROGRAM DETAILS

INFRASTRUCTURAL FACILITIES





Laboratory of Forensic Physical Sciences Full-fledged laboratory for examination and analysis of crucial evidences such as fingerprints, bullets, Hair, fibres, documents, soil, glass, paint etc. found on the crime scene. The laboratory is equipped with highly sophisticated instruments namely AFM, Stereomicroscope, EDXRF, Facial recognition system, Video Spectral Comparator, Currency verifier, IR Microscope, Comparison microscope, Digital microscope, TRASI scan, Tool scan imaging system, 3D scanner and Digital Refractometer.

Laboratory of Forensic Biology and Biotechnology The laboratory of Forensic Biology and Biotechnology has a unique amalgamation of teaching and research in modern Bio-forensics. Students are given exposure to state-of-the-art facilities and techniques to hone up the skills required for the highly interdisciplinary domain of forensic science. The lab is equipped with various high-end major and minor equipment like Next Generation Sequencing Unit (Ion Torrent S5 Plus) with Ion Chef, Rapid HIT, DNA Sequencer (3500), Spectrophotometer, Ultracentrifuge, Real-time PCR, Gel Documentation system, Microplate Reader, 2D-Gel and SDS-PAGE, Nano-spectrophotometer, Class II Biosafety Facility, Compound microscopes and Fluorescence microscope.



Laboratory of Forensic Chemistry and Toxicology The laboratory is well equipped with most of the instruments used for routine and sophisticated analysis of forensic evidences like drugs, poisons, explosives, petroleum products, alcoholic and non-alcoholic beverages etc. The laboratory is well functional with instruments like UV-VIS Spectrophotometer, Fourier Transform Infrared Spectrometer (FTIR), Gas Chromatography (GC), Gas Chromatography-Mass Spectrometry (GC- MS), Ultra performance Liquid Chromatography-Tandem Mass Spectrometry (UPLC-MSMS), HPLC (High Performance Liquid Chromatography), Inductively Coupled Plasma Mass Spectrometry (ICP-MS) and various other small instruments for chemical and toxicological analysis such as Compound Microscope, stereo Microscope, Fluorescence microscope for specimen/samples analysis. The facilities and equipment for performing different extraction techniques such as solvent extraction, solid phase extraction, solid phase micro extraction, accelerated solvent extraction and microwave extraction are up and running.

Laboratory of Multimedia Forensics A full-fledged laboratory aiming to enhance, analyze and verify multimedia evidence like audio, video and image file to be presented as crucial evidence in the court of law. The laboratory includes highly sophisticated tools for audio, video & photo enhancement and authentication tools including Computerized speech lab, Multispeech, Goldwave, Praat, Acustek, Amped Five and Amped Authenticate, facial recognition tools such as facevacs. These forensic instruments are specifically used for investigative, forensic, military and security applications.



Faculty Members



Dr. Satish Kumar
Professor and Dean
School of Forensic Science



Dr. Bhargav C. Patel
Senior Assistant Professor



**Dr. Akanksha Singh
Kachhawaha**
Assistant Professor



Dr. Rajlakshmi Chetty
Assistant Professor



Mrs. Krishna Modi
Teaching & Research
Assistant



Dr. C. Rajesh Babu
Associate Professor



Dr. Astha Pandey
Associate Professor



Dr. Pooja Ahuja
Associate Professor



Dr. Surbhi Mathur
Senior Assistant Professor



Dr. Malay Shukla
Assistant Professor



Dr. Niha Ansari
Assistant Professor



**Dr. Chandra Shekhar
Yadav**
Assistant Professor



Dr. Hirai Sanghavi
Assistant Professor



Dr. Poonam Gupta
Assistant Professor



Ms. Kanica Chugh
Teaching & Research
Assistant



Ms. Vaishali Abrol
Teaching & Research
Assistant



Ms. Vernika Mehta
Teaching & Research
Assistant



Mr. Kapil Shukla
Teaching & Research
Assistant



Ms. Manika Gupta
Teaching & Research
Assistant



Mr. Shikhar Mathur
Teaching & Research
Assistant

PLACEMENTS





Deloitte.

CONSULTANCY SERVICES



Hindustan Pencils Pvt. Ltd.
since 1958



RESEARCH THRUST AREAS

Forensic Biology and Biotechnology

- DNA Fingerprinting and DNA databasing
- Forensic Genomics and mtDNA analysis
- Non-Human DNA Forensics
- Microbial Forensics
- Forensic Proteomics and Bioinformatics



Forensic Chemistry and Toxicology

- Analysis and method development in NDPS, Petroleum products and explosives.
- Forensic toxicological examination
- Detection of adulterations in food.
- Investigation and analysis of fire and arson



Forensic Physics and Ballistics

- Development of cost effective and light weight bullet proof material
- Automated tool for trajectory determination from blood spatter analysis
- Development of automatic tool for signature and handwriting examination
- Differentiation of superimposed fingerprints
- Novel tools for fingerprint lifting and analysis from various matrices.



Cyber and Digital Forensics

- IOT and SCADA
- Mobile forensics
- Pen testing and Cloud Forensics
- Pen-testing and data security
- CCTV footages and image analysis



Multimedia Forensics

- Developing tool for determination and analysis of synthetic voices
- Tool development for analysis of deepfake videos and images
- Tool for Identification of electronically morphed voices
- Multilingual auto transcription tools for converting recordings to text



Ms. Krittika Sood
M.Sc. Forensic Science
2018 - 2020

“ At National Forensic Sciences University every day is a new day to learn, grow and achieve. The university aims that the students flourish, not only professionally, but personally thereby imparting a holistic education to students. ”

Mr. Amit Kumar
M.Sc. Forensic Science
2014- 2016

“ The teaching experience was wholesome as we were impacted with both practical and theoretical knowledge. The world class instrumentation at NFSU helped us train ourselves in all practical areas of forensics. ”

Ms. Ujaala Jain
M.Sc. Forensic Science
2017 - 2019

“ SFS, NFSU provides all the facilities a student wishes for. The course of forensic science being a part of SFS, offers good practical exposure and all the developments regarding curriculum are made up-to-date. Highly professional faculties are well certified in their own field which helps us to work in a more efficient manner in stuff like research papers, review papers, posters, participation in conferences, etc. ”

Mr. Tushar Ahire
M.Sc. Forensic Science
2015-2017

“ Study and Social ambience at NFSU are great. I loved to study at NFSU and I am proud to be a student of this university. ”

STUDENT TESTIMONIALS

Mr. Tarakbhai Shah
PG Diploma in Forensic
Document Examination
2014-2015

“ My overall development as a Forensic Scientist is possible only due to the cooperative and knowledgeable staff working at NFSU. I am very much thankful to all staff members and feel proud to be a student of such great institute. ”

Mr. Vikash Kumar
M.Sc. Forensic Science
2015-2017

“ NFSU provides the best platform with the best professionals and expertise. NFSU with the best infrastructure and advanced facilities is creating the foundation of forensic science in India. I cannot find a better university than NFSU. It is my honor and pleasure to be a part of SFS, NFSU. ”

Mr. Sagar Bhowmik
PG Diploma in
Fingerprint Science
2015-2016

“ Very well-designed curriculum. great experience at NFSU ”

Mr. TarunVig
PG Diploma in Forensic
Document Examination
2015-2016

“ The course content is very exhaustive, the faculties possess deep knowledge of both the theoretical and the practical aspects of the subject, and the infrastructure is well laid out. Jai Hind. ”



National Forensic Sciences University

Knowledge | Wisdom | Fulfilment

An Institution of National Importance
(Ministry of Home Affairs, Government of India)

School of Forensic Science National Forensic Sciences University

Sector - 9, Gandhinagar - 382007 Gujarat, INDIA.

Ph. : +91 - 79 - 23977185

Fax : +91 - 79 - 23247465, 23256251

Email : dean_sfs@nfsu.ac.in | Website : www.nfsu.ac.in