Education through Investigation

Gujarat Forensic Sciences University

KNOWLEDGE • WISDOM • FULFILMENT
Vision

- To provide highly qualified experts of forensic and allied sciences to fulfill their acute shortage in the country and the world.
- To strengthen the Criminal Justice Delivery System.
- To help make the world a better and safer place.

Mission

Being first of its kind, the University aims to become a world class University having various centers of excellence in different areas related to forensic and allied sciences.
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About the University

The Gujarat Forensic Sciences University is the world’s first and only University dedicated to Forensic and allied Sciences. It was established by the Government of Gujarat through an act passed by the Gujarat Legislative Assembly dated 30th September, 2008 with an objective of fulfilling the acute shortage against increasing demand of forensic experts in the country and around the world. Evidently, the University became functional from July, 2009 onwards with various courses, scientific programs and training modules. The University was recognized by the University Grants Commission (UGC) as a State University under section 22 of UGC Act, 1956 to award degrees in May, 2011. It is located in the green and clean city of Gandhinagar which is the capital city of Gujarat state, a vibrant, industrious, safe and business friendly state of Indian sub-continent.

The University runs in parallel association with the Directorate of Forensic Science (DFS)-Gujarat State, to provide hands-on training pertaining to various areas of forensic science, forensic psychology and research and development. DFS-Gujarat is a state-of-the-art, NABL accredited, ISO-IEC 17025:2005 certified laboratory, maintaining international standards in terms of infrastructural facilities, experts and technology for Forensic analysis.

The University is segregated into three academic departments, namely Institute of Forensic Science (IFS), Institute of Behavioural Science (IBS) and Institute of Research & Development (IRD). Due to the advanced and specialized courses run by each of the institutions of the University, it currently offers only postgraduate level academic programs. Maintaining excellence in education, research, and patient care with appropriate facilities within this University encourage collaborations across multiple disciplines and skill sets.

The GFSU’s Ultramodern Campus is constructed near the DFS premises, on a government allocated land of 50,000 square meters. The foundation stone of the University’s campus was laid by the then Hon’ble Chief Minister of Gujarat State and the present Prime Minister of India, Shri Narendra Modi, on the 10th of October, 2011. New campus was inaugurated by Hon’ble Chief Minister of Gujarat, Smt Anandiben Patel on the day of the ‘First Convocation’ of the University, 29th April, 2015. She delivered an extremely motivating convocation address to inspire the students and bless them for their future career.

The University has built a Hi-tech Green Campus with State of the Art infrastructure and it is proceeding for Green Building Certification.

The University is headed by the Director General, followed by the Registrar and three Directors, as head of each of the three institutes. The highest body of the University is the Board of Governors having the Director General of the University, as its Chairman.
## Board of Governors

<table>
<thead>
<tr>
<th>No.</th>
<th>Name &amp; Designation</th>
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<tbody>
<tr>
<td>1</td>
<td>Dr. J. M. Vyas</td>
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<tr>
<td></td>
<td>Director General, Gujarat Forensic Sciences University &amp;</td>
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<tr>
<td></td>
<td>Director, DFS, Gandhinagar</td>
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<tr>
<td></td>
<td><strong>Chairman</strong></td>
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<td>2</td>
<td>Shri Shivanand Jha, IPS</td>
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<td></td>
<td>Commissioner of Police,</td>
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<td></td>
<td>Ahmedabad City, Ahmedabad</td>
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<td>3</td>
<td>Shri Mukesh Kumar, IAS</td>
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<td></td>
<td>State Project Director, Sarva Shiksha Abhiyaan,</td>
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<td>Shri B. N. Karia</td>
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<td>Registrar General, High Court of Gujarat,</td>
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<td>Shri G. S. Malik, IPS</td>
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<td>Secretary, Home Department,</td>
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<td>Dr. M. S. Rao</td>
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<td>Retd. Chief Forensic Scientist,</td>
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<td>Ministry of Home Affairs, Government of India</td>
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<td>7</td>
<td>Dr. Akshai Aggrawal</td>
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<td></td>
<td>Vice Chancellor, Gujarat Technological University,</td>
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<td>8</td>
<td>Dr. Harish Padh</td>
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<td>9</td>
<td>Prof. Y. K. Agrawal</td>
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<td>Director, Institute of Research &amp; Development, GFSU</td>
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<tr>
<td>10</td>
<td>Dr. M. S. Dahiya</td>
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<td>Director, Institute of Forensic Science, GFSU</td>
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<td><strong>Member</strong></td>
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<td>11</td>
<td>Shri C. D. Jadeja</td>
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<td></td>
<td>Registrar, GFSU</td>
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<td></td>
<td><strong>Member Secretary</strong></td>
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### Academic Council

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<tbody>
<tr>
<td>1.</td>
<td>Dr. J. M. Vyas Director General, GFSU, Gandhinagar</td>
<td>Chairman</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Prof. Chandrakant Kokate</strong> Vice Chancellor, KLE University, Belgaum-590010 (Karnataka)</td>
<td>Member (Nominated)</td>
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<tr>
<td>3.</td>
<td>Shri Ketan Patel Chairman &amp; M.D, Troikaa Pharmaceutical Ltd., Ahmedabad-54</td>
<td>Member (Nominated)</td>
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<td>4.</td>
<td>Dr. M. S Rao Retd. Chief Forensic Scientist, Bengaluru-560048</td>
<td>Member (Nominated)</td>
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<td>5.</td>
<td>Dr. Rukmani Krishnamurthy CEO, Helik Advisory Ltd., Mumbai 400008</td>
<td>Member (Nominated)</td>
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<td>6.</td>
<td><strong>Prof. D. M. Pestonjee</strong> Chair Professor (GSPL)- School of Petroleum Management, PDPU, Gandhinagar</td>
<td>Member (Nominated)</td>
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<td>7.</td>
<td>Dr. Jyotsna Yagnik (Former Principal Judge,City Civil &amp; Sessions Court ) Ahmedabad-380006</td>
<td>Member (Nominated)</td>
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<td>8.</td>
<td><strong>Prof. D. Chenna Reddy</strong> Scientist –H &amp; Associate Dean (Infrastructure) Institute For Plasma Research, Gandhinagar-382428</td>
<td>Member (Nominated)</td>
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<tr>
<td>9.</td>
<td>Dr. S. R. Avashia Addl. Director, Health &amp; Family Welfare Department, Govt. of Gujarat</td>
<td>Member (Nominated)</td>
</tr>
<tr>
<td>10.</td>
<td><strong>Prof. Y. K. Agrawal</strong> Director of Institute of Research &amp; Development, GFSU- Gandhinagar</td>
<td>Member (Ex-Officio)</td>
</tr>
<tr>
<td>11.</td>
<td>Dr. M. S. Dahiya Director of Institute of Forensic Science, GFSU- Gandhinagar</td>
<td>Member (Ex-Officio)</td>
</tr>
<tr>
<td>12.</td>
<td><strong>Prof. C.R Mukundan</strong> Director of Institute of Behavioral Science GFSU - Gandhinagar</td>
<td>Member (Ex-Officio)</td>
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<tr>
<td>13.</td>
<td>Shri C. D. Jadeja Registrar, GFSU-Gandhinagar</td>
<td>Member Secretary (Ex-Officio)</td>
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Director General’s Message

I take this opportunity to place on record, the completion of six successful years of this super specialized University. The University made all attempts to achieve international standards in providing quality education, training & research and developmental activities, so as to fulfil the dream of our former Chief Minister of Gujarat State, and the present Hon'ble Prime Minister of India, Shri Narendra Modi, based upon whose vision the University has been established.

This University has carried out certain major activities in the past six years which include national & international events and collaborations, launch of some unique-world class academic programs, training to the officers of all the agencies of the country and abroad and research of international standards.

The University began with five academic programs, in the year 2009 and presently has started 34 unique and highly specialized programs having more than 1200 students. In this short span of six years, 11 students have successfully completed their Ph.D’s. Some of the Ph.D. students are holders of UGC-JRFs.

We have announced various Awards for the meritorious students belonging to Forensic Science, Forensic Psychology and Research & Development related programs. The University has decided to invite minimum one Overseas-guest Faculty every year since the courses being run are unique in nature, renowned experts are required to give them proper exposure.

The University has also established a full-fledged Placements & Career Guidance Cell in the year 2011 which arranges placements of students with highly reputed National & Multi-national organisations including Central and State Government Organisations, security agencies, financial institutions, corporates and others.

In addition to providing high quality education, we’ve also undertaken various training programs in collaboration with Ministry of External Affairs, Government of India, the Bureau of Police Research & Development, Gujarat State Judicial Academy, World Wildlife Federation, NABL, NIA, Banks, Corporates, etc. and so far around 4500 officials have been trained in the past six years in various subjects of forensic & allied Sciences..

The University also successfully organised 25 International & National events in the short span of six years.

For strengthening the knowledge extension programs, the University has inked collaborations with 35 organizations of National & International repute. To promote research in a big way, some of the very best Research Laboratories of both Public & Private sectors have been recognized as Research Centres of the University for conducting exemplary research & development work, under the guidance and supervision of the University.

I am confident that the students who have been associated with us have had a good time at the campus and have immensely been benefitted by the high quality education imparted to them.

My best wishes to all,

Dr. J. M. Vyas
Director General
The Registrar

Shri Chhatrapalsinh. D. Jadeja is currently the Registrar of Gujarat Forensic Sciences University.

He brings with him vast experience of Academic Administration, having worked with Premier Education Institutes like Nirma University, Ganpat University on important positions.

An alumnus of Sainik School Balachadi and a topper in Psychology from Maharaja Sayajirao University, Baroda, he began his career as an Academician and a Researcher which was when he had the opportunity to work at IIM, Ahmedabad in Areas of Business Policy, Organizational Behavior and Entrepreneurship.

He is optimistic about the changing scenario of education with Public Private Partnerships and believes that sound administration of an education institute makes a difference for all its Stakeholders.

The Officers

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<tr>
<th>Name</th>
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<tr>
<td>Shri G. T. Chavda</td>
<td>Sr. Accounts Officer</td>
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<tr>
<td>Shri D. D. Bhagat</td>
<td>Dy. Registrar - Exam</td>
</tr>
<tr>
<td>Shri R. N. Guna</td>
<td>Dy. Registrar - Academics</td>
</tr>
<tr>
<td>Shri M. V. Joshi</td>
<td>Asst. Registrar - Exam</td>
</tr>
<tr>
<td>Shri R. D. Patel</td>
<td>Accounts Officer</td>
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<tr>
<td>Shri B. M. Chauhan</td>
<td>Accounts Officer</td>
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<tr>
<td>Shri Kumarpal Shah</td>
<td>PRO/Estate Manager</td>
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<tr>
<td>Shri R. I. Patel</td>
<td>Campus Engineer</td>
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<tr>
<td>Shri R. J. Jhala</td>
<td>Security Officer</td>
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</table>
Infrastructure

Gujarat Forensic Sciences University’s current building comprises of centrally air conditioned classrooms equipped with LCD projectors, Hi-tech laboratories, learning resource centre, administrative wing, computer laboratory, R&D labs etc. The University’s new campus is spreading across 50,000 sq. mtrs., wi-fi enabled with CAT7 network, eco-friendly with solar panels, high intelligence security systems including 256 CCTV cameras, hostel and guest house facilities, amphitheater, gymnasium, huge playground, cafeteria, large auditorium with 560 seating capacity and mini auditorium with 250 seating capacity, various lecture theatres, well equipped laboratories and a central library inclusive of computers with internet facilities, together with a voluminous collection of both electronic and printed books, journal, paper articles and reviews subscribed from various reputed national and international publishing houses. Athletics field and parking facilities all form an imperative part of the University’s infrastructural amenities.

Additionally, a world class underground Ballistics Research Centre and a Threat Shield Laboratory are certain other special features of this unique campus. Even as the University adds more people and buildings, it continues to feel intimate, maintaining its sense of coherence and purpose and preserving its park-like character. GFSU’s campus houses a vibrant, forward-looking institution undergoing constant improvement and growing to pursue teaching and research in ever-changing and emerging fields of forensic research and knowledge.
Learning Resource Center

GFSU Learning Resource Centre

The Gujarat Forensic Sciences University Central Library is one of the unique and largest forensic libraries in the world. The GFSU central library is a congregation of various books and journals related to Forensic Science, Forensic Pharmacy, Nanotechnology, Civil Engineering, Environmental Science, Management, Chemistry, Digital Forensics, Cyber Security, Forensic psychology, Clinical Psychology etc. Students often visit to the INFLIBNET for full access to the journal articles in various fields of research academic and interests.

About the Collections

The GFSU Central Library holds more than 4000 volumes, subscribes to most of the current journal titles and houses many non-current forensic journal titles. The library also houses one of the world’s leading forensic investigation collections, and provides access to many electronic information resources.

Accessibility & Service to Students

GFSU library members have full privileges including borrowing books, using electronic resources remotely, and requesting items GFSU intranet facility. Copying, Scanning and Printing are also part of the Learning Resource Centre depending on the type of accessibility and demand. Wi-Fi internet connections backed by NKN is available to all students individually.

Access to print collections: Includes access to books, journals, reference materials, and the reserve collection.

Access to electronic resources: Access to electronic resources is available to all users physically located within the GFSU central library building.

Study space: GFSU Central library has ample study space throughout the building, as well as a user lounge equipped with computers and accessories.

Updated list of books and journals as and when required is readily available online. Ideally, each year, a number of books are ordered to help students and faculty members to abreast the new developments in respective areas of forensic research. Moreover, reading room is equipped with comfortable desks and chairs with timings from morning 08:00 hrs to evening 20:00 hrs, 24x7.

Additionally, the Records Management (RM) program advises and educates GFSU faculty and staff in the management of recorded information in all formats to ensure timely access to important information resources, compliance with recordkeeping laws, regulations, policies, and best practices, and preservation of the historical record of GFSU central library.
Knowledge Extension

The following international and national organizations have collaborated with the university with the view of knowledge extension.

**International MoUs**

1. Galilee International Management Institute - Israel
2. Center for Global Advancement of Community Colleges, Washington DC - USA
4. University of Houston - Clear Lake, Texas - USA
5. Alabama State University - Montgomery, AL – USA
6. Sagem Morpho Security Pvt. Ltd. - France
7. Nemesysco Ltd. - Israel
8. Forensic Technology WAI – Canada
9. Suspect Detection Systems (SDS) - Israel
10. MS Instruments - United Kingdom
11. StraEd Inc. - USA
12. Approved Group International – Malaysia
13. Uganda Police
14. Canberra Institute of Technology, Australia

**National MoUs**

2. Gujarat National Law University (GNLU) - Gandhinagar
3. Hospital of Mental Health - Ahmedabad (Govt. of Gujarat)
4. B. M. Institute of Mental Health - Ahmedabad
5. J.S.S. University - Mysore - Karnataka
6. Ranchi Institute of Neuro-Psychiatry & Allied Sciences (RINPAS) – Jharkhand
7. Govt. Dental College & Hospital - Ahmedabad
8. School of Security & Behavioural Intelligence Institute - Ahmedabad
9. Asian School of Cyber Laws (ASCL) - Pune
10. Helik Advisory Ltd. - Mumbai
11. Lexcode Regulatory Pvt. Ltd. – Pune
12. eSF Labs Ltd., Hyderabad
13. KLE University, Belgaum
14. Gujarat Environment Management Institute, Gandhinagar
15. Central Bureau of Investigation, New Delhi.
20. Price Waterhouse Coopers (PWC)
21. Police Foundation and Institute, New Delhi
Recognized Research Centers of the University

- Eco-friendly Computech Solutions, Ahmedabad.
- Axxonet System Technologies Private Ltd., Bengaluru.
- Gujarat Pollution Control Board, Gandhinagar.
- Gujarat State Biotechnology Mission, DST, Govt. of Gujarat, Gandhinagar.
- Care Institute of Medical Sciences, Research Laboratory, Ahmedabad.
- Gujarat Environment Management Institute, Gandhinagar.
- Bhaskaracharya Institute of Space Applications & Geoinformatics.
- Invitrogen Bioservices India Pvt. Ltd., Gurgaon (U.S Based).
- E-Secured Forensics, Hyderabad.
- Helik Advisory Ltd., Mumbai.
Achievements

Awards / Recognitions

- ‘Excellence in Education’ award, 2015 conferred by CMAI and CCI Technology
- ‘Education Leadership Award’ conferred by STARS GROUP and Dainik Bhaskar
- Recognized by UGC, RCI and Nursing Council of India for conducting various programmes.
Events

- Conference on Digital India organized by Institute of Forensic Science in association with Microsoft on 30th & 31st March, 2015 with over 900 participants.
- International Conference on Cyber Security, organized by Institute of Forensic Science on 13th & 14th March, 2015.
- One day Workshop on Ballistics, for Police Officers and Forensic Experts was organized in June, 2014.
- Five Days Integrated Workshop for Drug Control Officials On Medical Devices Regulation from 16th to 20th February, 2015 Ninth National Conference on Hypnotherapy, in collaboration with JNU - New Delhi; co-sponsored by Institute of Behavioral Science, Gujarat Forensic Sciences University and Indian Association of Positive Psychologists - October 2013.
- XVIth All India Conference of Directors of Fingerprints Bureaux, in collaboration with NCRB – New Delhi, organized by GFSU – March 2014.
- Workshop on Clinical & Forensic Psychology; conducted by Dr. Shripati Upadhyaya, Senior Clinical Psychologist from The Yorkshire Clinic, Bradford - United Kingdom - July 2013.
- National Seminar on “Firearms & Toolmarks Investigation”, conducted by Dr. James Hamby - USA and Mr. Nadav Levin – Israel in 2012.
- National Seminar on Uses of Digital Image Analysis in Forensic Investigation in 2011.
- Workshop on strengthening Wildlife Enforcement for Wildlife Protection in South Asia was organized under the aegis of South Asia Wildlife Enforcement Network (SAWEN) Secretariat in 2011.
- First International Conference on Forensic Nanotechnology in 2011.
- First INTERPOL conference to promote the use of DNA, DVI and Fingerprints in Identification in Asia; for experts of SAARC countries in 2010.
- “Myriad” - A National Level Competition Based on Nanotechnology in 2010.
Training

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<td>IAS/IFS/IPS/IRS</td>
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<td>Others</td>
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• Advanced Technology in Forensic Science & Crime Scene Investigation, for Police Officers
• Investigation of Cyber Crime Cases, for Police Officers
• Vertical Interaction Course on Recent advances in Forensic Science & Forensic Medicine, for Senior Police Officers (IPS).
• Forensic Science and Administration of Justice, for Judicial Officers.
• Scientific aids to interrogation, for Police Officers.
• Anti Human Trafficking, for Police Officers.
• ISO/IEC 17025:2005 & Internal Audit, for officers of Laboratories.
• Forensic Science in Investigation of Crime for Lt/Lt Cdrs of Naval Police.
• Fire Investigation, for Officers of Maruti Suzuki India Ltd.
• Forensic Science in Investigation of Crime for officers of Air force.
• Explosion & Post Blast Investigation (IED) for NIA officers.
• Role of Forensic Sciences in Insurance Claims Management, for the Officers of HDFC ERGO General Insurance Co. Ltd.
• Schematic Analysis of NDPS, for Bangladesh Police
• Forensic Science of various Division, for Nepal Police.
• Enhancing India’s Firearm Enforcement Operations through new and expanded process and Technology, for Police Officers & Forensic Experts by the experts of Canada and Denmark.
• Wildlife Forensics, for Officers of Forest Department & State Police.
• Cyber Forensics for Senior Officers of Commercial Tax, Odisha
• Digital Forensics for PC & PNDT Act Implementation for Medical Officers, Gujarat
• One day Training Programme, for 11 Civil Judges (Jr. Div.) from State of Uttrakhand.
• Training for Judicial Officers on subject of Forensic Science and Criminal Justice System.
• Training on the subject of law relating to Forensic Science for Judges.
• Modern Techniques for Improving Policing for Officers of Narcotics Control Bureau
• Training on Wildlife Forensics for Officers of Forest Department of Madhya Pradesh
• Training on ‘Cyber Suraksha Kavach’ for Police Officials
• Training for ATS Officers of Bihar on Post Blast Investigation
• Training on Laboratory Attachment for Bangladesh Police Officials.
• Training on Incident Response, CERT operations and Unknown Vulnerabilities.
# Placements

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<td><img src="image21.png" alt="Grokken Logo" /></td>
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<tr>
<td>Torrent Pharma</td>
<td><img src="image22.png" alt="Torrent Pharma Logo" /></td>
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Institute of Forensic Science

Gujarat Forensic Sciences University
About the Institute

FORENSIC SCIENCE, A FIELD OF VERSATILITY WITH PROLIFIC OPPORTUNITY

“Any place that anyone can learn something useful from someone with experience is an educational institution” -- William Wordsworth

Institute of Forensic Science under the Gujarat Forensic Sciences University has been established with a sole aim of creating much required expertise in the field of criminal investigation with the application of advanced scientific techniques. The primary and the most important mission of this institution are to inculcate the application of various scientific disciplines for the purpose of justice delivery among the needy. Starting with the much conservative disciplines of Forensic Sciences, this institution has come a long way by introducing more contemporary disciplines in the field of science and technology. More impetus is being given to the development of various specializations through which the main goal of creations of experts could be achieved. This in turn would lead to the efficient services from the young experts in various sectors in the government and private organizations. Not shrugging off from the traditionally embarked subjects such as Fingerprints, Questioned documents, Ballistics, Analytical chemistry, Toxicology, Explosives, Serology and DNA analysis; Forensic sciences have evolved new arena. Venturing into the modern technology in the associated streams betokens such an innovative step of this institute. In every specialty of forensic sciences, there has been synergetic inclusion of the novel techniques for the easier, smoother, fool proof methods of investigation for the more perfect results.

One of the most fascinating entities in the contemporary forensic sciences is that of cyber forensics which finds excellent prospects in almost every field irrespective of the area of interest (portfolio)/ departments. From the traditional methods of imparting solutions for the criminal investigation, there has been giant leap made forward in the form of introducing digital forensics as a solution for the complexities associated with cyber related crimes or the crimes involving Information and Communication technology arena. One of the most sought after technology in the modern era is that of the information technology and solutions for the cyber-crimes. It is very obvious that the information and communication are the nerve centres for any criminal act. In the era of communication and information system's excellence, the abuses are also getting more common and are being executed by the perpetrators of crimes as they are being easily handled by the tech savvy criminals. Global scenario reveals the dearth of the experts in this specialty. The technological knowhow is being offered in the academic curricula for the aspiring cyber-crime investigators. This has been encapsulated in academic curricula known as Digital Forensics and Information Assurance and Cyber Security and Incident Response as Master's degree programmes of Technology. The combination of technology and science gets the perfect fusion in the form of the best resolution for every criminal investigation involving cyber-crimes and breaches of information security.
There is another feather to the cap for this institute is that of establishing the intelligence laboratory solely for the dedicated service to the security of the nation. This is a sort of a mile stone reached by the institute in a very short period of time. It has been already placed on record that this institution is a trend setter by starting various pioneer courses viz. forensic biotechnology, forensic nursing, forensic accounting, forensic management, forensic odontology. This list gets lengthier as years roll by and becomes endless with the extension of the boundaries. With the subsequent courses on pipeline, the institution is emulating the international standards in various disciplines of forensic sciences.

In many a novel specialties, the institution leads from the front. One of such courses is the homeland security and Antiterrorism. This course has a tailor-made syllabus with the emerging trends of counter measures towards the terrorist activities. As terrorism has been a universal phenomenon, the technological knowhow to counter them is being rendered in this academia. This could be more comprehensive with the spectrum of strategies and counter measures to tackle, control and prevent the vulnerabilities due to various militant groups. There is an opportunity to render peace and harmony in the society without the menace of terrorism. This would ultimately render the society the serenity required for the safe survival. This is another way to endure freedom in every walk of life. There is a sense of socio political relevance in the form of countering the mass destruction or mass disasters either through the natural or manmade phenomena. This could well be achieved through the learning and practical training programmes offered as a part of the curriculum. This makes the aspirants more confident and skilful when they actually venture into the field of operation.

Though the fundamental concepts are still being in use, there are other improved techniques available and have been incorporated for the better services and fool proof solution as far as the criminal identification is concerned.

There is another effort made to be a pace setter nationally for the fundamental and applied sciences and technology in the field of forensic sciences. The institute has been undertaking a number of projects in the fields ofballistics, forensic biotechnology, advanced biometrics and forensic odontology to mention a few that are more appropriate and is also the need of the hour for the society as a whole. The research in forensic biotechnology may yield innovations and may definitely render useful applications not only to the law enforcement agencies and the judiciary but also to the society. There is a giant leap made in the form of establishing ballistics research centre in the institute which is a dedicated unit for rendering services to various organizations such as defence and other law enforcement agencies with the testing procedures conducted on army vehicles, bullet proof vests and helmets. There is also much scope for the research work in the field of forensic ballistics.

Though the criminal investigation has been in the ambit of the governmental agencies in general and the law enforcement in particular, there is a wider scope for the young experts of this specialty find their opportunities in the multifarious organizations in private sector also. There are such as the financial institutions, insurance companies, security services, and pharmaceuticals/drug industries and of course in the defence establishments also.
“Develop a passion for learning. If you do, you will never cease to grow.” - Antony Angelo

There are bountiful opportunities for the researchers and enthusiasts in forensic sciences to explore this prolific entity. Thereby, it is possible to elucidate easier methods for the resolution of crimes and the identification of criminals. The institute has been contemplating to sensitize the concept of preventive forensics among various strata of the society apart from the core government agencies such as law enforcement and other allied departments which again may be a pioneer event.

In order to extend the success after venturing into the academics through the introduction of master’s degree programme in forensic sciences, the institute has introduced a number of diploma programme in the core forensic science subjects such as fingerprints, questioned documents among others. There is another field of forensic science where the importance of the subject in the justice delivery is being felt more is that of forensic nursing. This area has been found to be more comprehensive with the effect of the solace and comforting rendered to the victims both with the psychological and physical care and attention.

There is another contemporary specialty which is more relevant in the society and also for the entire country. This course has been launched with the uphill task of dissemination of the knowledge of the forensic science in accounting. This ensures the skills for the purpose of investigation in cases of fraudulences. This is forensic accounting which is the complete solution to counter the enigma created in the country among the economic and financial front by various misdeeds.

In an era of unforeseen disasters either due to the natural causes or due to manmade ones, there is a distinct and concerted effort taken by various organizations for the smoother management in a comprehensive manner. This requires the collective efforts of the experts of disaster mitigation, medical experts and the Para-medical personnel and the experts of forensic scientists with the more specific expertise of forensic Odontology for the identification as notified by the international organization, the WHO. To articulate the skills of the experts, there is an academic curriculum made exclusively for the above mentioned purpose along with other requisites in a capsular form known as Forensic Odontology. This would cater to the need of such experts for the nation in this particular arena.

While marching towards success there is not even a trace of complacency being felt, the institute has been keeping the goals set for every year. Website may be an ideal platform for those who are the ardent followers of the innovations in investigative techniques and the young aspiring scientific investigators. This may be more of an interactive media with any sort of queries may be attended to. No doubt this institution has become an ultimate knowledge resource and the centre of excellence in the field of Forensic Sciences. Web page renders requisite information for every visitor with timely updates.
It is nice to give a message for every aspirant scientific investigator through the unique and modern academic centre of forensic science.

With the academic excellence is getting more globalized, educational institutions and the knowledge resource centres have become the guiding forces for the channelization of the youth according to their interests and the aspirations. To provide the extraordinary sense of powers for the criminal investigation to be proved through science, this institution imparts the perfect guidance for the excellent learning for the aspirants of the scientific investigators. Every youth who is always striving to be among the successful youth of the prospective investigator may realize their dreams by getting educated here. The opportunity is being felt world-wide as the youth coming out with flying colours takes the instantaneous call on the global centres of excellence in this specialized arena. The concept of globalization could be perfectly appropriate to mention in this area as the orientation of the academia is more towards the contemporary research. The impetus is given to the more advanced technology so that the students would become pioneers in their respective super specialization. The opportunity for getting exposed to the real time criminal investigation is being offered to the students so that there could be a better understanding among the students towards the incidence occurred around them. This gives a better exposure which could be done only with this institution by virtue of its novel and ultra-modern technology based education and training. The academic program comprises the entire range of science and technology. It is a modest approach to mention that every aspect of the criminal investigation may be accomplished through the applications of various disciplines of science and technology.

The purpose of research that is being carried out is always the need of the nation and the society. The research opportunities are also perfectly aimed at nurturing the researchers to be amongst the most wanted experts of the various super specialized areas of forensic sciences. I extend my hearty welcome to the young aspirants of scientific investigators. It may be better felt than being read. Once again everyone is welcome to feel the excellence of forensic science with a personal visit. It is always wiser to grab the opportunity when it is offered.
Facilities & Resources

Threat Shield Laboratory

The institute has established India’s first Cyber Threat Analysis laboratory as the country has been among the most vulnerable landscape and IT savvy nations, there is a huge shortage of trained Cyber security specialists. Very few institutes are offering courses related to Cyber Security. If one looks at Stuxnet and Heartbleed, they were unknown vulnerabilities sitting and waiting to be exploited. This has led to the creation of such a speciality to produce a strong talent pool of Cyber Security professionals at par with global standards. The laboratory is equipped with next-generation tools required for threat analysis and discovery of unknown vulnerabilities.

Digital Forensic Laboratories

The lab is equipped with high performance computers with non-stop high speed Internet connectivity, each allotted individually to the students during their course duration. The best forensic software used across the world including EnCase, FTK, Password Recovery Toolkit, Network and Mobile Forensic Tools, eDiscovery Tools, Data Recovery and Carving utilities, Multimedia Forensics tools and many open source tools related to Digital Forensics have been made available for the students.

Division of Forensic Biotechnology

This division is dedicated to DNA analysis and other biological evidences of forensic importance. It features high end instruments such as DNA Sequencing Unit, Automated DNA extractor, Real-time PCR, Gel Documentation system, ELISA Plate Reader, Gradient Thermal Cycler, SDS-PAGE and Nano-spectrophotometer. Students are given hands-on training on each technique and getting them honed up their skills in this fast developing specialty. This division is also equipped with world class minor equipments and microscopes to provide the best exposure of important areas of forensic biotechnology to the students.
Division of Forensic Chemical Sciences

This division is well operational with all routine and modern equipments required for the analysis of drugs, poison, explosives, petroleum products etc. by using GC, GC-HS, HPLC, UPLC, GC-MS, Detail Hydrocarbon Analyzer, GC-MS-MS, LC-MS, FT-IR, UV-Visible Spectroscopy, FT Raman-Spectroscopy, Ion Mobility Spectroscopy, Ion Chromatography, HPTLC, Automatic Kinematic Viscometer, Pensky Martin Auto Flash Point apparatus, Reid Vapor Pressure Equipment, Automatic Vacuum Distillation Apparatus for crude oil, Auto Distillation unit, Auto Pour Point Apparatus, GC-Aromatic etc. Extraction and estimation of poisons/drug from visceral and environmental samples are performed for hands on training/research to students and research scholars. The division is also dedicated to develop new methodologies for the examination of various analytes from different matrices and to understand the mechanism of toxicity of various toxicants in poisoning cases.

Division of Forensic Physical Sciences

In these laboratories, the students are imparted training for the detailed examination of physical evidences like fingerprints, chance prints, foot prints, questioned documents, tool marks, fake currencies, metallic substances, structural material, firearms and ammunition etc. using highly sophisticated stereomicroscope, comparison microscope, VSC, ESDA, SEM, EDXRF, Striagraph. In addition to this, there are facilities for the assessment of basic physical parameters of any matter such as density, viscosity, refractive index and so on. This happens to be a versatile field, there is an expertise with the analysis of voice of an individual for the personal identity. This incorporates the spectral pattern of voice. There is also a facility available for the examination of audio authenticity and video analysis to crack the complexity of crimes.

Ballistic Research Centre and Ballistic Resistant Armor and Armored Vehicle Testing Range

Center of excellence in the field of forensic ballistics has been established in this institute. This is among the first of its kind in the country. This is the authorized center for the certification of bullet proof materials. The ballistic range renders timely services for the defense establishments in the country for the testing of the body protection materials and to the researchers of private and public sector organizations. State of the art technology has been in accordance with the international standards as specified by the NIJ and other European standards. There is an acoustic mechanism for the safety of the people involved. There is an evacuation mechanism available for the elimination of the toxic emissions. The data collection center also is provided with the ultra modern technology for the acquisition of the data related to the firearms and ammunition. There is a provision for viewing the firing alive through the gallery exclusively available for this purpose. The entire range proves to be at par with the international standards.
### Course Structure

<table>
<thead>
<tr>
<th>No.</th>
<th>Course</th>
<th>Duration</th>
<th>Eligibility Criteria</th>
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<tbody>
<tr>
<td>1.</td>
<td>M. Sc. in Forensic Science, including Specialization in Forensic Biotechnology/Forensic Chemistry and Toxicology/Forensic Physical Sciences / Questioned Documents and Fingerprints / Forensic Information Technology</td>
<td>2 Years (4 Semesters) Full time</td>
<td>Bachelor’s Degree in any discipline of Science / Medicine / Engineering / Pharmacy with minimum 55 (50% in case of SC/ST) marks or its equivalent in grades</td>
</tr>
<tr>
<td>2.</td>
<td>M. Sc. in Digital Forensics &amp; Information Assurance</td>
<td>2 Years (4 Semesters) Full time</td>
<td>B.Sc. (Physics / Computer Sciences / Mathematics / IT) or B.E. (Computer/IT or B.Tech. (Computer/IT) with minimum 55 (50% in case of SC/ST) marks or its equivalent in grades</td>
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<tr>
<td>3.</td>
<td>M.Sc. in Homeland Security &amp; Anti-Terrorism</td>
<td>2 years (4 semesters) Full Time</td>
<td>Bachelor’s degree in Science/ Engineering/ Medicine/ Pharmacy / BCA or equivalent from a recognized university with minimum 55% aggregate.</td>
</tr>
<tr>
<td>4.</td>
<td>M. Tech in Cyber Security and Incident Response</td>
<td>2 Years (4 Semesters) Full time</td>
<td>BE / B.Tech / BS in Computer Science / Electronics / Electrical / Communication with minimum 55% aggregate. Or MCA/ M. Sc. in Computer Science / Electronics / Electrical / Communication with minimum 55% aggregate</td>
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<tr>
<td>S.No.</td>
<td>Course Title</td>
<td>Duration</td>
<td>Qualification</td>
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<td>5.</td>
<td>M.Sc. in Forensic Odontology</td>
<td>2 Years (4 Semesters) Full time</td>
<td>Bachelor’s degree in dental surgery from DCI recognised institutions with minimum of 55% aggregate</td>
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<td>6.</td>
<td>Master of Hospital Administration</td>
<td>2 Years (4 Semesters) Full time</td>
<td>Any graduate from a recognized university with minimum 55% aggregate</td>
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<td>7.</td>
<td>P.G. Diploma in Fingerprint Science</td>
<td>1 Year (2 Semesters) Full time</td>
<td>Bachelor’s Degree in Science/Medicine/Engineering/Pharmacy with minimum 50% marks</td>
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<tr>
<td>8.</td>
<td>P.G. Diploma in Forensic Accounting</td>
<td>1 Year (2 Semesters) Full time</td>
<td>Bachelor’s Degree in any discipline with basic knowledge of Accountancy and competency in Computer Applications.</td>
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<tr>
<td>9.</td>
<td>P.G. Diploma in Forensic Document Examination</td>
<td>1 Year (2 Semesters) Full time</td>
<td>Bachelor’s Degree in Science/Medicine/Engineering/Pharmacy with minimum 50% marks</td>
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<tr>
<td>10.</td>
<td>P.G. Diploma in Forensic Management</td>
<td>1 Year (2 Semesters) Full time</td>
<td>Bachelor’s Degree in Science/Medicine/Engineering/Pharmacy with minimum 50% marks Candidates In-Service are also eligible</td>
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<tr>
<td>11.</td>
<td>Post Basic Diploma in Forensic Nursing</td>
<td>1 Year (2 Semesters) Full time</td>
<td>Bachelor’s degree in Nursing with minimum 55% (50% in case of SC/ST) marks</td>
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<td></td>
<td><strong>Online Courses</strong></td>
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<tr>
<td>12.</td>
<td>Certified Information Security Professional</td>
<td>6 Months</td>
<td>Bachelor’s degree in any subject</td>
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<tr>
<td>13.</td>
<td>Certified Fraud Examination Professional</td>
<td>6 Months</td>
<td>Bachelor’s degree in any subject</td>
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<tr>
<td>14.</td>
<td>Certified Electronic Evidence Examiner</td>
<td>6 Months</td>
<td>Bachelor’s degree in any subject</td>
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<tr>
<td>15.</td>
<td>Certificate Diploma in Cyber Crime Investigation</td>
<td>6 Months</td>
<td>In-service government officers</td>
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<tr>
<td>16.</td>
<td>Certificate Diploma in Computer Forensics</td>
<td>6 Months</td>
<td>In-service government officers</td>
</tr>
<tr>
<td>17.</td>
<td>Certificate Diploma in Cyber Security</td>
<td>6 Months</td>
<td>In-service government officers</td>
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About the Programs and Specializations

Cyber Security and Incident Response

The unprecedented incidence of crimes in the information and communication systems, made a compulsion to fill up the vacuum created due to the dearth of experts. This could be overcome by creating experts in the field of Cyber Security. Chances of getting victimized accidentally is more common in the current era. To sensitize the people and to protect oneself from landing in such a scenario, there is a need of specialized academic program which will ultimately culminate in the expertise. This academia imparts overall security measures required for the protection through various misadventures with the electronic systems. This program would also provide comprehensive solution for the preventive care and also for the post traumatic measures to be taken.

Digital Forensic and Information Assurance

DFIA is one of the few recently developed academic programs that imparts wide spread knowledge on the various types and methods of crimes related to digital systems. A comprehensive solution is being made available for all sorts of crimes committed using information and communication systems. Application orientation and programming abilities with computer forensics, mobile phone forensics, network forensics, malware analysis and data retrieval are the hallmarks of the modules of this course. Preventive methods and post incident investigative protocols with overall management has been encapsulated in this academic program which is the need of the hour for various Governmental and Non-governmental organizations irrespective of the fields they are associated with.

Forensic Biotechnology

In recent years forensic biotechnology emerged as one of the most important branch of forensic science. Latest development in DNA fingerprinting and profiling has revolutionized the forensic science to achieve speedy and accurate investigation process. Different biotechnological techniques has given a new dimension in elucidating the forensic related cases with greater variability and sensitivity. Students of forensic biotechnology are exposed to state of art techniques to hone their basic and applied skills in order to investigate criminal cases efficiently. Our students are preferred choice as a forensic scientist in different government and private organization. The students can also peruse higher study leading to Ph.D.

Forensic Chemistry and Forensic Toxicology

Forensic Chemistry and Toxicology deal with medico legal cases involving Explosives, Fire, Narcotic Drugs & Psychotropic Substances and many more poisons. This is one of the core area of forensic investigation, as majority of cases are reported due to the use/ effect/ exposure of chemical substances. The examination of such evidences is based on skilled chemical and instrumental analysis. For this purpose the Institute is well equipped with highly sophisticated laboratory facilities through which our budding forensic chemist and toxicologist learn every basic and advance steps of investigation. Extensive research is going on, which involve the study of various aspects and mechanism of chemicals/poisons on biological and environmental systems.

Forensic Physics

A number of areas of Physics are of key importance to forensic analysis starting from traditional aspects of examination and identification of glass, soil, paint, tyre marks, tool marks to very technology intensive fields like ballistics, the collisions of vehicles, the physics of explosions, Crime scene photography and Videography, bloodstain patterns analysis, audio video tape authentication and three dimensional crime scene scanning and reconstruction.
Questioned Documents

An abundance of crucial information can be gleaned from documents related to a criminal or civil case. The discipline of forensic document examination is frequently associated with white-collar crimes related to handwriting & signature fraud, forgery in checks, wills or any legal deeds, currency, passport, visa, credit or debit card. Armed with sophisticated technology, forensic document examiners can peer into the visible and invisible marks on a document to extract an abundance of details that may verify authenticity or provide additional information crucial to the investigation.

Fingerprints Science

The use of fingerprints in the identification of criminals is the most frequently applied technique in forensic science. The science of fingerprint identification is based on the uniqueness and permanence of friction ridge structures. Therefore, the ability of the expert is to classify and identify fingerprint patterns and make most of it to identify the individual accurately. The fingerprint evidence is usually very sound and is one of the most reliable techniques used for personal identification.
**Forensic Nursing**

One of the most novel faculties of forensic sciences is that of Forensic nursing. This has been established for the purpose of enabling the humanity when they are in need mainly in the hour of crisis. It is more of the social and legal responsibility of the expert for ensuring the physical harmony and the fundamental rights of individuals who are the victims of painful eventualities. The expertise involves the skills imparted to the professional nurses with the solace and alleviation of distress among the victims of sexual abuses. The expert nurses would be able to ensure physical and mental health of the victims of child abuse, elder abuse, domestic violence and violence against women. The trained nursing professionals may be able to help the victims by supplementing in the legal and fundamental rights those are due to them. They are able to assist in the medico legal investigations, management of mass disasters in victim identification and in all other legal aspects concerned with these. Ultimately they may render their services to the humanity when they are in deep distress. They are able to provide the clinical, psychological and legal assistance to the victims of unforeseen circumstances.

**Forensic Accounting**

This is one of the most important entities in Forensic Sciences. This has been found to be more useful and necessary for the contemporary society of India. It would be more appropriate to get exclusive expertise in the specific field that is required for the purpose of justice delivery system. The Modern society has been witnessing massive financial irregularities among various strata. The system of renewed strategies and advanced technical methods would render better efficiency for the easy resolution of the cases related to the financial fraudulences. This expertise involves the capability of the experts for the unraveling the facts in every aspect of accounting and money matters. The overall solution for the different varieties of the criminal activity, the composite solution may be rendered through this subject. This imparts education of the physical and electronic fraudulences relating to the financial sectors. There is an evolution of the criminal activity in the form of less bloodshed and more financial benefits with the minute technical misdeeds. This is forensic accounting which is the complete solution to counter the enigma created in the country among the economic and financial front.

**Hospital Administration**

Every step of activity needs an exclusive planning for yielding better results. To maintain the success story rolling forward, there needs an effective mechanism in terms of human resources or a man power, financial viability, potential resources in the market and the skills in marketing. In case of health sector, the effective management of the above mentioned concepts will definitely lead to success. Hospital being one of the most important service sectors needs a planned and fool proof mechanism for getting the individual consumer delighted. The curriculum of hospital management has been designed in such a way that there is an overall satisfaction and consumer delights are dispensed in the form of the capsules. This would definitely lead to the success of the hospital in satisfying the needs of the patient both physically and morally. In this way the hospital works with the systematic management approach by keeping the individuals health at most priority, after all Health is wealth.

**Homeland Security**

In the modern society, there is a rampant criminal activity that is showing the exponential growth in the form of terrorism and militancy or insurgency. A more effective mechanism is being rendered through the module in the form of Homeland security and Antiterrorism. There is another composite solution available for the crimes committed with the perfect preplanning or organized crimes .There are certain specialized techniques with salient features are being imparted in this curriculum. Comprehensive solutions are available for the effective tackling of such incidence in which there is more loss of life and loss of property such as the manmade disasters and natural disasters. Effective handling of all such situations through a proper planning with economic and financial viabilities is one of the features available in this module. Stitch in time saves nine which is more relevant for this country in this is current scenario. Enduring freedom, protecting sovereignty and peaceful mutual coexistence are suitable concepts of this module.
Forensic Odontology

Human identification is one of the most vital components in every eventuality in general and mass disasters in particular. Forensic Odontology is one of the specialties that involve non invasive techniques to achieve identification. As there is dearth of specialists in this area, the Forensic Odontology curriculum has been conceived and has been introduced as a major super specialized area. The other importance attached to the subject is in imparting investigative skills for the prospective dentists. This includes detection of abuses against women, children and the elderly. There is a scope of odonto-legal practice for the aspirants.

Research and Development

This institute has been extending greater emphasis on the research work which is the vital artery for the excellence in the heart of the academic institution in its journey to prosperity. This institute has been involved in researches in the conventional and contemporary specialities of forensic sciences. To mention a few, this institute has been striving to achieve the methodology to establish and profile the identification of individuals with the microscopic analysis of fingerprints. A novel technology involving nano materials is being introduced to deal with any kind of least contact as far as fingerprints are concerned. In the area of ballistics, the research is extensively done to reestablish protective materials of physical body through a sophisticated, more effective and lesser weight by using nano materials. Another fascinating part in research in ballistics is the study of the gunshot residues for establishing the time and angle of fire apart from range.

The biological sciences division is involved in cutting edge research on DNA and Protein profiling. Nondestructive approaches to isolate the DNA from very important forensic samples are being explored. Microbial forensic tools are also being developed along with the contemporary DNA profiling from various body fluids. Significant work is carried out for the protein profiling and its exploitation to differentiate various meat samples.

The research work in chemistry and toxicology is dedicated to develop new methodologies for the examination of various analytes from different matrices and to understand the mechanism of toxicity of various toxicants in poisoning cases. Extensive research is going on, which involve the study of various aspects and mechanism of chemicals/poisons on biological and environmental systems. Studies are focused on the evaluation of potential treatment of the effects of exposure/poisoning using animal model.
Faculty Profile

The Director

Dr. Mohinder Singh Dahiya, M.Sc., Ph.D. is currently the Director of the Institute of Forensic Science, Gujarat Forensic Sciences University since the establishment of the institute. He holds a Ph.D. in Forensic Science and 35 years of experience in Forensic Science laboratory. He has held different positions in the Directorate of Forensic Science - Gujarat state and remained the Deputy Director of the laboratory for many years.

He has been imparting training to various cadre officers of Police, Judiciary, Banking and insurance, Forest, Revenue in the areas related to Forensic Science, Narcotic and Psychotropic Substances, Explosives, Explosions and Post Blast Investigations, Wildlife Crimes, Computer Forensics, Fire Investigations and Crime Scene Management. Some of his achievements are as follows:

• Gold Medalist in M.Sc. (Criminology & Forensic Science).
• Published more than 80 research papers in various scientific journals.
• Prepared and compiled the Toxicology Manual for BPR&D, under the Chairmanship of Director, FSL, Gujarat.
• Has been the Member of Chemistry and Explosives, Narcotics and Psychotropic substances Manual Committee, prepared by BPR&D.
• Felicitated with “Bharat Gaurav Award” by India International Friendship Society in 2014.
• Awarded with DFS Meritorious Award in Forensic science - 2003 recognition of crime scene management and forensic science support to police officers at crime scene and laboratory analysis.
• Played vital role in getting NABL accreditation of various departments of DFS – Gandhinagar as Quality Manager.
• Author of two renowned books titled “Crime Scene Management” and “Principles and Practices in Contemporary Forensic Sciences”.
• Reported many High Profile cases of forensic importance in Gujarat and other States of India.
  - Member of High Power Committee constituted by Home Department, Govt. of Gujarat, for defining the non-edible jaggery.
  - Building collapse case of Surat.
  - Member of High Power Committee in Bodeli Bus Accident case.
## Faculty Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Specialization</th>
<th>Current Research Interest</th>
<th>Publications</th>
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</thead>
<tbody>
<tr>
<td><strong>Dr. G. Rajesh Babu</strong></td>
<td>Forensic Medicine, Anthropology &amp; Fingerprints Examination</td>
<td>He has been working on the application of super specialties of forensic sciences such as Ridgeology in Fingerprints, Forensic nanotechnology, Forensic metallurgy and Forensic ballistics.</td>
<td>14</td>
</tr>
<tr>
<td><strong>Dr. Rakhi Agarwal</strong></td>
<td>Forensic Chemistry &amp; Toxicology</td>
<td>Engaged with the studies on assessment of mechanism of toxicity of various environmental toxicants using animal model. The potential elimination/removal of these substances and the treatment of poisoning is also carried out.</td>
<td>10</td>
</tr>
<tr>
<td><strong>Dr. Satish Kumar</strong></td>
<td>Forensic Biotechnology</td>
<td>His research is focused in the field of forensic proteomics.</td>
<td>13</td>
</tr>
<tr>
<td><strong>Dr. Bhargav C. Patel</strong></td>
<td>Forensic Biotechnology</td>
<td>His research is focused on DNA profiling, microbial forensic and bioinformatics.</td>
<td>07</td>
</tr>
<tr>
<td><strong>Dr. Parag Rughani</strong></td>
<td>Digital Forensics and Cyber Security</td>
<td>His area of research includes Mobile Phone Forensics and Malware Analysis.</td>
<td>10</td>
</tr>
</tbody>
</table>
Dr. Astha Pandey
M.Sc., Ph.D.
Assistant Professor

Specialization: Forensic Chemistry, Toxicology, Crime Scene Management, Fingerprint Science
Publications: 11
Current Research Interest: Forensic Chemistry & Toxicology and Fingerprints/Palmprints

Ms. Pooja Ahuja
M.Sc., Ph.D. (Pursuing)
Assistant Professor

Specialization: Forensic Physical Sciences, Documents, Photography and Crime Scene Management
Publications: 08
Current Research Interest: Her research area of focus is Forensic Physics, Ballistics, Material Testing, Crime Scene Management, Forensic Photography, Questioned Documents and Voice Profiling.

Mr. Nilay Mistry
M.Tech., Ph.D. (Pursuing)
Assistant Professor

Specialization: Digital Forensics and Cyber Security • Publications: 08
Current Research Interest: His research is focused in Volatile Memory Forensics and Advance Digital Forensic Artifacts Analysis

Ms. Surbhi Mathur
M.Sc., Ph.D. (Pursuing)
Assistant Professor

Specialization: Forensic Physics, Forensic Voice Identification, Forensic Photography, Questioned Documents Examination • Publications: 09
Current Research Interest: Her research is currently focused on Forensic Audio and Video Examination and Questioned Document Examination

Mr. Digvijaysinh Rathod
MCA, PhD (Pursuing)
Assistant Professor (Jr.)

Specialization: Web Application Security, Network Forensics and Malware Analysis • Publications: 09
Current Research Interest: His research area includes SOA and REST web service composition.
Ms. Gopi Upadhyay  
M.B.A., P.G.D.B.M., LLB  
Faculty Member  
Specialization: Marketing, Advertising and HR

Ms. Vandana Nageswarao Poturaju  
M.B.A.(Finance), M.Com  
Faculty Member  
Specialization: Accounting & Finance, Economics, Human Resource Management  
Current Research Interest: She has interest in research areas of Derivatives and Futures Market and Stock Market.

Mrs. Manali A. Amin  
M.Sc. (Nursing) (Medical Surgical Nursing)  
Faculty Member  
Specialization: Forensic Nursing, Hospital Management  
Current Research Interest: Her research area of focus is Forensic Nursing.
Achievements

The Institute of Forensic Science is one of the most successful institutes of university and is internationally recognized as a leading centre for teaching and research.

Training

IFS is actively involved in training for various Government and private organizations. Till date the institute has conducted more than 100 training programs for organizations like National Investigation Agency, Various Police Personnels, World Wildlife Federation, Gujarat State Judicial Academy, IPS officers and.

Awards and Medals Constituted by Institute

The Institute of Forensic Science has introduced a scheme of awards for its meritorious students, namely:

1. Gold Medal - IFS for the most meritorious student of the following courses:
   - M.Sc. - Forensic Science
   - M.Sc. - Homeland Security & Anti-terrorism
   - Master of Hospital Administration
   - M.Tech - Cyber Security and Incident Response
   - M.Sc. - Forensic Odontology
   - M.Sc. - Digital Forensics & Information Assurance

2. Laxmi Memorial Award – awarding Gold Medal to the most meritorious female student of M. Sc. - Forensic Science Course. (The financial aid towards this award, has been donated by Dr. M. S. Rao, Ex - Director cum Chief Forensic Scientist – Directorate of Forensic Science Services – MHA – GOI - New Delhi, in memory of his wife; Late Mrs. Laxmi Rao).

3. Sri A. S. Krishnamurthy Award for Most meritorious student of M. S. Digital Forensic and Information Assurance
Conferences/Workshops/Seminars

- International Conference on Cyber Security (INCONCYSE 2015) on 13-14 March, 2015
- XVI All India Conference of Directors of Fingerprints Bureaux, in collaboration with National Crime Record Bureau, New Delhi and Directorate of Forensic Science, Gandhinagar on 23-24 March, 2014
- Conference on Digital India was organized by Institute of Forensic Science in association with Microsoft on 30th & 31st March, 2015 with over 900 participants.
- One day Workshop on Ballistics, for Police Officers and Forensic Experts was organized in June, 2014
- Five Days Integrated Workshop for Drug Control Officials On Medical Devices Regulation from 16th to 20th February, 2015
- XIVth All India Conference of Directors of Fingerprint Bureaux, in collaboration with National Crime Record Bureau - New Delhi in 2012.
- National Seminar on "Firearms & Toolmarks Investigation", conducted by Dr. James Hamby - USA and Mr. Nadav Levin – Israel in 2012.
- National Seminar on Uses of Digital Image Analysis in Forensic Investigation in 2011.
- Workshop on strengthening Wildlife Enforcement for Wildlife Protection in South Asia was organized under the aegis of South Asia Wildlife Enforcement Network (SAWEN) Secretariat in 2011.

Awards and Recognitions

1. Dr. M. S. Dahiya, Director, Institute of Forensic Science has been honored with "Bharat Gaurav Award" by India International Friendship Society (IIFS) at New Delhi for the year 2014.
2. Dr. Rakhi Agarwal has been Awarded “Seth Roop Lal Aggarwal Memorial Gold Medal Young Scientist Award” for the best oral presentation by Society of Toxicology [STOX], India in November 2009.
3. Dr. Astha Pandey has been awarded with Best Educationist Award, and a “Certificate of Education Excellence” by International Institute of Education and Management on 12th August 2015 and National Mahila Rattan Gold Medal Award by Indian Solidarity Council on 12th August 2015 for outstanding achievements in the field of education.
4. Ms. Anjali Yadav, research scholar has been awarded for Best Scientific Paper entitled “Assessment of Motor and Visual Imageries in remembrance for differentiating between Perpetrator and Witness” during the XXII All India Forensic Science Conference organized by Directorate of Forensic Sciences, Ministry of Home Affairs, Govt. of India, held at Srinagar on 27th–29th June 2012.
Institute of Behavioural Science

Gujarat Forensic Sciences University
Institute of Behavioural Science (IBS) of GFSU conducts academic and research programs in the behavioral areas with focus in Forensic Psychology, Neuropsychology and Clinical Psychology. The neurocognitive and psychosocial specializations help in understanding the origins of criminal behavior and their preventive and correctional programs. Students are trained in investigative neurocognitive methods, criminal profiling, and various psychological methods for changing/controlling behavioral responses that may be labelled offensive behavior by the society. The IBS conducts five branches of specialties related to such domains viz., Forensic Psychology, Neuropsychology, Clinical Psychology, Child Psychology, and Neuroentrepreneurship for obtaining the best performance from personnel in all domains of work. The core focus of all the courses at IBS is on psychobiological basis of behavior centralizing on forensic investigations, correction systems and rehabilitation. Additionally the programs deal with investigations of the criminal behaviour and also with correction and rehabilitation of individuals with such behavioral anomalies. Clinical Psychology serves as a base for understanding the psychological and social anomalies precipitating criminal behaviour, and Neuropsychology deals with the anomalies in brain-behavior relationship and their etiological significances. Psychological assessment, psychotherapy and correctional programmes in clinical and forensic perspectives and medico-legal cases are also the emphasis of IBS training and education. The institute therefore promotes inter-disciplinary research in the various fields of Forensic Psychology, under the umbrella of cognitive neuroscience and social processing systems. The objectives of the various programs are:

About the Institute
Forensic Psychology: Investigative psychology using Psychophysiological, Neurocognitive, and Psychological testing methods, which help in eliciting information from suspects, which can further aid in the investigation of crimes. M.Sc., M.Phil. and Ph.D. courses are the main academic programs that offer specialization in this area. Forensic psychology is also the scientific study of individual and social factors that may precipitate offensive and violent actions in the individual. The major thrust and interest of IBS is to understand such factors and introduce correctional methods during the developmental and later stages, which can help individuals control themselves and abstain from offensive responses. They get their practical training in the Forensic Laboratory at IBS and Directorate of Forensic Science, Gandhinagar. They are also posted for training in correctional homes for Juveniles, prisons, and homes for destitute women.

Neuropsychology: Specialization in neurocognitive processing is very important for understanding brain mechanisms associated with the genesis of psychological and behavioral responses and actions, and their abnormalities, which can bring about behavioral deficits including offensive behavior in individuals. Cognitive neuroscience is the psychobiological base for understanding such patterns of processing of sensory inputs into the brain and regulation of responses and actions, under the drive provided by emotional arousal. It also forms the scientific basis of various investigation tests used for eliciting information from individuals, when the investigators believe that they have not obtained such information through normal interviews or interrogations. The M.Sc. in Neuropsychology course helps students learn the integration of cognitive functions with neuroscience processing. Learning the foundations of cognitive neuroscience and the technologies related to cognitive electrophysiological recording help to measure, analyze, and understand the neurocognitive processing methods and their abnormalities, if any present and their significances. The knowledge base equips them to meet and handle challenges in various areas where brain-mind interfaces are considered.
Clinical Psychology: Training in Clinical Psychology is offered as per the rules laid down by Rehabilitation Council of India. This needs students to be posted mainly in mental hospitals, so that they can be provided supervised training in clinically oriented psychological methods, which is also considered a basic requirement for dealing with prisoners and offenders in correctional homes and mental hospitals. M.Phil. Clinical Psychology is a course conducted and monitored as per rules of Rehabilitation Council of India (RCI). In this course, the faculty positions and their strength and the number of students, and syllabus are according to the guidelines of RCI, which gives sanction to conduct the course for 2 years, after every RCI inspection.

Efforts are in progress to apply socially and individually relevant methods for the rehabilitation of juveniles and prisoners. This is a very challenging social program, which needs to obtain extensive psychological, social, and administrative supports in the country. M.Phil. in Forensic Psychology and Clinical Psychology have this as a special component of training, as the expertise can be applied for taking care of the rehabilitative needs of offenders in the society.

Child Psychology: Child mental health may be affected by several developmental issues and problems, which are seen in Learning Disabled children, Autism, ADHD and Mental Retardation, etc. The Learning Disabled children, Autistic children and ADHD children are the ones who may be exceptionally benefitted by various cognitive training and behavioral management programs. IBS has special interest in these groups of disabled children, as several of the methods they have developed viz., Computerized Cognitive retraining, Neurofeedback, and behavioral management techniques are established as beneficial treatment programs.

Neuroentrepreneurship Training: This is a specialty area for facilitating personal growth of individuals working in the corporate world as well as those working in governmental agencies so that they learn to perform at the best and handle various problems in the different areas of interpersonal relations, communication, leadership training, Critical thinking and Problem Solving, Team building and Role Playing Stress Management, etc. We have faculty who have been working in these areas and intends to conduct workshops and short programs in the immediate future.

Investigative Psychology: This is a special Forensic Psychology investigative training program for Police, Military, and other Investigative personnel, for training them in various Forensic Psychological Investigative tests and interviewing methods. IBS is also planning training and research programs in Cyber Psychology.
My association with this reputed world forensic center started in 2003, when I signed MOU with the Directorate of Forensic Science Laboratory, as a Professor from NIMHANS, Bangalore. The intense academic and research interests of the staff of DFS was evident in those days itself, which became the foundation for starting a forensic university. This prompted collaborative research for application of cognitive neuroscience in the area investigative psychology. The challenges that IBS has taking up are of immense value to this country for understanding the basic social processing patterns and responses of its people to the processing changes, which have precipitated varying criminal acts by its citizens. Understanding the brain – behaviour relationship and the development of psychological and social factors that precipitate clinically and forensically significant responses and actions are the basic bottom up methods to understand the genesis of this aspect of behaviour and their corrections and rehabilitation of the affected individuals. Starting the clinical psychology course has further helped to understand the clinically significant aberrations in individuals which may give rise to criminal thoughts and behaviour, as well as for developing psychological methods for the correction of the related thoughts and responses. The Postgraduate, M.Phil. and Doctoral courses in Forensic Psychology would create the much needed experts in Forensic Psychology for the country. This is further supported by the Postgraduate and Doctoral courses in Neuropsychology with extensive training in cognitive neuroscience, which help to create young specialists who can confidently handle issues in the domains of the brain – mind – behavior processing. We are looking at the genesis of problems of socialization and origin of criminal behavior in young children, along with other multiple problems in learning disorders, autism, ADHD, and mental retardation, etc. by providing training in Child Psychology for postgraduates. In addition, we have started training program in the form of Professional Diploma in Forensic Investigative Psychology for investigators and security professionals, which would train them in multiple methods of forensic psychological investigations.
Facilities and Resources

The Institute of Behavioral Science has facilities across 2,887 square meter areas in three floors, in the new GFSU building. The ground floor has the Budha Psychological Services with 12 rooms for patient interview – testing- psychological therapies. The Institute has 5 lecture halls and 1 seminar hall. It has a computer room and a study room for its students with Wi-Fi facilities. The faculty rooms are in the first floor, with separate room for each faculty. There are rooms for visiting faculty. All the research laboratories and experimental rooms are placed in the second floor. As consciousness is an important area of research interest, the institute is developing special facilities for sleep and hypnosis research.

Internship at the Directorate of Forensic Science (DFS), Gandhinagar is an integral part of the forensic psychology training. These students are trained in various neurocognitive, electrophysiological, psychological assessments and forensic investigative methods in the laboratories at DFS. Also, Juvenile Homes and Sabarmati Jail visits are often carried out in Forensic and Clinical Psychology programs.

Clinical psychological interviewing, diagnostic testing, counselling and psychotherapy, relaxation therapy and behaviour therapies are offered to patients and clients as part of clinical psychological services at IBS. Such services to children with learning disorders and other psychiatric and neurological problems and training of professionals are being developed to meet the immense demands for the same in this part of the country. All Neuropsychology and Forensic Psychology students are trained in conducting and recording multichannel EEG and Event Related Potential experiments. They are trained in Q-EEG (frequency domain) analyses and time domain analyses, and encouraged to carry out research projects using these techniques as part of their course requirements.
Lecture Theatres

Student Creativity
Three major academic domains for educational courses are Forensic Psychology, Clinical Psychology, and Neuropsychology. Academic program starts at postgraduate level with M.Sc. in Forensic Psychology and Neuropsychology, and Post Graduate Diploma course of one-year duration in Forensic Psychology and Child Psychology. This is followed by M.Phil. in Forensic Psychology and Clinical Psychology, which are courses of two years duration. Clinical Psychology students are trained in the Ahmedabad Mental Hospital. IBS has MOU with the Ahmedabad Mental Hospital, that our students are trained by the Psychiatry staff of the hospital. Students also visit the Psychiatry Department of Civil Hospital for Clinical Psychology training.

**Programs Offered**

Three major academic domains for educational courses are Forensic Psychology, Clinical Psychology, and Neuropsychology. Academic program starts at postgraduate level with M.Sc. in Forensic Psychology and Neuropsychology, and Post Graduate Diploma course of one-year duration in Forensic Psychology and Child Psychology. This is followed by M.Phil. in Forensic Psychology and Clinical Psychology, which are courses of two years duration. Clinical Psychology students are trained in the Ahmedabad Mental Hospital. IBS has MOU with the Ahmedabad Mental Hospital, that our students are trained by the Psychiatry staff of the hospital. Students also visit the Psychiatry Department of Civil Hospital for Clinical Psychology training.
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<thead>
<tr>
<th>No.</th>
<th>Program and Duration</th>
<th>Areas of Specialization</th>
<th>Eligibility</th>
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<tbody>
<tr>
<td><strong>M.Sc. Programs</strong></td>
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<tr>
<td>1.</td>
<td><strong>M.Sc. Forensic Psychology</strong>&lt;br&gt;(2 Years, 4 Semesters)</td>
<td>Forensic Psychology</td>
<td>Graduate in Psychology or Science subjects from recognized university with a minimum of 55% marks aggregate. For SC/ST category, minimum of 50% marks in aggregate.</td>
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<td>2.</td>
<td><strong>M.Sc. Neuropsychology</strong>&lt;br&gt;(2 Years, 4 Semesters)</td>
<td>Neuropsychology</td>
<td>Graduate in Psychology or Science Subjects from recognized university with a minimum of 55% marks aggregate. For SC/ST category, minimum of 50% marks in aggregate.</td>
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<td><strong>M.Phil. Programs</strong></td>
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<td>3.</td>
<td><strong>M.Phil. Forensic Psychology</strong>&lt;br&gt;(2 Years, 4 Semesters)</td>
<td>Forensic Psychology</td>
<td>Master’s Degree in Psychology from recognized university with a minimum of 55% marks aggregate. For SC/ST category, minimum of 50% marks in aggregate.</td>
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<tr>
<td>4.</td>
<td><strong>M.Phil. Clinical Psychology</strong>&lt;br&gt;(RCI Approved, 2 Years-Annual System)</td>
<td>Clinical Psychology</td>
<td>Master’s Degree in Psychology from recognized university with a minimum of 55% marks aggregate. For SC/ST category, minimum of 50% marks in aggregate.</td>
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<td><strong>Post-Graduate Diploma Programs</strong></td>
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<td>5.</td>
<td><strong>Post Graduate Diploma in Forensic Psychology</strong>&lt;br&gt;(PGDFP)&lt;br&gt;(1 Year, 2 Semesters)</td>
<td>Forensic Psychology</td>
<td>Master’s Degree in Psychology from recognized university with a minimum of 55% marks aggregate. For SC/ST category, minimum of 50% marks in aggregate.</td>
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<tr>
<td>6.</td>
<td><strong>Post Graduate Diploma in Child Psychology</strong>&lt;br&gt;(PGDCP)&lt;br&gt;(1 Year, 2 Semesters)</td>
<td>Child Psychology</td>
<td>Master’s Degree in Psychology or Science subjects from recognized university with a minimum of 55% marks aggregate. For SC/ST category, minimum of 50% marks in aggregate.</td>
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<td><strong>Professional Diploma Program</strong></td>
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<td>7.</td>
<td><strong>Professional Diploma in Forensic Investigative Psychology</strong>&lt;br&gt;(PDFIP)&lt;br&gt;(1 Year, 2 Semesters)</td>
<td>Forensic Investigative Psychology</td>
<td>Police Investigators, Security and Legal Professionals with work experience.</td>
</tr>
</tbody>
</table>
Emeritus Prof. C. R. Mukundan, Ph.D., D.M. & S.P., is a pioneer in Neuropsychology in India. He joined GFSU in the year 2013, as the first Emeritus Professor of the University and Director for Institute of Behavioral Science. Earlier, he remained a member of the Academic Council and a Visiting Professor to GFSU, for over three years. He was formerly a Professor and HOD in the Clinical Psychology department at the National Institute of Mental Health & Neuro Sciences (NIMHANS), Bangalore.

One of his greatest achievements was the development of the technology called 'Brain Electrical Oscillations Signature (BEOS)' Profiling. BEOS is a test for eliciting remembrance of experiential knowledge for forensic application. He is the inventor and patent holder of this technique, used widely in forensics today. He setup the first Clinical Neuropsychology facility in India at NIMHANS, Bangalore during 1975 -79, for testing brain dysfunction in patients with diseases of the brain. He also set up the first Cognitive Electrophysiological Laboratory at NIMHANS from 1979. He set up facilities for evoked potential and event related potential recordings, and computerized EEG analysis.

He developed the NIMHANS Neuropsychology Battery of tests for testing brain dysfunction. The battery of clinical procedures and tests evaluating and assessing various dysfunctions was validated against CT scan and neurosurgical findings in the late 1980s. Today, the procedure is widely used in different clinical centers in India.

He also started Neuropsychology as specialty subject in M.Phil Clinical Psychology at NIMHANS, which led to Neuropsychology being accepted as a specialty subject in other clinical disciplines of Neurology, Neurosurgery, Psychiatry, and Neurosciences. An avid electronics buff, he designed and built his own 24 and 32 channels EEG amplifiers for application with the EEGSYS program in 1993-94. He also developed ‘Polygraph’ facility at the Neuropsychology Laboratory - NIMHANS for lie-detection testing purposes, as part of collaborative agreement between NIMHANS and Forensic Science Laboratory – Bangalore, in 1997.

In the year 1993, he developed a computerized program called ‘Brain Function Therapy’ for cognitive retraining of patients with Traumatic Brain Injury and other brain lesion patients, and children with learning disability and ADHD. 22 Ph.D(s), 26 M.Phil(s) and several engineering research projects have been supervised by him during the course of his career at NIMHANS. He has over 90 (national & international) research publications and has authored 3 books, along with contribution of chapters in several books.

He has conducted over 40 invited workshops on Neuroscience for Personal Growth for senior managers of corporate enterprises across India. He has developed several tests for measuring potentiality and cognitive controls on emotions and interpersonal relationships in corporate executives, based on System theory and neuropsychology. He is currently involved in research and development of BEOS technology with IP, using BEOS as an Automated Interview System for interviewing immigrants and normal individuals for detecting individuals with suspected personal backgrounds of forensic significance, collaborating in developing handheld EEG system with QEEG analysis, quantification of EEG in sleep – wakefulness – coma, hypnosis, brain - mind effects, socialization - early social conditioning for action/response control, and Neurocognitive processing and protein intake. He is also the President of Cognitive Neuroscience Society of India (a Multidisciplinary national research society).
Faculty Members

**Dr. Rejani, T. G.**  
Ph.D., M.Phil.  
Assistant Professor  

Specialization: Clinical Psychology (Child and adolescent Mental Health)  

Publications: 29. Member of Peer review committees of 5 international journals. Dr. Ambedkhar National Fellowship (2013) for the contributions in the area of mental health  

Current Research Interests: Externalizing disorders, sexual abuse, epidemiological studies, school mental health, De-addiction

**Dr. Priyanka Kacker**  
Ph.D., PGDCAH  
Assistant Professor  

Specialization: Forensic Psychology, Cognitive Neuropsychology & Hypnotherapy  

Publications: 25  

Current Research Interests: States of consciousness and remembrance, hypnotic trance and effects on brain, forensic applications of hypnosis – EEG-ERP based forensic psychological investigations, Neurofeedback, and creativity, social conditioning, and cognitive enhancement in children

**Dr. Proshanto Kr. Saha**  
Ph.D., M.A.  
Assistant Professor  

Specialization: Forensic Psychology, Cognitive Neuropsychology  

Publications: 8  

Current Research Interests Criminal Profiling, Juvenile problems and their rehabilitation, EEG-ERP based forensic psychological investigations, Cognitive Neuroscience of Attention and Emotion.

**Dr. Smita Pande**  
Ph.D., M.Phil.  
Assistant Professor  

Specialization: Clinical Psychology, Clinical Neuropsychology  

Publications: 11  

Current Research interests: Clinical Neuropsychological Assessment, Cognitive Retraining And Rehabilitation
**Mr. Biswajit Dey**  
*M.Phil., Ph.D. (Pursuing)*  
*Lecturer*

Specialization: Clinical Psychology  
Publications: 3  
Current Clinical and Research interests: Projective tests of personality, biofeedback treatment for psychological problems

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**Ms. Richa Singh**  
*M.Phil., Ph.D. (Pursuing)*  
*Lecturer*

Specialization: Clinical Psychology  
Publication: 2  
Current Research Interests: Psychotherapy and Psychosocial Rehabilitation

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**Ms. Ami Pathak**  
*M.Phil., Ph.D. (Pursuing)*  
*Lecturer*

Specialization: Clinical Psychology  
Publications: 2  
Current Research Interests: Behavioral Medicine, Psychosocial Rehabilitation and Psychotherapy

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**Mr. Khoibi Singh**  
*M.Phil., Ph.D. (Pursuing)*  
*Lecturer*

Specialization: Clinical Psychology, Neuropsychology  
Current Research Interests: Neurofeedback, Cognitive Retraining
The major thrust areas of research at IBS are in the interdisciplinary areas with focus on Forensic Psychology, Neuropsychology and Clinical Psychology.

The institute has set up state of the art Cognitive Electrophysiology laboratory, which has several EEG and ERP recording and analysis equipment for training, as well as for research. IBS has a unique laboratory facility (Neurocognitive Electrophysiology Laboratory), which has a BEOS Laboratory and 5 independent EEG–ERP recording facilities. There are facilities for Neurofeedback and Biofeedback research and service. A Polygraph room for deception detection studies and facilities for training in Layered Voice Analyses for detection of deception are the additional laboratory facilities. IBS is engaged in helping children with learning disabilities and other disorders like Autism, and ADHD, with extensive cognitive retraining programs (using computerized Brain Function Therapy). A BEOS laboratory and Eye movement (with EEG correlates) recording system are being set up.

Faculties are engaged in several collaborative research and development activities at other national Institutions. These are related to development of handheld multichannel EEG system and dry-electrode recording for rural applications with QEEG analysis and telemedicine facilities, EEG analysis in sleep-wakefulness conditions, effects of hypnosis and coma on EEG, and upgrading of BEOS system as an automated interview system for suspect detection are in progress. Faculty is also engaged in developing brain-computer interface for robotic applications. M.Phil. Clinical Psychology and Forensic Psychology students are expected to submit dissertation after carrying out research projects under supervision of the faculty. Faculty is also interested in carrying out research related to rehabilitation of psychiatric patients, and the related works are in progress.
Achievements

Setting up of the Neurocognitive Electrophysiology Laboratory for carrying out cognitive electrophysiological experiments for the students added another major achievement at IBS. The experiments helped students learn the neurocognitive processes related to signal detection in the brain, recognition, and other aspects of stimulus evaluations. Results of several of these small projects were presented by students in various national conferences. There were 48 such national level presentations by students of IBS alone, other than the 20 presentations by faculty, in 2014. The 24 publications by faculty and students in national and international journals in 2014 highlighted the national level importance of some of major research endeavors, which IBS is seriously pursuing.

IBS has emerged as the first University to have expertise and extensive neuropsychological – cognitive electrophysiological experiment facilities at the postgraduate (M.Sc. & M.Phil.) level. In the years to come, we hope that this will become the basis for postgraduate research in this internationally coveted and pursued research domain for the students in India and abroad.

The national seminar in Cyber Psychology was highly appreciated by several national level experts in neuroscience, neuropsychiatry, psychology, and security professionals of the country. It has been proved that IBS has the expertise to work in this important area and that IBS must conduct educational-training programs as well as remediation programs for those who are addicted to cyber space. IBS is now independently pursuing forensic investigative training programs for various national agencies.

The training programs, which IBS has started in Forensic Psychology has been highly invigorated, as the students get intensive practical training under the expertise of relevant professionals in the Directorate of Forensic Science, Gandhinagar. This is expected to lay the foundation for Forensic Psychology in India, where the specialty is yet to be professionally recognized at the national level, though Forensic Psychology is a vital and very important international professional specialty. As IBS has Clinical Psychology course also, it has helped in developing the correctional and rehabilitative specialization for prisoners, juveniles, and other offenders in our society. This is also a national level requirement, and the courses and training at the IBS have been the starting point for this national endeavor.

The Budha Psychological Services (BPS) has become an important clinical service center for psychological examination and treatment of adult and child cases. IBS is the only educational center in India, where theoretical and practical training in neurocognitive methods in Forensic Psychology, Neuropsychology and Clinical Psychology are presently available.

Special research laboratory is being set up to work on brain-computer interface – project taken up with Axxonet System Technology, Research Centre of GFSU and DFT being recognized. Further, IBS is also planning to start Neurocognitive Rehabilitation Centre for Juveniles and patients with neurocognitive deficits.
Workshops & Seminars

IBS has conducted the following National Level Conferences and Workshops (2014-15):


2. One day Seminar on “Forensic and Clinical Psychology in U.K”, by Dr. Sripathi Upadhyaya.


6. Two-Days National workshop on Cognitive Electrophysiology on 14th and 15th March, 2015 at IBS, GFSU

Awards and Medals Constituted by the Institute

Two Gold Medal Awards for meritorious students in the Forensic Psychology and Neuropsychology programs has been constituted at IBS, sponsored by Axxonet Technologies Pvt. Ltd., Bangalore, India.

Awards/Recognition

i. Prof. C.R. Mukundan

1. Elected as President of Cognitive Neuroscience Society of India (www.cnsi.org.in). CNSI is a multi-disciplinary scientific society of India.

2. Recipient of WHO fellowship in Mental Health and Neurosciences to visit the United Kingdom in 1983 for training in Electrophysiology & Neuropsychology.

3. International Patent for the Brain Electrical Oscillations Signature (BEOS) profiling technique. The BEOS technique is a new memory based paradigm and technique for measuring the neural activation pattern during retrieval and differentiating retrieval in autobiographic memory (experiential knowledge) from retrieval in knowing (conceptual knowledge).

4. Awarded Honorary membership of New York Academy of Science, 1999


6. Received the ‘Psycho Award’ and delivered the Psycho’ Oration in the 25th Annual Conference of Indian Association of Clinical Psychologists held from 10th to 12th January 1999.


Research Awards Received by Faculties


4. Kacker, P. received NAOP Best Paper Award for the paper titled, “Improving Subjective wellbeing of People living with Seropositive Status with and without Dermatitis using Hypnotherapy” in XXth Annual Convention of NAOP and International Conference on Mind, Culture and Human Activities, Psychological Sciences in Twenty First Century held on 12- 15 Dec 2010 at Zakir Husain Centre for Educational Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi, India.


Research Awards Received by Students


7. Afreen Alisha Hussain & Proshanto, K. S, “Cyber Stalking; Explaining the Cyber Syndicate”, received best paper award during National Seminar on Cyber-Psychology held in Gujarat Forensic Sciences University, on February 20-21, 2015.

Service and Research Collaborations

with other Centres (2013-15)

The institute has set up Neurocognitive Electrophysiology Laboratory where research projects are carried out in collaboration with other institutions and laboratories, recognized as Research Centres by GFSU. IBS works in close collaboration with Directorate of Forensic Science, which is the central laboratory in Gujarat for all forensic investigations including those in Forensic Psychology. IBS also has such collaboration mainly with Ahmedabad Hospital for Mental Health and also with the Civil Hospital, Gandhinagar, where students receive practical training in clinical psychological and psychiatric services. As IBS conducts various forensic psychological investigative training programs for the entire police force and judicial professionals of the country, as part of the training programs conducted by GFSU, they are also closely supported by these agencies, especially Bureau of Police Research and Development, New Delhi.
The Institute conducts training programs in mental health, Neuro and Forensic fields for public and private sectors which address real-life problems. IBS students and faculty visits B.M. Institute of Mental Health for taking part in rehabilitative training of children at the BM Institute.

Interaction and Association of the University with different organizations help in publicizing the expertise of the university. In last four years, institute provided its consultancy service to the variety of domains such as jail, juvenile homes, general hospitals, schools, and community level. This is an area, which IBS hopes to develop in a large measure and develop a model for rehabilitation – correction of offenders, which can become a national standard. No work in the area is carried out for income or profit generation. All the work is supported in the area is supported by the Institute and other institutions, where we work.

IBS is in the early stage of developing hypnosis based forensic interview technology for Intelligence work, and working on brain-computer interface for robotics project, and developing the technology for recording EEG changes associated with eye (retinal) movements, which can be used for detection of deception. This is being taken up with Axxonet System Technologies.

The institute encourages faculties to contribute in solving real mental health/clinical psychological cases by offering clinical services and testing and behavioural/psychological therapeutic facilities at Buddha Psychological Service Centre in IBS. IBS plans to conduct several national level conferences and academic programs in 2016 and set up Neurorehabilitation Centre for affected population.
Institute of Research & Development

Gujarat Forensic Sciences University
About the Institute

The Institute of Research & Development is stepping in its 6th year since its inception. An important aim of the Institute is to provide quality education and fostering pioneering innovative research in fields spanning the entire range of Pharmaceutical science, Nanotechnology, Chemistry, Environmental science and structural engineering with a focus on their application in Forensic technology for crime scene investigation. The Institute seeks to contribute to civilization, peace and prosperity in the nation and world, and aims at developing global human capabilities par excellence through pioneering research and education in science and technology. To achieve this mission, the Institute has an eye on educating highly moral students to acquire sound academic knowledge in selected disciplines and transform those from basics to practice with academic mastery through research.

At presently, the Institute provides M.Pharm., MS, M.Tech. and Doctoral degrees to the students covering the realm of forensic sciences in various specializations such as Pharmaceuticals, Nanotechnology, Environmental Science and management, Chemistry, Forensic Structural Engineering, leading to the development of experts in these fields. The courses are designed with keeping in mind their relation to forensic science and their usefulness in different industry and government sectors. There are presently 100 students, 10 faculty and 7 administrative staff members in this Institute. Also, a number of guest faculty members from India and abroad visit this Institute throughout the year for taking courses as well as giving lectures on frontier research areas of mutual interest. The faculties of the Institute have received various research grants from governmental and industrial bodies.

The Institute is actively collaborating with premier Institutes and industries of both national and international repute. More than 100 publications including research articles, reviews, patents, monographs, book-chapters of national and international repute during last 5 years span reveal its dedication towards a research center of excellence. This high-quality, high-performance research environment, combined with a uniquely bottom-up approach to scientific innovation, has enabled the Institute to foster an environment in which researchers are able to thrive.

The scenario of placement is quite luminous. Our post-graduate and doctoral students are the most sought-after in industry, academia, and research and for varied professional including legal services and postdoctoral positions in abroad.
“I welcome you on behalf of Institute of Research & Development, GFSU and appreciate your keenness about us.

Since envisioned inception of GFSU in 2009, Institute of Research & Development is engaged in fostering and nurturing technocrats who are capable of making difference in all vicinities of their specialization. Highly specialized programmes offered by the institute cater need of talented manpower in the fields of forensics, pharmaceutical sciences, civil engineering, nanoscience, biotechnology, chemistry, Food Technology and environmental science. Our inclination and competence to conquer interdisciplinary challenges in these fields help us in acquiring superiority in epitome of competition era.

We believe in making students equipped with resources and knowledge so that they can lead themselves in cutting edge advancements of new products and processes to change the future of mankind. The infrastructure and facilities available in research labs, classrooms and campus make sense of belongingness to the student community and contributors. Presence of our alumni in esteemed organizations and our association with interdisciplinary core of eminent scientists is making the image of the institute captivating in research fraternities especially in India. The State of art research environment and a pool of dedicated brains provide a transformational experience to the students and investigators that’s why Institute of Research & Development continuously attracting aspirants from all over the India and even abroad. Encouragement for collaborative activities and inculcating professional ethics in scientific activities make our institute enriched with high impact research output.

Finally, I appreciate the farsighted policies of The Govt. of Gujarat and their desire to make evolution in education excellence by establishing such a remarkable research institution which is turning out to be an element of serving the mother nation by mean of the highest level of scientific research.”
Facilities & Resources

The Institute of Research & Development has excellent class-rooms and conference/seminar halls with high-tech presentation facilities. The class rooms are air-conditioned and equipped with overhead projectors, LCD projectors and computers with internet facility. The Institute has total nine laboratories with high end research facilities and sophisticated instruments. These are: Raman Laboratory, Max-Plank Laboratory, Lehn Laboratory, Faraday Laboratory, Kroto Laboratory, Edison Laboratory, Braggs Laboratory, Curie Laboratory and Einstein Laboratory. The Institute is well connected with an excellent Central library that has large number of books and Journals. The Institute has well-equipped animal house approved by CPCSEA, New Delhi. We have some of the state-of-art instruments available that has been listed below.

Some available highly sophisticated instruments include:

- MS/MS/MS
- Automated Smart-HPLC system
- Isocratic HPLC
- Supercritical Fluid Chromatography
- ELISA Reader
- DSC (Differential Scanning Calorimetry)
- ZetaSizer ZS Nano
- UV Visible spectrophotometer
- UV/VIS/NIR Spectrophotometer
- Scanning Electron Microscope (SEM)
- Chiral Detector
- Probe Sonicator
- Spectrofluorimeter
- Lyophilizer
- Lithography
- Fluorescence microscope
- XRD
- Dissolution Test Apparatus
- Rotary Vacuum Evaporator
- High speed Homogenizers
- Brooke Field Viscometer
- FT-IR spectrophotometer
- FT-IR with image microscope
- Raman spectrophotometer
- Spectrofluorometer
- Gel electrophoresis
- Langendorff apparatus with NIBP system (AD Instruments)
- Electroconvulsometer
- Plethysmometer
- Data Acquisition system
- Atomic Force Microscope (AFM)
- Planetary Ball-Mill
- Digital Compression Testing Machine (3000 kN)
- Universal testing machine
- Ultrasonic pulse velocity machine
## Programs Offered

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<tr>
<th>No.</th>
<th>Program and Duration</th>
<th>Areas of Specialization</th>
<th>Eligibility</th>
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<tbody>
<tr>
<td>1.</td>
<td>M. Pharm in Forensic Pharmacy (2 Years)</td>
<td>1. Quality Assurance and Pharmaceutical Analysis</td>
<td>B.Pharm Degree with minimum 55% marks, preference will be given to GATE/GPAT Qualified candidates</td>
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<td></td>
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<td>2. Regulatory Affairs and Management</td>
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<td>3. Nano Drug Delivery System</td>
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<td>4. Pharmacology and Toxicology</td>
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<td>5. Pharmacokinetics &amp; Clinical Pharmacy</td>
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2. **M.S. Forensic Nanotechnology** (2 Years)  
   1. Nano-science and Nanotechnology  
   2. Nano Biotechnology  
   3. Nano Engineering  
   Bachelor’s degree in any discipline of Science / Medicine / Engineering / Pharmacy with minimum 55% marks

3. **M.Tech. Civil Engineering** (2 Years)  
   Forensic Structural Engineering  
   BE/BTech Civil Engineering with 60 % marks

4. **M.S. Chemistry** (2 Years)  
   Forensic Analytical Chemistry  
   BSc in Chemistry with 55% marks

5. **M.Sc. in Food Technology**  
   Forensic Food Analysis  
   Bachelor’s degree in any discipline of Science / Medicine / Engineering / Pharmacy with minimum 55% marks

6. **M.S. Environmental Science** (2 Years)  
   Environmental Forensics  
   Bachelor degree in any discipline of Science (except mathematics and statistics), medicine, pharmacy, Environmental / B.E. Civil, Chemical, Environmental Engineering with 55% marks

7. **M.S. Environment Management** (2 Years)  
   Environmental Forensics  
   Bachelor degree in any discipline of Science (except mathematics and statistics), medicine, pharmacy, Environmental / B.E. Civil, Chemical, Environmental Engineering with 55% marks

### INTEGRATED M.S. PROGRAMS

8. **Environmental Management and MS Environmental Science** (3 Years)  
   Environmental Forensics  
   Bachelor degree in any discipline of Science (except mathematics and statistics), medicine, pharmacy, Environmental / B.E. Civil, Chemical, Environmental Engineering with 55% marks

### PH.D /INTEGRATED PH.D. PROGRAMS

9. **M.Pharm. - Ph.D.** (5 Years)  
   MS in specializations of Forensic Pharmacy  
   B.Pharm Degree with minimum of 60% marks, preference will be given to GATE/GPAT Qualified candidates

10. **M.S. - Ph.D.** (5 Years)  
    MS in specializations of Forensic Nanotechnology  
    A candidate should have Bachelor’s degree in any discipline of Science / Medicine / Engineering / Pharmacy with minimum 60% marks.

11. **Ph.D. (Minimum 3 Years)**  
    Forensic Pharmacy, Forensic Nanotechnology, Chemistry, Structural engineering, Environmental science  
    Master’s degree in any discipline of Science/ Medicine/Engineering/ Pharmacy, with minimum 55% marks or its equivalent in grades
About the Courses

**Forensic Pharmacy**

M.Pharm. Forensic Pharmacy deals with the application of Pharmaceutical Sciences in the broader area of Forensic investigative work. Students possessing degrees in Forensic Pharmacy will work with scientists in pharmaceutical industries as well as with various governmental and private organisations and laboratories dealing with forensic analysis. The main employment agencies will be pharmaceutical industries, hospitals, Universities Defense/Army headquarters, Central Forensic Science Laboratories, Narcotics Department, Insurance Agencies, Law-firms and many more.

**Forensic Nanotechnology**

The MS forensic nanotechnology programme will provide you very fundamental knowledge on nanotechnology as well as its wide applications in different branches including forensic science. Nanotechnology requires advanced level infrastructure and equipment and the opportunity to work in a quality environment, which will be provided here. Thus, the programme provides the theoretical basis and knowledge of experimental methods and technological applications of nanotechnology. So you will become an expert on nanotechnology, which is a highly demanding branch of science and technology with enormous prospects in the coming days ahead. These students have good job opportunities in different academic institutes as well as research laboratories along with different private industrial sectors. A lot of prospects await nanotechnology professionals in abroad in various sectors like medicine, health care, catalysis, energy production, semiconductors.

**Forensic Analytical Chemistry**

Advances in analytical science have produced a revolution in forensic, environmental and pharmaceutical science. There is a strong worldwide demand for imaginative, skilled analysts with knowledge and hands-on experience of modern analytical instrumentation. Course work of this specialization will help students to participate in multidisciplinary activity that relies on chemical and analytical techniques to provide invaluable evidence from investigation of disasters, nanotechnology based research, failure in product or process, accident and criminal activities.

**Forensic structural Engineering**

This is a new and unique program started by the institute for engineering graduates. The course on Forensic structural engineering has been developed with an aim to develop graduates with technical and legal practices in the field of forensic investigation involving cases of civil structures. The candidate with education of this program can grab opportunities in government and private civil work quality auditing agencies, Government and Private Companies engaged in infrastructure development, Consultancy firms for attorneys practicing land disputes and construction disputes, International companies practicing in structural failure analysis and failure preventions, Government departments engaged in rural and urban infrastructure development and maintenance, Government and private structural material testing laboratories.
Environmental Sciences

The Institute provides various MS program in the area of Environmental Science:

1. MS Environmental Science with specialization in Environmental Forensics
2. MS Environmental Management
3. MS environmental Management and MS Environmental Science (Integrated)

Environmental Science & Management course offers research and legal opinions towards the use and conservation of natural resources, protection of habitats and control of hazards; spanning the field of applied environment without any traditional boundaries. The course's objective is to improve expertise, generate ideas and results through contributions from biology, botany, climatology, ecology, ecological economics, environmental engineering, fisheries, environmental law, forest sciences, geology, information science, public affairs, zoology and other subjects. As the principal user of nature, humanity is responsible for ensuring that its environmental impacts are benign rather than catastrophic. Environmental Management presents a novel opportunity for academic researchers and professionals outside universities, including those in business, government, research establishments, and public interest groups, presenting a wide spectrum of viewpoints and approaches.

Food Technology

Food safety and food quality are much needed topics in our society and are important issues for the individual consumer. Food safety for VIPs is immensely important in the context of present vulnerable situation in the world. Institute is currently running a two-year Masters program on Food Technology with the specialization on “Forensic Food Analysis”. The program deals with the challenges associated with food production, food safety, food quality and health along with a rich infrastructure facility to make the students experts in food analysis from forensic investigation prospective. The passouts of this program will have good employment prospect in food and pharmaceutical industries, Defense/Army headquarters, Central Forensic Science Laboratories, Narcotics Department, Insurance Agencies, Law-firms and many more.
Faculty Profile

The Director

Prof. Y. K. Agrawal, M. Sc.-Ph. D., D.Sc. (USA) in Pharmaceutical Science, D.Sc. (India), F.R.S.C. (UK), C.Chem. (UK), F.I.C., F.S. (Switz), F.A.Sc. (USA), F.G.S.A., is the Director for the Institute of Research & Development - Gujarat Forensic Sciences University. Formerly he has worked as the Director - Nirma Institute of Science & Technology – Nirma University – Ahmedabad; Director - School of Sciences - Gujarat University – Ahmedabad; and Professor and Head - Pharmacy Department - Faculty of Technology & Engineering - M. S. University - Baroda.

Prior to this he has served at different prestigious institutions of the country: like: NCL - Pune, IIT - Bombay, Bhabha Atomic Research Centre - Trombay, IISc – Bangalore; Etc., in various capacities. Prof. Agrawal has visited and experienced various International Universities at USA; UK; Australia; Spain; Israel and Germany. He is the Fellow and Member of several Chemical Societies of India and Overseas. Prof. Y. K. Agrawal has more than 45 years of teaching and research experience and has published more than 500 research papers, in National & International Journals of repute. He has 5 patents, guided 117 Ph. D. students (in Pharmacy, Chemistry, Engineering and Bio-sciences) and also 30 M.Pharm.; 5 M.Phil and 5 M.E. students, during the course of his career.


He is a member of International Advisory Board of Fullerene Nanotubes and Carbon Nanostructure (USA) and also Author of Fullerene Derivatives and their Analytical Applications, being published by Kluwer (USA). He is a Member of the Editorial Board; mainly Inorganic Chemistry (Bentham), Mini Res.Rev.(Bentham) for the Indian Journal of Pharmaceutical Sciences; Indian Drugs; Indian Journal of Chemistry; Journal of Chemical Research; etc.

Prof. Agrawal has been the organizer for the National Seminar on Supramolecules, Nanotechnology and Nanomedicine since 2001 till date. Recently he has started MS programme in Forensic Nanotechnology. He is a Member of the Atomic Energy, UGC, DST, CSIR, DSIR etc. and Indian Representative of Asian Analytical Society, Japan.
Faculty Members

**Dr. Ashish Dhir**  
**M. Pharm, PhD**  
**Assistant Professor and DBT Ramalingaswami Fellow**

Specialization: Pharmacology & Toxicology

Experience: Total 9 years in Research & Development (University of California, Davis, USA; Punjab University, Chandigarh; Sun Pharma Advanced Research Center, Vadodara, India) and 4 years in Academic (UIPS, Panjab University, Chandigarh and IRD, GFSU, Gandhinagar)

Publications: More than 80 Publications, 2 International Patents, Author of 2 books on Neuropharmacology and many book-chapters

Thrust Areas of Research: Neuropharmacology, Herbal Pharmacology, Drug discovery


**Dr. Deepak Rawtani**  
**M. E, PhD**  
**Assistant Professor**

Specialization: Bio-nanotechnology

Experience: Total 11 years in Research & Development (ITRC, Lucknow, USV Limited, Mumbai and Torrent Research Centre, Ahmedabad) and 5 years in Academic.

Publications: More than 10 Publications.

Thrust Areas of Research: Design and development of functionalized bio-nanomaterials, Development of bi-nanosensors, Study of DNA-nanoparticle interaction


**Dr. Prasenjit Maity**  
**M. Sc, PhD**  
**Assistant Professor**

Specialization: Nanotechnology, Chemistry

Experience: Postdoctoral Fellow (University of Padova, Italy, 2009-10), Postdoctoral Fellow (The University of Tokyo, Japan, 2011 to 2013), Assistant Professor (Gujarat Forensic Sciences University, 2014 -)

Publications: 15 Publications

Thrust Areas of research: Design and synthesis of nanomaterials and molecules for forensic analysis and green catalysis process development

Other Achievements: Qualified in GATE (2003, all India rank-05), CSIR-NET (2003), Received GOLD-2012 best research presentation award in Tokyo, Received young scientist research grant from SERB (DST) of Rs. 20.5 Lakhs (2014-2017)
Dr. Harshad Patel  
M. Sc, PhD  
Assistant Professor  

Specialization: Nanoscience & Nanotechnology  
Experience: Total 07 years in Academic and Research & Development.  
Publications: 07 Publications.  
Thrust Areas of Research: Synthesis of novel nanoscale materials, Development of nano-scale characterization techniques, Development of nanosensors.  

Mr. Jasmin Kubavat  
M.Pharm, Ph.D. (Pursuing)  
Assistant Professor  

Specialization: Pharmacology & Toxicology  
Experience: Total 08 years in Academic and Research.  
Publications: 5 Publications.  
Thrust Areas of Research: Drug discovery & development for coronary heart diseases and metabolic syndrome, Drug toxicology.

Dr. Prajesh Prajapati  
M.Pharm., Ph.D.  
Assistant Professor  

Specialization: Pharmaceutical Analysis & Quality Assurance  
Experience: Total 07 years in Academic and Research & Development.  
Publications: 10 Publications.  
Thrust Areas of Research: Impurity profiling, Pharmaceutical method development, Analysis of various pharmaceutical formulations and characterization of nanomaterial.

Dr. Jayrajsinh I. Sarvaiya  
M.Pharm., Ph.d.  
Assistant Professor  

Specialization: Industrial Pharmacy  
Experience: Total 08 years in Academic and Research  
Publications: 10 Publications  
Thrust Areas of Research: Preformulation studies and formulation development of nano drug delivery systems and regulatory aspects of pharmaceutical products.
Ms. Merool Vakil  
M.E., Ph.D. (Pursuing)  
Assistant Professor

Specialization: Structural Engineering  
Experience: 14 Years in Academic & Research  
Publications: 15 Publications  
Thrust Areas of Research: Advanced structural analysis, Finite element analysis, Design of steel concrete composite structures, Structural health assessment  
Other Achievements: Gujarat University Ranker in B.E.(Civil) and in M.E.(Civil), GATE (1999), Author of a book-"Structural Analysis", Major Consultancy projects (04), Coordinator STTP (2012)

Ms. Mitali Patel  
M.E., Ph.D. (Pursuing)  
Assistant Professor

Specialization: Structural Engineering  
Experience: 2 Years in Academic & Industry.  
Publications: 4 Publications  
Other Achievements: Gold medal from GTU, Ahmedabad, Gold medal from GICEA, Ahmedabad
Research Thrust Areas

An important aim of Institute of Research and Development is to fostering pioneering innovative research in fields spanning the entire range of Pharmaceutical science, Nanotechnology, Chemistry, Environmental science and structural engineering with a focus on their application in Forensic technology for crime scene investigation. The Institute seeks to contribute to civilization, peace and prosperity in the nation and world, and aims at developing global human capabilities par excellence through pioneering research in science and technology. To be more precise, the Institute is currently involved in following research areas:

- Optical and electrochemical sensors for detection of trace analytes (Explosives, Pesticides, Heavy Metals, Drugs).
- Functionalized nanomaterials for Latent Fingerprint development and detection of trace elements present in it.
- Impurity profiling and self-degradation study of drugs using analytical techniques.
- Novel therapeutic strategies to treat neonatal seizures.
- In vivo and In vitro toxicity study of different nanomaterials and drugs.
- Investigation on multifunctional nanocarrier systems.
- Novel nano alloy for corrosion resistance in reinforced steel.
- Analysis of faulty construction (civil) structures.

The List of sponsored research projects at the Institute:

1. Development of Nano Techniques and Technology for Finger Print detection and Identification and detection of Toxic Material at Nanogram levels in Biological Matrices” sponsored by Ministry of Home Affairs to Professor Y K Agrawal, 25 Lakhs
2. SERB (DST) sponsored project “Intrapulmonary allopregnanolone (a neurosteroid) in acute treatment of seizures’ awarded to Dr. Ashish Dhir, 17 Lakhs
3. SERB (DST) sponsored project “Novel functional polymer stabilized mono and multimetallic nanocatalyststs for demanding catalytic transformations” awarded to Dr. P. Maity, 2014-2017, 20.5 Lakhs
4. DBT Ramalingaswami Grant “Novel therapeutic strategies to treat neonatal seizures” awarded to Dr. Ashish Dhir, 82 Lakhs
5. GUJCOST sponsored research project “Load carrying capacity of steel concrete composite deck with different bond patterns” to Ms. Merool Vakil, 1.91 Lakhs
6. GUJCOST sponsored research project “Development of nanotechnology based formulations of poorly bioavailable nutraceuticals and their characterization” to Professor Y K Agrawal, 4.7 Lakhs
7. DST (FIST) awarded research grant (69 lakhs) for establishment of sophisticated instrummntal facility
The Institute of Research and Development has introduced a scheme of awards for its meritorious students, namely:

1. **Gold Medal - IRD** for the most meritorious student of the following courses:
   - MS Forensic Pharmacy (by Troikaa Pharmaceuticals)
   - MS Environmental Science (by GEMI)

### Awards and Recognitions

- Identified by DST (Department of Science and Technology, Government of India) as a research center of excellence and awarded a special research grant for installation of high-end instruments under FIST level 1 scheme.
- Lifetime Achievement award by chemical research society of India (CRSI) to Professor Y K Agrawal for the year 2015
- Rafaelsen Young Investigator International Award to Dr. Ashish Dhir for his research contribution in pharmacology for the year 2014

### Workshops & Seminars

- Actively organize MYRIAD entitled “Nanotechnology Based model and poster presentation” – every year.
- National conference on “Supramolecules and Nanotechnology” – every year
- National conference on “Green Chemistry” – every year
- Workshop for Drug Controller Officers from all over India – every year
- Workshop on Dissolution Techniques by JASCO – 2015
- Seminar on BABE Studies - 2015
- “Workshop on Nano-HPLC” – 2011
- “International conference on Nanotechnology” – 2011
Campus Life

One of the most distinctive characteristics of GFSU is its close-knit and integrated residential community. Housing is arranged for all students, and approximately 270 students live on this campus, allowing the blending of academic and residential life. This residential experience is central to the University's educational programme, and offers its students a supportive and enriching environment, full of opportunities for overall growth. A vast range of cultural, educational, athletic and social activities is available to GFSU students, faculty and staff. The quickest way to get involved in campus life is to become a part of this vibrant community, and to create one's own GFSU experience.

Extracurricular Activities

Students here do much more than only study. There is ample opportunity to nurture all kinds of talent in students. There are excellent recreational and sporting facilities like volleyball, soccer, cricket, badminton and indoor games like table tennis, chess and carom and much more. Annual Sports Week, an extremely popular event is organised by the GFSU community.

Students are also enthusiastic participants at the journal club, bringing the fun back into forensic science and scientific hobbies. The students also produce e-Forensic, a monthly English magazine that keeps students up-to-date on campus research and scientific happenings.
Top audit firms hire digital forensic students of GFSU

Job Profiles Include Network, Cyber Security And Risk Assessment

Ahmedabad: When one hears about Ernst & Young, PricewaterhouseCoopers, Deloitte and campus placements for these companies, one generally assumes that they are targeting the Engineers or MBA graduates. Many of these students will also intern with these firms during their fourth semester. But, a few other firms are also interested in the students who are pursuing a BA or BCom degree.

A few of the firms that are interested in these students are KPMG, Deloitte, Ernst & Young and PricewaterhouseCoopers. The students who are interested in these firms have to go for the written test and interview. The students who are interested in these firms have to go for the written test and interview.

Former White House cyber security expert to mentor GFSU

The International Conference on Cyber Security began at Gujarat Forensic Sciences University (GFSU). The conference is aimed at raising awareness on cyber security and to discuss the latest developments in the field.

GFSU course to cover food forensics and toxicity

The course will cover the skills of those working in the fields of Food and Drug Administration (FDA) and Central Drugs Standard Control Organization (CDSCO). It will equip them to identify adulterated goods and counterfeit products, Ahmed said.

Gujarat Forensic Sciences University (GFSU) held a day-long interaction session for psychology students and professional to observe Forensic Psychology Day on Wednesday. The aim of the session was to spread awareness and provide training on the study.

The university runs MSc courses in Forensic Psychology.

USE IN DIFFERENT CASES

There are several components of forensic psychology and their expertise can be used in cases of sex offenses, domestic violence and other cases in which referrals of forensic psychologists become important. Such cases include drugs and alcohol abuse, rape and child abuse, domestic violence, sexual harassment, and so on.
Contact Details

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