

CENTRE FOR GENOMICS

POST GRADUATE DIPLOMA IN FORENSIC SCIENCE

Profile of the course

The word “forensic” means “pertaining to the law”. Forensic science resolves legal issues by applying scientific principles to them. Forensic scientists perform comprehensive chemical and physical analyses on evidence submitted by law enforcement agencies. Their work is often instrumental in apprehending and convicting criminals. At present, there has been significant increase in the crime rates as well as in the pattern of crimes and criminals in India. Often, routine legal investigations face difficulties in decision making in certain complicated criminal cases. In such conditions, the knowledge and application of forensic science and its tools provide decisive evidences, facilitating accurate legal decisions and verdict. In recent times, there has also been a parallel increase in the effort to develop newer and more refined methodologies, having significant advantage over existing methods, to cope-up with the problems of decision-making. For this, there is a need of well trained persons who could provide technical support to the legal authorities, such as Police and Judiciary, to maintain law and order and deliver justice to the aggrieved.

Keeping in view the above issues, Jiwaji University has initiated a one year Post Graduate Diploma course in Forensic Science for the interested students/ applicants. The students will be competently prepared in the areas of finding, preserving, developing, collecting, analyzing, recording, and presenting physical evidences, utilizing modern scientific methods used in the field and laboratory for forensic identification. The course is designed to provide the students with crucial information that will allow them to become Qualified Expert in the respective areas of Forensic Science.

The Department also runs short certificate (one-month) courses for professionals and other interested individuals on various aspects of forensic science.

Job prospects:

Education in Forensic Sciences, Cyber Forensics, Forensic Psychology, Crime scene investigation, etc., provides backbone to those who wish to work within the justice department or as Forensic Expert, Scientist, Administrator, Private Investigator, Detective, Forensic Analyst, Forensic Examiner, Teacher, Psychologist, Legal Consultant or in other positions. The pass out students will have the potential to get job opportunities in both government and private sectors.

Government Sector: Police Department, Crime Branches, CBI, CID, Forensic Science laboratories, IB, Banks, Defence/Army, Courts, Quality control bureau, Narcotics Department, Hospitals, etc.

Private sector: Detective agencies, Banks, Insurance Companies, Universities, Hospitals, Security Services Agencies, Helpful to lawyers/Advocates, Law firms, Private companies, Own Private practices, etc.

Career Options:

There are varieties of options for forensic professionals. They can specialize in subjects as varied as medicine, engineering, fingerprinting, insect study, languages, geology etc.

Crime Scene Investigation involving issues such as security, prevention of contamination, locating and collecting relevant items of evidence, interpretation of evidence and possible reconstruction of the event.

Forensic Pathology/Medicine involving post mortem examinations of deaths reported to determine the cause and manner of death in cases of suspected murder or suicide.

Forensic Anthropology involving identification of individuals murdered or killed in disasters such as plane crashes, explosions, fires and other tragedies resulting in the loss of life and mutilation of bodies and also to discover the age, sex, ancestry, stature and unique features of the deceased.

Forensic Psychology and Psychiatry are concerned with whether a mental state may be a mitigating circumstance in the commission of an alleged crime and whether a person is mentally fit to stand trial and treating those convicted of crimes who are mentally ill.

Forensic Dentistry deals with the collection, evaluation and proper handling of dental evidence in order to assist law enforcement officers and in civil & criminal proceedings.

Forensic Serology involves studying blood groups, blood and other fluids for identification purposes following a crime.

DNA fingerprinting offers the possibility of positive identification of an individual from samples of blood or semen

Forensic Chemist includes the detection and identification of illicit drugs, accelerants used in arson cases, explosive and gunshot residues, trace evidences, including paint, glass polymers and fibers.

Ballistics studies the flight paths of projectiles, but modern ballistics now includes the study of everything to do with firearms.

Toxicology involves the detection and identification of illicit and pharmaceutical drugs and poisons, interpreting toxicity levels and the effects on the functions of the body

Eligibility : B. Sc. In any subject combination with 50% marks and Biology as compulsory subject at 10 + 2 level, MBBS, BVSc

Faculty :

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| Prof. PK Tiwari, Coordinator Centre for Genomics Jiwaji University, Gwalior | Prof. AK Srivastava SoS Physics Jiwaji University Gwalior | Dr. GK Sharma, Institute of Law Jiwaji University, Gwalior |
| Dr. OP Srivastava Rtd. Director Forensic Science Lab, Sagar | Dr. Mehmood Ali Rtd. Jt. Director Forensic Science Lab, Sagar | Dr. Azad Srivastava Rtd. Jt Director Regional Forensic Science Lab, Gwalior |
| Dr. MK Verma Rtd. Director Forensic Science Lab, Sagar | Prof. CK Shinde (Rtd.) SoS Chemistry Jiwaji University Gwalior | Mr. Sanjay Yadav Finger Print Expert Gwalior |

Available Seats : Open = 10

Mode of Selection : On the basis of the **Index based on the merit** in qualifying examinations.

Course Structure :

I – Semester

General Forensic Science, Criminology and law
General idea of Questioned documents, Finger print, Photography & Anthropology
General Forensic Biology and Serology
General Forensic Physics, Ballistics and Cyber Forensic
Practical I
Practical II

II – Semester

Forensic Chemistry, Toxicology and Instrumentation
Special papers:
A. DNA Forensic & Molecular Methods
B. Questioned documents & Finger prints
Practical I
Field Training and Dissertation

Dissertation : During second semester, summer (field) training of two months (May - June) to be carried out in the subject areas related to various aspects of forensic science and its applications in different academic, research or police organizations.

Fees Structure:

| Course | 1 st Semester | 2 nd Semester |
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| Post Graduate Diploma in Forensic Science | Rs. 18115.00 | Rs.14225.00 |