

Forensic Sciences

Join the enthralling world of the Forensic Scientist! As crimes become more sophisticated and complex, so the skills and ingenuity of the Forensic Scientist develop to match them. Forensic science is the application of scientific knowledge and techniques in support of the legal process. As a Forensic Scientist you are responsible for gathering evidence, the scientific analysis of that evidence, its interpretation and evaluation, and its presentation in a court of law in a form that is impartial, convincing and understandable.

Content of the Diploma of Higher Education (DipHE) in Forensic Studies shadows the BSc (Hons) Forensic Sciences degree curriculum and successful completion of the DipHE allows direct entry into third year of the degree course. The core themes are common to both courses.

Core Themes

Your studies will involve a range of exciting themes associated with the investigation of forensic casework, developing skills, which will enable you to identify and recover evidence from a variety of crime scenes. You will learn how to apply a wide range of techniques to the forensic analysis, interpretation, evaluation and reporting of evidence. Throughout the programme you will be steadily developing a detailed knowledge of the underpinning science applied to forensic science. One day, perhaps learning about the nature of fires and explosions; the next DNA profiling. Later you will be using sophisticated analytical equipment to determine if traces of illegal substances came from the same batch of drugs and you may appear in a mock court to report your findings under hostile cross-examination.

Forensic Science – You will develop a professional approach to forensic science and learn how to investigate crime scenes, and to acquire, interpret, evaluate and analyse evidence, and report it in a confident and informed manner. For your case studies you will refer to famous and infamous crimes where forensic evidence was of crucial importance. You will study areas such as ballistics, fire and explosion investigation, document examination; substances of abuse, blood stain evidence, tool-marks, paint, glass, fibres and fingerprints.

Chemistry – You will acquire a sound understanding of the chemical make up of substances, as this is the essential foundation on which most aspects of forensic science are built. As one of your main roles as a Forensic Scientist is to provide an authoritative scientific opinion of a substance, you will develop a thorough understanding of the requirements, accuracy, and limitations of sophisticated analytical chemistry techniques. You will learn about the basic building blocks of matter and their interaction in different environments and apply your skills and knowledge to such diverse areas as document examination, fire and explosion investigation and characterisation of glass, paints and illegal drugs.

Life Sciences – Central to your work as a Forensic Scientist is the study of living organisms and in particular human beings. Human and animal physiology, plant biology, cell tissue, metabolism, genetics, molecular biology, pharmacology and toxicology are all part of this theme. As our knowledge and understanding of the human genome develops beyond its already advanced stage, new and fascinating areas of interest are opening up to the Forensic Scientist with DNA profiling and the development of DNA databases.

Course

BSc (Hons) Forensic Sciences
DipHE Forensic Studies

UCAS Code

F410 BSc/FoS
F411 DipHE/FS

Duration

Four years FT
Two years FT



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Forensic Sciences

Support Themes – You will hear presentations from our legal experts on a range of supporting study topics focused on your work as a Forensic Scientist. You will study criminal and civil law systems, the law of evidence, and the regulatory framework within which court cases proceed to a successful conclusion. You will develop an understanding of the role of statistics in evaluating evidence and be encouraged to develop your communication, photography, microscopy, problem solving and IT skills.

Course Content

- Year 1: Introduction and general overview of forensic science and forensic techniques plus foundations for biology, chemistry and law.
- Year 2: Scenes of crime techniques and methodology plus forensic analysis.
- Year 3: Interpretation of biological and physical evidence, techniques of evidence collection, fires and explosions.
- Year 4: Contemporary forensic science practice, substances of abuse, forensic DNA analysis, forensic data bases and honours project.

Specialist Facilities

We have worked closely with forensic science practitioners and the police in developing this course. Our state of the art Laboratory facilities and equipment include a forensic microscopy suite, DNA sequencing, drug analysis and simulated crime scenes (house, garage and bank). The University Library has a wide and expanding forensic science section and is home to the Tayside Faculty of Procurators and Solicitors Law Library which gives you access to the same case reports and learning facilities used by the local legal fraternity and the Police.

Accreditation

The programme is accredited by the Forensic Science Society and is recognised by the Royal Society of Chemistry for the membership of these professional bodies.

Career Opportunities

Many graduates studying forensic science seek careers as Forensic Scientists, or in related areas, such as Scenes of Crime Officers. A good Honours degree is a minimum requirement for these posts and often a higher degree is also required. Competition for such posts is high but as well as offering these career opportunities; this unique, exciting, inquiry based course also provides you with the skills and abilities to pursue a diverse range of interesting and fulfilling careers. These may be in teaching of chemistry or science, quality assurance in the pharmaceutical industry, research into diagnostics in the biotechnology industries, development of new food products, problem solving in the public utilities, and advising on protocols in the armed forces and central government.

Course Accessibility

Students participating in this course may be involved in the following activities: field trips, summer placements, team working, attending lectures and tutorials, undertaking practical work in IT and network laboratories and undertaking laboratory practicals. For advice on course accessibility, please contact John Petrie (Student Advisor) at j.petrie@abertay.ac.uk or telephone (01382) 308051.

Further Information

Details of the entrance requirements can be found on our website. If you would like more information on this course, please contact the Student Recruitment Office (details at the bottom of the page).

The information in this leaflet is correct at the time of going to print. As the University has a policy of regularly reviewing its courses, the course or content may be subject to change without prior notice.
12/08

Contact

For further information contact:
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