
Форензическая наука — это приложение науки к уголовному и гражданскому праву. Форензические ученые собирают, сохраняют и анализируют научные доказательства в ходе расследования, чтобы предотвратить недопустимые судебные постановления.

**Ведущие исследования**

Исследования, проводимые в Школе Физических наук в Кенте — включая Форензическую Науку — были высоко оценены в REF 2014. Физика в Кенте была заняла 7-е место в Великобритании по влиянию исследований, всех исследований, представленных для оценки, были признаны на международном уровне. В химии 98% исследований Кентского университета были признаны на международном уровне, из которых 78% были мировыми или международно отличными.

Наша академическая перспектива включает в себя экспериментальные методы для анализа осколков, а также испытания, которые помогут арсенику в расследовании, создание новых методов для анализа отпечатков пальцев и создания реалистичных статей для тренировки. Дополнительно, программное обеспечение для анализа, разработанное ученными в Кенте, используется большинством полицейских и международными организациями.

**Вдохновляющая обучение**

Кент предлагает некоторые из лучших преподавания, сопровождения студентов и ресурсов обучения в стране. Наука компонент вашего обучения учитывается как в Школе Физических наук, так и в Школе Права Кента, одной из самых инновационных в Великобритании. Оба института получили хорошие оценки в последней оценке качества обучения.

Мы имеем сильные творческие связи с исследовательскими услугами, местными здравоохранительными службами, биотехнологическими, химическими и фармацевтическими компаниями в Великобритании и Европе. Мы также имеем тесное сотрудничество с Интерполом и доставляем многое из наших исследований в глобальные консультационные услуги.

**Отличное образовательное воздействие**

Благодаря крупным инвестициям в течение многих лет, мы обеспечиваем нашим студентам отличное образовательное воздействие. Школа была рекомендована Кембриджской профессиональной организацией для исследования, и для наших студентов предоставляется множество аналитических и исследовательских возможностей, доступных для студентов для обучения, и для поддержки, оказываемой сотрудниками. Наши студенты ценят то, что обучение на практике и теоретические навыки интегрированы.

**Специализированные связи**

Студенты на наших ферензических степенях не только занимаются в нашей собственной экспериментальной лаборатории, но и некоторые специфические аспекты программы могут быть представлены в качестве лабораторных практикумов от правительственных учреждений, таких как Home Office, и от специалистов в области исследования, таких как Forensic Explosives Laboratory.

**Chartered Society of Forensic Sciences (CPSF) Кент**

Кент имеет отличные связи с Chartered Society of Forensic Sciences, профессиональной организацией для исследовательских учений в Великобритании. Многие из наших сотрудников являются профессионалами в области исследования, а также практикующими в своих областях специализации. Мы один из немногих университетов, которые предлагают всем своим студентам бесплатное членство в этом профессиональном союзе в рамках их обучения.

**“I thought the course was interesting, challenging and enjoyable. The help at hand was excellent and I left university with an abundance of knowledge.”**

**Melissa Sampson**

Бывший студент, нынешний Scientific Officer с полицией Кента
assigned an Academic Adviser, who is available to discuss academic matters, and the School has a dedicated Student Support Adviser for any pastoral issues.

Year in industry
At Kent you are given the option of studying for a four-year degree, spending a year in industry. This gives you the opportunity to gain valuable experience and earn a salary. It can also greatly enhance your employment prospects after graduation. To make sure you get the most out of the experience, you are assigned an academic supervisor who approves the company’s programme of work in consultation with your industrial supervisor. For further information, see p14.

Supportive academic community
We want our students to feel that they are part of the academic community at Kent, and welcome the contributions they make. When they arrive, all of our students are encouraged you to participate in conferences and professional events, as these help you to build up a portfolio of continuing professional development. Combining academic qualifications with professional development will greatly enhance your employability following graduation.

Flexible entry levels
A foundation year course is available for students who do not have the level of scientific background necessary for direct entry into the standard degree programmes. The foundation year, which includes lectures in chemistry and mathematics, together with practical classes, is taught entirely on the Canterbury campus, and successfully caters for students with a wide range of backgrounds and experience. Providing you pass all modules on the foundation year, you are automatically granted a place on one of our forensic science degree programmes.

A global outlook
We have an international community on campus with 37% of Kent’s academics coming from outside the UK and students representing 148 nationalities, which helps to create a dynamic environment and gives your studies an international context.

Professional recognition
All our programmes are formally accredited by The Chartered Society of Forensic Sciences for all three component standards:
• crime scene investigation
• interpretation, evaluation and presentation of evidence
• laboratory analysis.

A successful future
As well as providing a first-rate academic experience, we want you to be in a good position to face the demands of a challenging economic environment. During your study, you develop key transferable skills considered essential for a successful career. Most recently a number of our students have gained employment with major forensic science suppliers with many more heading off to work within the field of physical science.

For more information on the careers help we provide at Kent, see p8 or visit our Employability web page at www.kent.ac.uk/physical-sciences/employability.html
SUPERB STUDENT EXPERIENCE

Our campus at Canterbury provides a stunning location for your studies and offers excellent academic and leisure facilities.

First-class facilities
Throughout your studies, you are based at our scenic Canterbury campus, working with cutting-edge technology in the laboratory. The School of Physical Sciences is primarily located in a large and completely renovated building, following investment of £10 million over the last few years. As a Forensic Science student, you have access to a superb range of state-of-the-art equipment and facilities, which include:

• dedicated ballistics and firearms kit
• scene-of-crime facilities that allow you to apply the theory of crime scenes, evidence recovery and fingerprinting
• document examination instrument which can be used in the detection of forged documents
• a full analytical suite for forensic chemical analysis, including Gas Chromatography – Mass Spectrometry (GC-MS), High-Performance Liquid Chromatography (HPLC), Atomic Absorption Spectrometry (AAS), Raman Spectrometry, Fourier Transform Infra-Red Spectrometry (FTIR) and Scanning Electron Microscopy (SEM).

Excellent study resources
The study resources on campus are excellent. The Templeman Library has extensive printed and electronic collections specifically aimed at supporting the courses and subject areas taught at Kent. There are also over a thousand PCs on campus and a range of support services for help or advice.

Kent’s Student Learning Advisory Service also provides information and advice on all aspects of effective learning and study skills, and is available to students from the time they arrive at the University. See www.kent.ac.uk/learning for more information.

Beautiful green campus
Our campus has plenty of green and tranquil spaces and is on a hill giving a view of the city and Canterbury Cathedral. The campus has its own cinema, theatre, concert hall and a student nightclub.

Kent has a reputation for being a very friendly university with a cosmopolitan environment. There are many restaurants, cafés and bars, as well as a sports centre and gym. Everything you need on campus is within walking distance, including a general store, a bookshop, banks, a medical centre and a pharmacy. From campus, it’s a 25-minute walk or a short bus-ride into the city.

Attractive location
Canterbury is a lovely city with medieval buildings, lively bars and atmospheric pubs, as well as a range of shops. The attractive coastal town of Whitstable is close by, and there are sandy beaches further down the coast. London is just under an hour away by high-speed train.
Hugo Perry is in his final year, studying for an MSci in Forensic Science.

What attracted you to studying at Kent?
I've always been interested in science. I couldn't decide just one area as my favourite, so I got to do all of them here because the course has a very strong science focus. This course is also highly rated in the independent university rankings and it offers an applied direction to the science. There's a good mix, practical, written and research work, which covers a broad range of areas.

How is your course going?
It's going well. I'm working on my final-year project; you get a lot of independence. It's great because it gives me a chance to put all the skills I've learnt over the course of my degree into practice. My project is on the contamination and transfer of gunshot residue. My supervisor is an expert in ballistics and it's good working with him. Also, a big part of our third year, was giving 'evidence' in a simulated Crown Court setting. You weren't quite sure what to expect at first, but it was a really valuable experience.

How would you describe your lecturers, and what about the level of support in your studies?
We have experts from different areas, very strong chemists, specialists in ballistics, DNA and crime scene investigations. They are all approachable, you can go to see them after lectures or email them out of office hours and they'll always get back to you. Every student has an academic adviser, you also have a senior tutor and if you have any issues with anything you can go and talk to them. I am also part of the peer mentoring scheme in the School. Kent pays for our membership of the Chartered Society of Forensic Sciences and transport to the annual student conference, where we got to see how relevant and up-to-date what we had learnt was in the real world. It's reassuring to know that we're learning about the right things.

What about your fellow students
People come from all over and we all get on well. We're all friends and we all want each other to do well.

Which modules have you enjoyed the most, and why?
This year, in particular, I've really enjoyed my project and the Incident Management module. The project gives me a lot of independence and I have greatly developed my understanding of the subject area and I hope to contribute something to the scientific field. With Incident Management, we did a table-top exercise managing a major incident. It gave us a strategic perspective on how the different emergency service organisations: police, fire and rescue and ambulance, work together. I really enjoyed that. It was a four-hour live exercise in real time and we had complete responsibility for all aspects of the response.

What are the facilities like?
We have excellent labs and equipment for pretty much anything you want to do. It's really helped with my project. We have cutting-edge equipment – the scanning electron microscope is an expensive piece of kit and it's the best way to analyse the samples I've got for my project; without that I'd have to use other techniques which wouldn't be as good.

What do you do in your spare time?
I am President of the Forensic Science Society, I've been a member all through my course and now I'm part of the team running it. We have guest speakers, socials, we go on trips. We recently went to the Museum of London exhibition called The Crime Museum Uncovered. Previously the exhibits were only seen by police officers. It included evidence from some of the UK's most notorious criminals including Dr Crippen, the Krays, the Great Train Robbery and the 7 July 2005 London bombings.

Any advice for somebody thinking of coming to Kent?
Have a good look at the specific courses you are interested in and the modules and think what you'll get out of that. Don't just go to university for the sake of it, pick a course that really interests you because that will help you out in getting a job you want when you graduate. When I started my degree, one of my lecturers told me to treat every day as a 9-5 job, if you consistently work hard throughout, you will come out with a good result and will have learnt a lot. Make the most of every opportunity.
Kent equips you with essential skills to give you a competitive advantage when it comes to getting a job; more than 95% of Kent students who graduated in 2015 were in work or further study within six months.

Good career prospects
Forensic science provides many more opportunities for graduate employment than in its traditionally perceived role in the service of the law. Forensic skills are now used in a wide range of professions and industries, for instance at disaster scenes, within archaeology and in the food and pharmaceutical industries.

Recent legislation has stimulated the demand for authentication of materials, and for experts and analytical companies to carry out the work. In addition, because of increasing interest and investment in the subject, scientific liaison officers are being appointed by the police service, and so the knowledge and communication gap between the scientists and the police at the crime scene has narrowed.

Our graduates go into areas such as government agencies, consultancies, emergency services, local authorities, contract laboratories, research or further vocational training.

Gain transferable skills
The skills you gain through the degree also equip you for a range of jobs where the ability to analyse problems and combine disciplinary perspectives is required. So your degree will open up specialised opportunities, without closing off access to general opportunities.

Careers advice
The University’s award-winning Careers and Employability Service can give you advice on how to choose your future career, how to apply for jobs, how to write a good CV and how to perform well in interviews and aptitude tests. It also provides up-to-date information on graduate opportunities before and after you graduate. For more information on how Kent helps you to plan for your future career, go to www.kent.ac.uk/employability

DID YOU KNOW?
Four Forensic Science graduates now work at the Forensic Explosives Laboratory – part of the Ministry of Defence, providing scientific support to the Police and Crown Prosecution Service.
GRADUATE PROFILE

Kumaree Ramhit graduated from Kent in 2014 with an MSci. She is now working at Authenticate Limited based in Kent Science Park, Sittingbourne, a company that specialises in the analysis of suspect counterfeited goods.

Why study at Kent?
I had always been interested in forensic science but was torn between an analytical chemistry or forensic chemistry course. As the degree at Kent was promoted as having a strong analytical/chemistry foundation and I had the option to switch to forensic chemistry from science, it was obviously the best option for me. On top of that the campus, out of all my university choices, looked the best by far.

How did you find the course?
I enjoyed studying Forensic Science at Kent, there were definitely challenges throughout the years, but I found that the course allowed me to develop as a scientist and as a well-rounded individual because it addressed soft skills and non-scientific writing too. We were pushed to learn how to write lab reports, law essays and lead presentations effectively.

Did the course live up to your expectations?
I would have liked the opportunity to choose a wild module to study but the course structure is quite stringent. Regardless, the course equipped me with the skills and knowledge to acquire a graduate forensic science position straight after university, which is what anyone wants after graduating.

Which part of the course most interested you?
The Forensic Physical Methods module, where we learned about different evidence collection techniques, was fun but I most enjoyed the chemistry module in my final year, Substances of Abuse, as it gave a lot of insight into drug synthesis and expanded upon the organic chemistry I had already learned.

What about your lecturers?
Most lecturers are open to questions and will offer guidance where necessary. However, they generally encourage students to come up with the answers themselves instead of giving them the answer they want straight away.

What did you think about the level of support in your studies?
There are workshops and the lecturers are available during their office hours to offer extra help and the demonstrators are very knowledgeable. There are also supervisors and course tutors to point you in the right direction even if your issue is not academic.

What did you enjoy most about university life?
I really enjoyed university, there are plenty of social activities to suit a range of interests and personalities.

The campus is lovely and I really liked Canterbury as a city. No matter what university you go to, your experience is going to be what you make it, but I think Kent, and what it has to offer, made it easy.

What are you doing at the moment?
I’m working as a Forensic Scientist Supervisor at Authenticate, a counterfeits analysis laboratory. I perform forensic comparisons and spectroscopic analysis on a daily basis and write reports on my findings. I’m happy to have found a job that allows me to draw on key skills that were taught on the Forensic Science course at Kent.

My work is extremely diverse and I have supported investigations from around the world, including China, India, Columbia and Nigeria. It is particularly rewarding to know that my efforts contribute ultimately to public health and wellbeing, by stemming the flow of any further counterfeits on to the market.

Any advice for someone thinking of studying at Kent?
The University of Kent is constantly improving, the laboratory facilities are even better now than when I started and the course content enables students to decipher their true interests. I moved from London to study at Kent and really enjoyed how scenic the campus was, I also loved Canterbury and still visit the city from time to time.
Not sure which programme to choose? Here’s a quick guide to the degrees on offer.

**Forensic Science**

These programs offer a general approach to science, alongside an understanding of key legal topics.

On the year in industry programme you spend a year between your second and final year working on an approved placement. See p14 for more information.

**Forensic Science with a Foundation Year**

This programme is for students who have previously studied relevant science subjects but do not have the grades for direct entry to Stage 1 of our programmes. It includes lectures in chemistry and mathematics, together with practical classes, and is taught entirely on the Canterbury campus.

**MSci Forensic Science**

This is a four-year programme, which builds an advanced knowledge of the science and practice underpinning modern forensics. You take modules on subjects ranging from advanced laboratory analysis and substances of abuse to major incident management. This programme prepares you for professional practice or postgraduate study.

Assessment is by written examinations at the end of each year, with some continuous assessment based on laboratory classes and other assignments. You must pass all modules in Stage 1 to go on to Stage 2. Marks from Stages 2 and 3 count towards your final degree result, as does the year in industry if taken.

**Teaching and assessment**

There are approximately eight one-hour lectures a week, with one or two days of laboratory classes. Laboratory classes emphasise different aspects of the subject and are assessed on results and written reports. Problem-solving seminars also play an important role in our teaching programme. These are usually integrated within the lecture programme and discussions focus on difficulties that you may encounter within your written work.

**Further information**

For further information on our degree programmes, please contact:

School of Physical Sciences, Ingram Building, University of Kent, Canterbury, CT2 7NH

T: +44(0)1227 824392
F: +44(0)1227 827558
E: spsrecruit@kent.ac.uk

www.kent.ac.uk/physical-sciences/prospective/undergraduate/forensic-science
The foundation year is a very popular option for students who, for example, might not have secured the grades required to study for a degree in Chemistry at Stage 1.

We also welcome students who have taken a career break and feel the need for a refresher course to increase confidence prior to tackling a degree course. A-level material is refreshed and your knowledge is extended beyond the level required at A level, ensuring you are ready to tackle a degree course.

Please note that the module list below is not fixed as new modules are always in development and courses are updated yearly. Please see www.kent.ac.uk/ug for the most up-to-date information.

Modules you study during your foundation year are:
• Algebra and Arithmetic
• Chemical Reactivity
• Graphs, Geometry and Trigonometry
• Molecules and Analysis
• Properties of Matter.

All teaching and extensive practical laboratory classes are on campus, so you can take part in all student activities. The teaching is mainly conducted by academic staff from this University and consists of lectures, example classes and laboratory sessions.

Foundation modules
Algebra and Arithmetic
A degree in forensics requires a significant competency in mathematics. Here, you are given all the mathematical tools needed to embark upon a degree in forensics. These include: arithmetic calculations, significant figures and error analysis, which are required to present experimental data in a concise and scientific fashion. The module introduces algebra, including solving of equations and their manipulation such as quadratics, simultaneous equations, and binomial theorem.

Chemical Reactivity
You are introduced to a variety of topics that underpin chemical reactivity. These include: the periodic table and periodicity, transition metals and basic reactions of organic compounds. We also cover reaction kinetics, chemical equilibrium and solubility. You also develop your problem-solving skills.

Graphs, Geometry and Trigonometry
All the underpinning mathematical graphing skills, required to undertake a forensics degree, are introduced here. The module includes, for example, constructing graphs using experimental data, co-ordinate geometry and vectors, trigonometric functions and their manipulation.

Molecules and Analysis
This module explores chemical structure and analysis. We start with atoms and molecules and introduce chemical equations. You then explore the shapes of organic and inorganic molecules using atomic and molecular orbitals. Finally, you explore the energy levels of atoms and chemical compounds, such as the energy required to break bonds and form new bonds, and the energy released during a chemical reaction. There is a special focus on hydrogen bonding.

Properties of Matter
Central to chemistry are the states of matter: solids, liquids and gases are introduced, and we cover the science underpinning ideal and non-ideal gases, liquids and solutions, with a focus on the special properties of water. We introduce phase diagrams and how they can be used to determine the properties of a material at particular temperatures and pressures. We underpin the module with main group inorganic chemistry.
STUDYING AT STAGE 1

Stage 1 is the first year of your degree programme. It provides you with the broad base of knowledge on which forensic science is founded.

Please note that the module list below is not fixed as new modules are always in development and courses are updated yearly. Please see www.kent.ac.uk/ug for the most up-to-date information.

All students take the following modules:

• Chemical Skills for Forensic Scientists
• Fundamental Organic Chemistry for Physical Scientists
• Introduction to Ballistics
• Introduction to Biochemistry and Drug Chemistry
• Introduction to Forensic Science
• Molecules Matter and Energy
• Skills for Forensic Scientists.

Modules: Stage 1

Chemical Skills for Forensic Scientists
Having been instructed in the safe use of equipment and chemicals in the laboratory, you go on to conduct set experiments in organic and analytical chemistry. You learn how to write scientific reports succinctly, conduct literature searches and use library catalogues, and to use appropriate referencing.

Fundamental Organic Chemistry for Physical Scientists
This module introduces and revises the basic concepts of organic and bio-inorganic chemistry. You study functional group organic chemistry, reaction mechanisms and spectroscopy of organic molecules.

Introduction to Ballistics
This module introduces some basic mathematics that relates to the flight of projectiles as well as a range of weapon systems that may be encountered during firearms-related investigations. Practical work is carried out in trajectory analysis and ammunition identification, and a group presentation encourages teamwork among students.

Introduction to Biochemistry and Drug Chemistry
You are introduced to the nature of drugs and the fundamentals of medicinal chemistry. You gain an overview of the subject, which serves as a platform for further study. You examine the importance of the relationship between chemical structure, chemical properties and drug action.

Introduction to Forensic Science
In this module, you look at the role of forensic scientists and the procedures they are involved in at crime scenes. Topics include: evidence and the scene of the crime; document examination; fires, explosions and firearms; drugs of abuse, alcohol and forensic toxicology; body fluids; the presentation of forensic evidence.

Molecules Matter and Energy
This module introduces and revises the basic concepts of chemistry, including atomic and molecular structure, properties of gases, liquids and solids, and thermodynamics.

Skills for Forensic Scientists
You develop your experimental and teamwork skills and receive training in incident-scene mapping, laboratory safety, communication skills, experimental science, project work, error analysis, mathematics and computer skills.

“We provide a truly multidisciplinary experience to students with teaching contributions from lecturers in chemistry, physics, law, anthropology and forensic science, ensuring the content is always interesting, current and supported by a strong scientific underpinning.”

Dr Chris Shepherd
Forensic Science Lecturer
STUDYING AT STAGE 2

Stage 2 is the second year of your degree.

Please note that the module list below is not fixed as new modules are always in development and courses are updated yearly. Please see www.kent.ac.uk/ug for the most up-to-date information.

All students take the following modules:
- Chemical Identification Techniques
- Criminal Law for Forensic Scientists
- Digital Forensics
- Firearms and Ballistics
- Forensic Archaeology
- Forensic Physical Methods
- Inorganic Chemistry, Fibres and Microscopy
- Numerical, Statistical and Analytical Skills.

Modules: Stage 2

Chemical Identification Techniques
You develop an understanding of the theory and application of techniques for chemical identification. You study symmetry, nuclear magnetic resonance, mass spectrometry, infrared and Raman spectroscopy, spectrophotometry/fluorimetry, basic diffraction methods and electron spin resonance.

Criminal Law for Forensic Scientists
You are introduced to aspects of the procedure and practice of the criminal process. You gain grounding in the concepts and principles underlying criminal law and look at specific offences, in particular relating to homicide and non-fatal offences, which are especially relevant to forensic science students.

Digital Forensics
This module investigates methods of facial identification in relation to policing and security. It includes an introduction to digital image processing, image analysis techniques and digital forensics analysis.

Forensic Physical Methods
This module outlines and defines the scope and purpose of forensic physical methods in developed countries and encourages critical thinking in relation to these methods and their application. Topics studied include crime scene management, interviews, evidential procedures and witness reliability. You develop your knowledge and understanding of the major physical forensic methods and your ability to identify and present your findings. You also become aware of emerging developments in forensic science.

Inorganic Chemistry, Fibres and Microscopy
This module introduces and revises the basic concepts of inorganic chemistry. It covers some general background and then goes on to study s- and p-block (main group) chemistry and d-block (transition metal) chemistry.

Forensic Archaeology
You gain an appreciation of the advantages of using modern scientific archaeological techniques. You discover the scientific background to techniques such as seismic detection, nuclear decay dating and palynology, and their applicability to the non-invasive detection of archaeological remains.

Numerical, Statistical and Analytical Skills
This module develops mathematical tools and the critical assessment of data. It provides you with the basis for understanding chemical arithmetic, the quantitative analysis of reacting chemical and enzymatic systems, reaction kinetics, and the application of statistics in a forensic context.
YEAR IN INDUSTRY

If you choose to take a year in industry, it comes between Stages 2 and 3.

Finding a placement
Work placements are usually advertised nationally and students apply by sending in a CV or application form. We guide you through the process, giving you valuable feedback on the placements that are likely to enhance your career prospects, how to write a winning CV and how to hone your interview skills. We also work closely with a number of local companies which often provide our students with placements.

Please note that students are not guaranteed a placement due to the competitive nature of the process. Unsuccessful students can transfer on to our other forensic science programmes after Stage 2 without their studies being affected.

Salary and benefits
Students usually work on placement for an entire calendar year. Salary and holiday entitlements vary according to the employer you work for. However, many students find that they earn enough to be able to save some of their income, and this often helps them in their final year at Kent.

Study and career benefits
A work placement provides practical experience that can be put to good use in your final year of study. It gives you a sense of how the theory works in practice and improves your skills in many areas. It also allows you to evaluate a particular career path, and gain knowledge of the working environment.

At the end of your placement, you write a report of the work you did and, on returning to Kent for your final year of study, present a lecture on your experiences. Previous year-in-industry students have worked for Abbott Laboratories, Cranfield Defence and Security, GSK, Kent and Canterbury Hospital and Procter & Gamble among many others. In general, the year in industry is very popular with employers, because of the skills you gain. If your placement is a success, you may even be offered a job with the same employer after graduation.

Keeping in touch with Kent
To make sure you get the most out of the experience, you are assigned an academic supervisor who approves the company’s programme of work in consultation with your industrial supervisor. Your year in industry counts towards your final degree classification.

DID YOU KNOW?
The Forensic Imaging Group at the University of Kent provides digital image processing services for businesses and crime prevention organisations. Clients include Kent Police.
STUDYING AT STAGE 3

Stage 3 is the final year of the BSc degree programme.

Please note that the module list below is not fixed as new modules are always in development and courses are updated yearly. Please see www.kent.ac.uk/ug for the most up-to-date information.

All students take the following modules:
- Advanced Topics in Forensic Science
- Analytical Chemistry
- DNA Analysis and Interpretation
- Fires and Explosions
- Forensic Expert Witness Skills
- Law of Evidence for Forensic Scientists.

All BSc students take:
- Forensic Science Project.

All MSci students take:
- Advanced Forensic Project Laboratory.

Modules: Stage 3

Advanced Topics in Forensic Science
This module covers the very latest developments and emerging topics in the delivery of forensic science in the United Kingdom, Europe and further afield. Topics may include: case assessment and interpretation of evidence, Bayesian statistics, and quality and proficiency standards within forensic science, with reference to UCAS accreditation. The great importance of ethical standards and bias are also covered.

Analytical Chemistry
This module looks at a range of physical techniques currently used in analytical chemistry and explores their potential applications. Topics covered include: atomic emission/absorption spectrometry, separation methods, ion chromatography, x-ray fluorescence by SEM, electro-analytical chemistry, and automating analytical chemistry.

DNA Analysis and Interpretation
The module deals with the latest DNA multiplexes both in the UK and across the world, and demonstrates the benefits and drawbacks associated with new techniques becoming increasingly sensitive to DNA samples at the trace level. Indicative content includes an overview of forensic DNA typing systems and their associated procedures, including DNA extraction techniques and the polymerase chain reaction.

Fires and Explosions
The investigation of causes of fires is one of the most difficult studies undertaken by forensic scientists. This module includes the study of combustion and explosion, flammability, ignition, and chain reactions. The forensic aspects are illustrated with case studies.

Forensic Expert Witness Skills
In this module, you investigate how science is reported in the media and develop your skills in presenting scientific material and arguments clearly and correctly, in writing and orally, to a range of audiences. To assist in this, you act as an expert forensic science witness, discovering first-hand the challenges this presents.

CONTINUED OVERLEAF
STUDYING AT STAGE 3 (CONT)

Law of Evidence for Forensic Scientists
You study the general principles of the law of evidence and proof, and are introduced to the context in which the rules of evidence operate, namely criminal civil procedure and the nature of adversarial trial. You also consider fact analysis and the rules relating to the testimony of witnesses, and the major exclusionary rules relating to hearsay, character evidence and opinion.

Forensic Science Project (BSc only)
This module provides an introduction to research methods and skills, and prepares you for a research career either in industry or at postgraduate level. It also provides you with training in, and experience of, communicating research results orally and in writing, and managing a project from start to finish. In addition, you deepen your knowledge of a specialised area of forensic science.

Advanced Forensic Project Laboratory (MSci only)
You gain hands on experience of complex instruments used in forensic analysis such as X-ray diffraction (XRD), Raman spectroscopy and nuclear magnetic resonance (NMR) spectroscopy. You also undertake a short research project, which enhances your understanding of your chosen area of forensic analysis.
For those taking the MSci programme, Stage 4 is the final year of your degree.

Please note that the module list below is not fixed as new modules are always in development and courses are updated yearly. Please see www.kent.ac.uk/ug for the most up-to-date information.

All students take the following modules:
- Forensic Science Research Project
- Incident Management
- Physical Science Research Planning
- Substances of Abuse.

Modules: Stage 4

Forensic Science Research Project
Scientific research is at the forefront of innovation and design, driving advances in many areas including manufacturing technologies, materials development, medicine and forensic science. The ability to tackle problems and continually assess research project/experiment direction are key skills and vital if new knowledge is to be contributed to a field. In forensic science, research has allowed for the development and validation of new methodologies, materials and approaches which continue to shape and expand our ability to collect and analyse potential evidence. In this module, you undertake a research project which gives you the opportunity to develop key research skills and to gain further experience of scientific instrumentation.

Incident Management
Managing a major incident, such as an air crash, a major chemical spill, or a rail accident represents an enormous challenge. Thankfully such events are rare. However, when one does occur, systems and organisations move immediately to minimise loss of life, damage to property, and to preserve evidence so that lessons can be learned. This module defines the role of statutory and non-statutory agencies in identifying and responding to major threats and events. You are introduced to the difficulties and challenges associated with running a command structure at a major incident. Finally, the module prepares you for the role of court reporting officer; you produce an incident report which you then defend in a tribunal environment.

Physical Science Research Planning
The creation of new knowledge and innovation is no accident; it requires considerable planning and perspiration before a new concept can emerge. Thomas Edison knew all about sweat: genius is 99 per cent perspiration and one per cent inspiration. And Einstein said that if we knew what we were doing, it wouldn’t be called research. This module gives you the opportunity to develop the seed of an idea into a concrete proposal where all aspects of the intentions, schedules, collaborations and equipment are worked out. The feasibility and expectations of the research itself are argued within a Dragons’ Den environment as well as in written form. You also critically review the science case of others and learn how the funding process operates in the UK and elsewhere. You are trained to argue your case for support, a skill which is transferable to work life in general.

Substances of Abuse
In this module, you acquire a theoretical knowledge and understanding of the chemistry and principles of analysis and identification of several chemicals that are substances of abuse. These include: amphetamines and related compounds, LSD, cannabis and cannabis products, opiate compounds, cocaine; products from Catha edulis and Lophophora williamsii; psilocybin and psilocin from fungi and certain controlled pharmaceutical drugs.

“My four years studying within the School of Physical Sciences has been amazing! The academics are highly qualified, great teachers who work tirelessly to support and motivate each and every student. The lab facilities and resources are excellent and the degree itself is well structured and extremely well taught.”

Katherine Ponsonby
MSci Forensic Science
VISIT THE UNIVERSITY

Come along for an Open Day or an Applicant Day and see what it is like to be a student at Kent.

Open Days
Kent runs Open Days during the summer and autumn. These provide an excellent opportunity for you to discover what it is like to live and study at the University. You can meet academic staff and current students, find out about our courses and attend subject displays, workshops and informal lectures. We also offer tours around the campus to view our sports facilities, the library and University accommodation. For more information and details of how to book your place, see www.kent.ac.uk/opendays

Applicant Days
If you apply to study at Kent and we offer you a place (or invite you to attend an interview), you will usually be sent an invitation to one of our Applicant Days. You can book to attend through your online Kent Applicant Portal. The Applicant Day includes presentations in your subject area, guided tours of the campus, including University accommodation, and the opportunity to speak to both academic staff and current students about your chosen subject. For further information, see www.kent.ac.uk/visit

Informal visits
You are also welcome to make an informal visit to our campuses at any time. The University runs tours of the Canterbury and Medway campuses throughout the year for anyone who is unable to attend an Open Day or Applicant Day. It may also be possible to arrange meetings with academic staff, although we cannot guarantee this. For more details and to book your place, see www.kent.ac.uk/informal

Alternatively, we can provide you with a self-guided tour leaflet, which includes the main points of interest. For more details and to download a self-guided tour, go to www.kent.ac.uk/informal
More information

If you would like more information on Kent’s courses, facilities or services, or would like to order another subject leaflet, please contact us on:
T: +44 (0)1227 827272
Freephone (UK only): 0800 975 3777
www.kent.ac.uk/ug

For the latest departmental information on studying Forensic Science at Kent, please see www.kent.ac.uk/physical-sciences/prospective/undergraduate/forensic-science

Location
Canterbury

Award
BSc (Hons), MSci

Degree programmes
• Forensic Science BSc (F410)
• Forensic Science MSci (F414)
• Forensic Science with a Foundation Year (F412)
• Forensic Science with a Year in Industry (F411)

Typical offer levels
BBB at A level, IB Diploma 34 points inc Biology or Chemistry 5 at HL and 4 in Mathematics, or IB Diploma with 15 points at Higher inc Biology or Chemistry 5 at HL and 4 in Mathematics.

Foundation Course (F412)
This is subject to individual consideration but evidence of prior relevant scientific study is required.

Required subjects
A level grade B or equivalent in Chemistry, Biology or Human Biology with a pass grade in the relevant practicals, plus GCSE Mathematics grade C.

Foundation Course (F412) individual consideration but evidence of prior relevant scientific study is required.

Year in industry
See p14.

Foundation year
Passing all modules in the foundation year programme guarantees you entry on to one of our forensic science degree programmes. See p11 for more details.

Further information
Admissions enquiries
T: +44 (0)1227 827272
www.kent.ac.uk/ug

Offer levels and entry requirements are subject to change. For the latest course information, see www.kent.ac.uk/ug
COME AND VISIT US

To find out more about visiting the University, see our website:
www.kent.ac.uk/visit