FORENSIC SCIENCE
MSc

Canterbury
INTRODUCTION

The Forensic Science MSc is an exciting taught Master’s programme, which prepares you for a professional role in forensic science within the criminal or civil judicial systems, forensic practice, or research. It is specifically for graduates with a strong grounding in science who wish to apply their knowledge in a forensic context.

The Forensic Science MSc allows you to develop a wide range of advanced scientific skills and immerse yourself in the very latest advances in forensic science. You develop a deep knowledge and understanding of advanced laboratory analytical methods as applied to forensic investigations. This enables you to select the most appropriate analytical techniques and to use a wide range of advanced analytic apparatus to a high standard.

After successfully completing the programme, you will have the skills and knowledge to recognise and solve forensic-related problems at an advanced level. In addition to enhancing your employment opportunities and career prospects, this programme helps you to develop an integrated and critical understanding of forensic science to prepare you to undertake a PhD in any associated disciplines.

Expert teaching
The School of Physical Sciences at Kent offers postgraduate students the opportunity to participate in groundbreaking science, working with expert staff at the forefront of their fields. Students on our forensic programmes are taught not only by our expert in-house lecturers, but also by industry specialist lecturers. We also have strong collaborative links with forensic science providers such as Kent Police as well as local health authorities and biotechnology, chemical and pharmaceutical companies in the UK and Europe.

Leading edge research
The School of Physical Sciences achieved excellent results in the most recent Research Assessment Exercise (2008). All of the programmes taught within the School are underpinned by a strong, active and cutting-edge research environment.

The School has an innovative research team in the Forensic Imaging Group, which brings together physics and forensic science. The Group is developing

“This programme offers higher level training than is found in undergraduate forensic science degrees, enabling its graduates to undertake more senior forensic roles. There is also a strong emphasis on research methodology, allowing you to develop new forensic procedures as well as embark on a research career in a variety of scientific areas.”

Michael Went
Professor of Chemistry and Forensic Science
Impressive career prospects

Kent has an excellent record for postgraduate employment: over 94% of our postgraduate students who graduated in 2013 found a job or further study opportunity within six months. The MSc uses modules from our MSci programme, which is accredited by the Chartered Society of Forensic Sciences and endorsed by Skillsmark under the Skills for Justice Programme.

Excellent facilities

As a student of this programme, you have access to newly refurbished state-of-the-art laboratories as well as access to first-class facilities. These facilities include a dedicated firearms and ballistics kit, forensic investigation equipment, FT-IR microscopy, NMR spectrometers, Raman spectrometers, X-ray fluorescence, atomic absorption spectroscopy, GC-MS, HPLC, ion chromatography and scanning electron microscopy.

Engagement with the professional body

The School of Physical Sciences is one of the few, and by far the largest academic institution to offer all of its students (both undergraduate and postgraduate) free membership of the Chartered Society of Forensic Sciences. This enables us to integrate the webinar conference materials provided by the Society into our teaching materials. In this way, our students are always able to stay in touch with the very latest advances in forensic science and maintain a close association with their professional body as student members.

We actively encourage all our students to attend professional conferences organised by the Society and others in order to graduate not only with good class degrees but also with a respectable measure of continuing professional development credits which distinguish our graduates.

Other areas of research include new methods of fire debris analysis in collaboration with Prometheus Forensic Services Ltd and spectroscopic analysis of forensic evidence in collaboration with Authenticate Ltd.

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PROGRAMME CONTENT

This one-year Master's programme in forensic science offers academic rigour combined with practical application and professional orientation. It consists of taught modules and a research project.

Forensic Science MSc

Location: Canterbury.
Attendance: One year full-time.
Start: September.

Programme description

The programme comprises two stages over the year. In Stage One, you undertake seven taught modules during the autumn and spring terms.

During the spring term, you are assigned an academic supervisor for your dissertation project which you undertake during Stage Two of the programme. The dissertation is completed over the summer.

To proceed to Stage Two, you are required to pass all modules with a minimum of 50%. Students who successfully complete Stage One, but do not complete the dissertation, will be eligible for the award of a postgraduate diploma.

Course content

- Advanced Forensic Project Laboratory
- Contemporary and Advanced Issues in Forensic Science
- DNA Analysis and Interpretation
- Fires and Explosions
- Major Incident Management
- MSc Research Project
- Physical Science Research Planning
- Substances of Abuse

Assessment

Assessment is by examination and coursework.

DID YOU KNOW?

As a postgraduate student at Kent, you not only have the support of the Graduate School but also access to a careers service, counselling support and other student support services.
The School of Physical Sciences comprises 35 academic staff who support teaching and research across a range of areas.

View detailed staff profiles on our website: www.kent.ac.uk/physical-sciences/staff

Programme staff

Dr Maria Alfredsson
Senior Lecturer in Theoretical Materials
Supervises projects in areas such as identification of heavy metals in pyrite ash waste, characterisation and analysis of gunpowder, determination of NOx and SOx distribution from a legal perspective.

Dr Donna Arnold
Senior Lecturer in Forensic Science
Teaches Advanced Forensic Project Laboratory, in particular powder X-ray diffraction of inorganic solids. Supervises projects in areas such as metal oxide materials as sensors for decomposition gases.

Dr Robert Benfield
Senior Lecturer in Inorganic Chemistry
Teaches Fires and Explosions. Supervises projects in areas such as chemical basis of colour spot tests in forensic science and the characterisation of colour.

Dr Stefano Biagini
Senior Lecturer in Organic Chemistry
Teaches Substances of Abuse and supervises projects in the synthesis and isolation of substances of abuse.

Dr Anna Corrias
Reader in Chemistry
Teaches Advanced Forensic Project Laboratory and researches into the synthesis and characterisation of novel nanomaterials.

Dr Holly French
Laboratory Experimental Officer
Teaches Advanced Laboratory Techniques and supports projects involving the forensic applications of analytical techniques including atomic absorption spectroscopy, high-performance chromatography and gas chromatography.

Dr Stuart Gibson
Lecturer in Forensic Science
Conducts research into digital image processing with forensic applications; machine learning; signal processing; computer vision; interactive evolutionary computation (IEC) and cognitive psychology relating to human facial appearance.
Robert Green OBE
Senior Lecturer in Forensic Science
Teaches DNA Analysis and Interpretation. Supervises projects involved with the practical applications of forensic science to solve both minor and major crimes.

Mark Johnson
Senior Lecturer in Forensic Science
Teaches Major Incident Management. Supervises projects in trace evidence, firearms, ballistics and collision analysis.

Dr Mark Price
Senior Lecturer in Space Science
Teaches Advanced Forensic Project Laboratory, in particular the use of a scanning electron microscope (SEM) and energy dispersive X-ray spectrometer (EDX) for elemental analyses.

Dr Silvia Ramos-Perez
Lecturer in Materials Physics
Teaches Advanced Forensic Project Laboratory, in particular the X-ray fluorescence (XRF) investigation of trace materials.

Dr Christopher Shepherd
Lecturer in Forensic Science
Supervises research into ballistics with a particular emphasis on the application of modern techniques to interrogate the wounding potential of different projectiles on the human body for forensic applications.

Professor Michael Smith
Professor of Astronomy
Teaches Physical Science Research Planning.

Dr Christopher Solomon
Reader in Physics
Supervises research in digital image processing with forensic applications; facial modelling and facial composites, computer vision; interactive evolutionary and soft computing and cognitive psychology relating to human facial appearance.

Professor Michael Went
Professor of Chemistry and Forensic Science
Teaches Contemporary and Advanced Issues in Forensic Science. Supervises projects in the forensic applications of Raman spectroscopy.

The academic staff are supported by guest lecturers with experience from the former Forensic Science Service and the Forensic Explosives Laboratory, part of the Defence, Science and Technology Laboratory.

EXPERT STAFF
You work with expert staff who are at the forefront of their fields and among leading research expertise such as our innovative Forensic Imaging Group, who are developing new methods for producing images in facial recognition.
General entry requirements
You should hold a good first degree (usually an upper second-class classification or above or the equivalent) in a science discipline such as forensic science, chemistry, biochemistry or forensic biology.

For information about the requirements for international qualifications from an internationally recognised institution, see www.kent.ac.uk/internationalstudent/country

Making an application
There is no fixed closing date for applications although we recommend you make your formal application as early as possible and at least three months before your intended start date. You can apply for the MSc in Forensic Science programme online via our website at www.kent.ac.uk/courses/postgrad/apply

If you wish to apply for on-campus accommodation, an application must be made online by the end of July.

English language
The University requires all non-native speakers of English to reach a minimum standard of proficiency in written and spoken English before beginning a postgraduate degree.

Only English language tests taken up to a maximum of two years prior to the date of registration will be accepted for admission to the University.

Please note that if your university studies have been completed entirely in English, you may be exempt from providing an English test certificate. Please contact International Development for clarification, see www.kent.ac.uk/internationalstudent/contact-us/

For further information, see www.kent.ac.uk/ems/eng-lang-reqs

Tuition fees and funding
For the most up-to-date information on tuition fees and funding, visit www.kent.ac.uk/pgfunding

Further information
For further information, visit www.kent.ac.uk/physical-sciences

For more specific enquiries, contact: Professor Michael Went, School of Physical Sciences, Ingram Building, University of Kent, Canterbury, Kent CT2 7NH, UK

T: +44 (0)1227 823540
E: spsrecruit@kent.ac.uk
www.kent.ac.uk/physical-sciences

Admissions enquiries
T: +44 (0)1227 827272

COME AND VISIT US
We hold Open Days and postgraduate events throughout the year. For more details, see www.kent.ac.uk/opendays

APPLYING TO KENT
Kent: the UK’s European university
Kent is known as the UK’s European university. Our two main UK campuses, Canterbury and Medway, are located in the south-east of England, close to London, and we also have study locations in Athens, Brussels, Paris and Rome.

We have a diverse, cosmopolitan population with 149 nationalities represented and 41% of our academic staff come from overseas. We also have strong links with universities in Europe, and from Kent, you are about two hours away from Paris and Brussels by train.

World-leading research
A great deal of the University of Kent’s research has been ranked as world-leading in terms of originality, significance and rigour, according to the Government’s most recent Research Assessment Exercise (2008). Kent staff were found to be engaged in research of international and world-class standing.

Strong academic community
At Kent, our postgraduate students are part of a thriving intellectual community that includes staff and students from all our locations. In addition to lectures, seminars and one-to-one supervisions, our students benefit from a rich and stimulating research culture.

A global outlook
Kent has a great international reputation, attracting academic staff and students from around the world. Our academic schools are engaged in collaborative research with universities worldwide and we offer a range of opportunities to study abroad and an approach that is truly global.

The Graduate School
As a postgraduate student, you also have the support of the Graduate School, which promotes your academic interests, co-ordinates the Researcher Development Programme and the Global Skills Award, and facilitates cross-disciplinary interaction and social networking.

CONTINUED OVERLEAF
GENERAL INFORMATION (CONT)

Funding
Kent provides a variety of financial support opportunities for postgraduate students. These range from research studentships, location-specific funding, sport and music scholarships, and funding specifically for overseas fee-paying students. For further information, see www.kent.ac.uk/pgfunding

Enhanced career prospects
At Kent, we want you to be in a good position to face the demands of a tough economic environment. During your studies, you acquire a high level of academic knowledge and specialist practical skills. We also help you to develop key transferable skills that are essential within the competitive world of work.

Further information
For information about applying to Kent, or to order a copy of the Graduate Prospectus, please contact: Recruitment and Admissions Office, The Registry, University of Kent, Canterbury, Kent CT2 7NZ, UK T: +44 (0)1227 827272 F: +44 (0)1227 827077 www.kent.ac.uk

The University also holds Open Days and postgraduate recruitment events throughout the year. Please see www.kent.ac.uk/opendays

Location
Canterbury

Faculty
Faculty of Sciences

School
School of Physical Sciences

Contact
School of Physical Sciences, Ingram Building, University of Kent, Canterbury, Kent CT2 7NH, UK T: +44 (0)1227 823321 E: spsrecruit@kent.ac.uk

Applications
Online at www.kent.ac.uk/courses/postgrad/apply

Terms and conditions: the University reserves the right to make variations to the content and delivery of courses and other services, or to discontinue courses and other services, if such action is reasonably considered to be necessary. If the University discontinues any course, it will endeavour to provide a suitable alternative. To register for a programme of study, all students must agree to abide by the University Regulations (available online at: www.kent.ac.uk/regulations).

Data protection: for administrative, academic and health and safety reasons, the University needs to process information about its students. Full registration as a student of the University is subject to your consent to process such information.
COME AND VISIT US

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