



Forensic Explosive and Explosion Investigation

MSc/MSc by Research/PgDip

This course introduces students to the investigation of explosive and CBRN crime scenes. It considers both pre and post blast scenes, and associated scenes. The MSc also develops the student's ability to apply Forensic Intelligence and exploitation techniques, and blend it with Open Source Intelligence. The course offers students a wide range of different experiences with unique facilities available to no other university in the UK and is part of the MSc Forensic Programme which has been formally accredited by The Chartered Society of Forensic Sciences. Places on the MSc Forensic Explosive and Explosion Investigation are competitive. Students come from a wide range of backgrounds, usually with a science or forensic science first degree. Many students come from abroad, especially Europe, Africa and North America. This course is designed to give a broad introduction to the subject, rapidly advancing into the understanding of cutting-edge research and the latest methodologies. The course is highly practical and hands-on, aiming to produce forensic experts capable of giving expert witness testimonies in a courtroom situation and elsewhere.

Course structure

Students are required to take nine core modules and choose three elective modules based on their particular background, future requirements or interests. This is followed by a four-month research project or thesis.

Individual project

The individual project takes four months from April to July. The student selects from a range of titles, or may propose their own topic. Most are practically or experimentally based using Cranfield's unique facilities.

Future career

Supports professional development for those in security and defence occupations related to explosives, intelligence or search. Excellent grounding for career starters looking to join government scientific services, forensic laboratories, police departments and insurance companies.

Accreditation

The MSc of this course is accredited by The Chartered Society of Forensic Sciences.



The
Chartered
Society of
Forensic
Sciences

Example modules

Modules form only part of the course, with the project(s) and theses making up the balance. Please see the course structure for details.

The list below shows the modules offered in the 2019-20 academic year, to give you an idea of course content. To keep our courses relevant and up-to-date, modules are subject to change – please see the webpage for the latest information.

Compulsory:

- Ballistic Impact and Protection,
- Counter-Improvised Explosive Device Capability,
- Courtroom Skills,
- Explosive Effects on Structures,
- Fires, Explosions and their Investigation,
- Forensic Investigation of Explosives and Explosive Devices,
- Introduction to Shock and Impact,
- Investigation and Evidence Collection,
- Reasoning for Forensic Science.

Elective (choose three):

- Digital Crime and Investigation,
- Environmental Forensic Science Explosive Effects on Structures,
- Fakes and Forgeries,
- Firearms Investigations,
- Forensic Archaeology: Recovering Buried Remains,
- Forensic Exploitation and Intelligence,
- Fundamentals of Forensic Anthropology: Osteology,
- Hazardous Forensics,
- International Heritage Crime,
- International Heritage Crime Exercise,
- Introduction to Firearms Investigation and Forensic Ballistics,
- Mass Fatality Incidents,
- Materials Engineering and Processes,
- Radiographic Investigations in Forensic Science,
- Trace Evidence,
- UK Heritage Crime,
- UK Heritage Crime Exercise.

Duration:

MSc: 11 months full-time, up to three years part-time.
PgDip/PgCert: one year full-time, up to two years part-time.

Start date:

October.

Location:

Cranfield.

Entry requirements:

A first or second class Honours degree or equivalent in forensic science or scientific discipline, or the professional equivalent. Students with other degrees who can show a knowledge of and interest in the scientific elements of the subject will also be considered.

Contact details

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For further information please visit

www.cranfield.ac.uk/feei