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 eight 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.

Example modules

**Compulsory:**
- Analytical Techniques,
- Courtroom Skills,
- Fires, Explosions and their Investigation,
- Forensic Investigation of Explosives and Explosive Devices,
- Investigation and Evidence Collection,
- Reasoning for Forensic Science,
- Hazardous Forensics,
- Forensic Exploitation and Intelligence,
- Research Project.

**Elective:**
- Introductory Studies,
- Fakes and Forgeries,
- Firearms Investigations,
- Introduction to Firearms Investigations and Forensic Ballistics,
- Forensic Archaeology: Recovering Buried Remains,
- Fundamentals of Forensic Anthropology: Osteology,
- Mass Fatality Incidents,
- Radiographic Investigations in Forensic Science,
- Trace Evidence,
- Digital Crime and Investigation,
- Materials Engineering and Processing,
- Approach to Failure Investigation and Analysis,
- Failure Analysis of Components,
- Counter Improvised Explosive Devices Capability,
- Environmental Forensic Science.

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 or Shrivenham (to be confirmed).

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/courses/taught/forensic-explosive-and-explosion-investigation