This course is designed to provide students with a comprehensive insight of the field of firearms, ammunition and ballistic investigations. 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 is formally accredited by The Chartered Society for Forensic Sciences. 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. The course is highly practical and hands-on, aiming to produce a clear understanding of how firearms and ammunition function, the science of ballistics, the role of the forensic firearms examiner and how the forensic evidence produced in gun crime can be used to help resolve issues in relation to criminal and civil law.

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 and either a thesis or literature review and paper.

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
Prepares you to practice as a professional expert witness in forensic ballistics, within forensic laboratories, police departments, government bodies and non-governmental organisations. It is also a necessary introduction that could lead into conducting research at PhD level in the subject.

Example modules
Compulsory:
• Analytical Techniques,
• Courtroom Skills,
• Firearms Investigations,
• Forensic Ballistic Investigations,
• Investigation and Evidence Collection,
• Reasoning for Forensic Science,
• Introduction to Firearms Investigations and Forensic Ballistics,
• Materials Engineering and Processing,
• Research Project.

Elective:
• Introductory Studies,
• Environmental Forensic Science,
• Fakes and Forgeries,
• Fires, Explosions and their Investigation,
• Forensic Archaeology: Recovering Buried Remains,
• Forensic Investigation of Explosives and Explosive Devices,
• Fundamentals of Forensic Anthropology: Osteology,
• Mass Fatality Incidents,
• Radiographic Investigations in Forensic Science,
• Trace Evidence,
• Hazardous Forensics,
• Failure Mechanisms of Materials,
• Forensic Exploitation and Intelligence,
• Digital Crime and Investigation,
• Approach to Failure Investigation and Analysis,
• Counter Improvised Explosive Devices Capability.

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 a relevant discipline such as a science, archaeology, anthropology, engineering, forensic science, materials, 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
T: +44 (0)1793 785400
E: cdsadmissionoffice@cranfield.ac.uk

For further information please visit
www.cranfield.ac.uk/courses/taught/forensic-ballistics

Every effort is made to ensure the information on this sheet is correct at the time it was produced in October 2018. Please check the web pages for the latest information.