



Military Vehicle Technology

MSc/PgDip/PgCert

This course offers the underpinning knowledge and education to enhance the student's suitability for senior positions within their organisation. The course is intended for officers of the armed forces and for scientists and technical officers in government defence establishments and the defence industry. It is particularly suitable for those who, in their subsequent careers, will be involved with the specification, analysis, development, technical management or operation of military vehicles. Each individual module is designed and offered as a standalone course which allows an individual to understand the fundamental technology required to efficiently perform the relevant, specific job responsibilities. The course also offers a critical depth to undertake engineering analysis or the evaluation of relevant sub systems.

Course structure

This course is made up of two essential components: the equivalent of 12 taught modules and an individual project. The aim of the project phase is to enable students to develop expertise in engineering research, design or development.

Individual project

In addition to the taught part of the course, students undertake an individual project. The aim of the project phase is to enable students to develop expertise in engineering research, design or development. The project phase requires a thesis to be submitted and is worth 80 credit points.

Future career

Many previous students have returned to their sponsor organisations to take-up senior programme appointments and equivalent research and development roles in this technical area.

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:

- Armoured Fighting Vehicle and Weapon Systems Study,
- Finite Element Methods in Engineering,
- Military Vehicle Dynamics,
- Military Vehicle Propulsion,
- Modelling, Simulation and Control,
- Solid Modelling CAD,
- Survivability,
- Vehicle Systems Integration,
- Weapon System Technology.

Elective:

Either choose two:

- Element Design,
- Fundamentals of Ballistics,
- Guided Weapons,
- Light Weapon Design,
- Military Vehicle Propulsion and Dynamics,
- Reliability and System Effectiveness,
- Rocket Motors and Propellants,
- Uninhabited Military Vehicle System.

Or choose one:

- Ordnance Design.

Duration:

Full-time: up to one year; part-time: MSc- three years, PgDip and PgCert- two years.

Start date:

September.

Location:

Shrivenham.

Entry requirements:

A first or second class Honours degree or equivalent in science, engineering or mathematics. Alternatively, a lesser qualification together with appropriate work experience may be acceptable.

ATAS Certificate:

Students requiring a visa to study in the UK may need to apply for an ATAS certificate to study this course.

Contact details

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For further information please visit

www.cranfield.ac.uk/mvt