Sensors Electronic Warfare

PgCert

This PgCert covers a selection of Electronic Warfare topics relevant to military systems, covering the specification, analysis, development, procurement, and technical management of military radar, electro-optics and infrared sensor systems. The course has been designed for officers of the Armed Forces and for scientists and technical officers in government defence establishments and the defence industry. Graduates achieve a high level of understanding and detailed knowledge of military communications and sensor systems with particular regard to electronic warfare. The main focus of the course is to provide a good understanding of Electronic Warfare in relation to sensor systems, requires a good understanding of these systems before going on to consider how to defend them from electronic attack or intercept.

Course structure

PgCert students must complete a taught phase consisting of six specified modules. The course is delivered via lectures, laboratory demonstrations and tutorials. The teaching of the modules is reinforced by visits to relevant outside organisations and scheduled outside of teaching periods.

Future career

Successful graduates of this course should be fully equipped for roles in defence intelligence, systems development and acquisition, involving the specification and analysis of such systems; and working individually or as part of a team either in the military or in the defence industry.

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:

- Electromagnetic Propagation and Devices,
- Electro-Optics and Infrared Systems 1,
- Electro-Optics and Infrared Systems 2,
- Radar Electronic Warfare,
- Radar Principles,
- Signal Processing, Statistics and Analysis.

Duration:
PgCert: up to three years part-time.

Start date:
September.

Location:
Shrivenham.

Entry requirements:
A first or second class honours degree or equivalent in an appropriate discipline (normally electronics, electrical engineering or physics). Alternatively, a lesser qualification with relevant professional experience may be acceptable.

Contact details

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For further information please visit
www.cranfield.ac.uk/sew