Military Electronic Systems Engineering Foundations

PgCert

The aim of this PgCert is to provide students with an understanding of the fundamentals of military electronic systems used in communications and sensors. 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 radar, electro-optics, communications, sonar or information systems, where the emphasis will be on an Electronic Warfare environment.

Who is it for?

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Course structure

The PgCert will comprise of six core modules accumulating 60 credits, after successful completion the award of PgCert Military Electronic Systems Engineering: Foundations is available.

Individual project

The project aim is for the student to undertake an extensive analytical research project using appropriate research methodology, involving simulation and modelling, measurements, experimentation, data collection and analysis. This will enable students to develop and demonstrate their technical expertise, independent learning abilities and critical research skills in a specialist subject area.

Future career

Successful graduates of this course should be equipped for roles in defence intelligence, systems development and acquisition, involving the specification and analysis of such systems, 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:

- Communications Principles,
- Communications Systems,
- Electromagnetic Propagation and Devices,
- Electro-optics and Infrared Systems 1,
- Signal Processing, Statistics and Analysis,
- Radar Principles.

Duration:
PgCert: Up to 11 months full-time, up to two years part-time.

Start date:
September.

Location:
Cranfield University at 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

International students must provide evidence of English proficiency through an English language test. We accept IELTS, TOEFL, Pearson PTE Academic or Cambridge English Scale. The latest requirements can be found on the course webpage on the webaddress at the top of this page.

Contact details

T: +44 (0)1793 785220
E: cdsadmissionsoffice@cranfield.ac.uk

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