Committed to helping improve efficiency, effectiveness and safety at work?

PgCert Human Factors
By online learning

www.abdn.ac.uk/pgcert/human-factors
This Postgraduate Certificate (PgCert) offers the opportunity to develop your knowledge and understanding of **key human factors issues, methods of investigation and intervention development.**

Human Factors encompasses the study of organisational, environmental, task, equipment and behavioural factors that can impact human performance.

The PgCert programme aims to provide students with:
- An in-depth understanding of the main human factors topics.
- An ability to utilise human factors investigative techniques to assess and understand potential problems and past incidents at work.
- Opportunities to develop, and critique human factors based interventions.
The course is delivered entirely online, giving students complete flexibility in terms of time management.

During this PgCert students will benefit from:
- Learning about the tools and methods used in human factors practice
- The University’s long association with industry
- Course materials based on up-to-date research findings
- Access to industry experts in guest lectures
- Interactive discussions online enabling students to share work-based experience

What are the study options?

The teaching materials have been designed to be delivered online, allowing students to study from home. This will enable students to continue to work full-time while studying.
The PgCert includes assessment of a variety of tools and methods currently used by human factors consultants and practitioners within industry; this will enable you to apply the knowledge and experience gained to your own workplace.

What will you study?

The PgCert encompasses four modules, with the following main aims and objectives:

**Human Factors Methods (Two modules 30 credits):**
- Describe and understand the main methods used to carry out human factors investigations within organisations (including hierarchical task analysis, verbal protocol analysis, cognitive work analysis, critical incident technique, analysis of human error, checklists etc.).
- Critically evaluate the utilisation of these methods within industry, including an evaluation of some of the main tools (HAZOP, SWAT etc.).
- Identify the principal statistical paradigms used to evaluate the results of a human factors investigation, in order to provide a report to the client organisation.
- Review example recommendations that might be made on the basis of a human factors investigation, and how these might be implemented within an organisation.

**Cognitive Ergonomics (15 credits):**
- Understand human cognition and physiology in relation to the interaction of an employee with their workplace.
- Describe and understand the main issues that can influence safety at work, including workload and the workplace environment.
- Critically evaluate workplace, workload and alarm design and assessment techniques.

**Human Performance and Safety (15 credits):**
- Explain the importance of human performance limitations, and then link to safety behaviours and human error.
- Describe the main factors that might limit human performance at work.
- Explain the importance of risk assessment and management in the workplace.
- Outline the main tools that could be used to assess safety culture and risk.
Graduates from the PgCert Human Factors will be **ideally placed to continue into an applied career within the human factors sector.**

Graduates with a human factors qualification might have the opportunity to work within a private sector organisation (e.g. oil and gas; rail; aviation) as an adviser on a variety of issues, such as design interfaces, assessing safety culture and investigating incidents.

Alternatives include working within a Human Factors or Safety consultancy, or for a public-funded organisation within defence, safety or healthcare.

Finally, graduates can utilise the knowledge gained during the programme to enhance their own work performance and safety in their current role, as well as implementing improved practices within their workplace.
The city of Aberdeen is known as the ‘Energy Capital of Europe’ with a large number of energy based businesses located within the city, with a focus on oil and gas. The Aberdeen Institute of Energy is located at the University and brings together world leading expertise in interdisciplinary energy-related research.

Aberdeen is home to one of the largest health complexes in Europe, which includes the Aberdeen Royal Infirmary. The complex hosts a number of specialist research centres within the University of Aberdeen Foresterhill campus.

Research excellence

The School of Psychology at the University of Aberdeen has excellent links with the energy industry and the NHS, and has carried out a series of research and consultancy projects in those areas stretching over the past two decades.

Applied research within this area is organised by the Industrial Psychology Research Centre (IPRC), led by Professor Rhona Flin, where projects have been conducted within aviation, nuclear energy, oil and gas, healthcare, agriculture and transportation.

Industry links

Students will benefit from the University of Aberdeen’s excellent links with industry; learn from industry experts in a series of guest lectures, and engage in online debates with human factors professionals.
The School of Psychology has excellent links with the energy industry and the NHS and has carried out a series of research and consultancy projects in those areas stretching over the past two decades.

Programme details
The programme consists of four modules which can be completed online over a period of up to 12 months or can be taken as individual modules over a longer time frame, with the certificate awarded on completion of all required modules.

Admissions criteria
Applicants will usually need to possess a degree level qualification in a relevant discipline (e.g. Psychology; Sociology; Behavioural Studies; Engineering; Management; Nursing; Medicine; Law), or HND in relevant discipline (as above) plus two years relevant work experience (aviation; healthcare; oil & gas; energy; transport).

Want to know more?
Contact Dr Amy Irwin, Programme co-ordinator at graduateschool-cism@abdn.ac.uk who will be delighted to discuss the opportunity with you.

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