
Forensic engineering T839

Presentation pattern November to April

Course description

Why do products fail? Inadequate materials, poor manufacturing or assembly methods, bad design – failure can arise at any stage during product development, giving designers clues as to what failed and why, and how to avoid future failures. Using real case studies, students examine the principles of good product design and assess the significance of poor design on the development process. They work with techniques for analysing product failure, including scientific and engineering tests and observation. They investigate real catastrophic failures – the Challenger space shuttle, the Hindenburg and the Tay Bridge – and consider the role of design, manufacturing, materials and communications in these fatal disasters.

Person specification

The person specification for this course should be read in conjunction with the [generic person specification](#) for an associate lecturer at The Open University.

As well as meeting all the requirements set out in the generic person specification, you should have:

- a degree or equivalent qualification in engineering or physical science
- practical experience in industry, preferably related to QC/QA procedures
- an analytical approach to problem identification and solving in product design or manufacture (e.g. trouble-shooting on the shop floor, investigation of accidents and disasters).

It would be an advantage to have:

- an awareness of legal matters, such as the Consumer Protection Act.

Module related details - a full explanation can be found on the website

Credits awarded to the student for the successful completion of a module:	30
Number of assignments submitted by the student:	3
Method of submission for assignments:	1a
Level of ICT requirements:	2
Number of students likely to be in a standard group:	15
Salary band:	3
Estimated number of hours per teaching week:	4.5