Structural integrity: designing against failure T357

Presentation pattern *October to June*

Course description

Structural integrity is the study of the safe design and assessment of components and structures under load, and has become increasingly important in engineering design. It integrates aspects of stress analysis, materials behaviour and the mechanics of failure into the engineering design process.

The course is well-illustrated with case studies and will be of interest to anyone associated with the design of any component or structure that experiences loading, and will be of benefit in developing skills in the analysis and assessment of product design.

It has universal applicability in the UK and across international boundaries.

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:

- experience of the theory and application of stress analysis and fracture mechanics
- interest in teaching engineering to motivated students
- ability to help students develop engineering skills through distance teaching.

It would be an advantage to have:

- recent experience of working in an engineering environment
- membership of an engineering institution.

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:	20
Salary band:	3
Estimated number of hours per teaching week:	3