
 Engineering: origins, methods, context T192

Presentation pattern *October to March*
 April to September

Module description

T192 introduces students to key principles of engineering and design engineering, while helping them to develop their study skills and become independent and reflective learners. Students will learn how the broad discipline that is engineering has developed over time, explore current examples of engineering practice, and get a taster of future trends. Scientific knowledge and mathematical skills are both essential components of engineering. They form a major part of T192 and are included and practised throughout the module, with the engineering topics providing a clear context for their application.

Mathematical topics such as basic numeracy, simple mathematical modelling, algebra, graph work, geometry and trigonometry are either taught or revised to varying degrees. The mathematics content will be regularly assessed by the use of quizzes and iCMAs.

The module acts as a general introduction to what engineering is and how it is practised in modern society and prepares students for further study at Level 1. T192 is designed to be the first module studied on the BEng, MEng and Eng FD and is common to all pathways through the qualification.

Person specification

The person specification for this module 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 be able to demonstrate:

- interest in, and enthusiasm for, teaching engineering and mathematics at level 1 in a predominantly online environment
- ability to support students in developing basic study skills and mathematical confidence
- willingness to develop expertise in the effective use of virtual learning environment tools integral to the module
- the ability to facilitate online tutor group activities
- a willingness and ability to plan and deliver engaging tuition activities in both engineering and mathematical concepts/curriculum areas both face to face and online

It would be an advantage to have:

- recent experience of working in an engineering environment
- experience of teaching engineering and engineering related mathematics to engineering/science students
- experience of teaching adults in further education, higher education and/or distance learning
- a teaching qualification, or professional recognition with a teaching institution such as the Higher Education Academy
- membership of an engineering institution
- experience of supporting students with personal and professional development planning

Additional information

- Tuition will be provided through a mix of face-to-face and online tutorials, forums and other online tools, including a virtual engineering studio.

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:	2
Method of submission for assignments:	2
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:	5

