Applicable differential geometry M827

Presentation pattern  February to October

This module is presented in alternate even-numbered years.

Module description

Differential geometry, an amalgam of ideas from calculus and geometry, could be described as the study of geometrical aspects of calculus, especially vector calculus – vector fields, gradients, line and surface integrals, differential equations – and, equally, as the study of topics in geometry that calculus applies to – parallelism, curvature and isometry in smooth surfaces and their higher-dimensional generalisations. Although we concentrate on topics useful in applications, this is not a module in the applications themselves and should appeal equally to students interested in pure and applied mathematics. It is based on the set book Applicable Differential Geometry (M. Crampin, F.A.E. Pirani, Cambridge University Press, 1986).

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 have:

- a good honours degree in mathematics or in another subject relevant to the module
- candidates should show evidence of having studied and worked in the relevant subject area.

It would be an advantage to have:

- a higher degree and experience of teaching and examining, particularly in distance education or at postgraduate level
- teaching experience in the relevant specialist subject area
- you may be required to mark assignments electronically.

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: 4
Method of submission for assignments: 1b
Level of ICT requirements: 2
Number of students likely to be in a standard group: 15
Salary band: 1
Estimated number of hours per teaching week: 2.5