

Presentation pattern October to June

Module description

Half of this module is about modelling simple fluid flows, the other half concerns related mathematical methods. In the methods half, students cover solving ordinary differential equations and partial differential equations such as: Laplace's equation, the wave equation and the diffusion equation; some vector field theory; and Fourier analysis. The fluid mechanical aspects of the module will give students a good working knowledge of modelling in the context of fluids. They should have a sound knowledge of: ordinary differential equations; vector calculus and multiple integrals; basic particle mechanics; and some knowledge of the solution of partial differential equations and Fourier series, as taught in MST207/MST209/MST224/MST210.

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 degree in mathematics, physics or a related subject
- knowledge of fluid mechanics and of related mathematical methods
- an interest in teaching applied mathematics
- willingness to teach students from a variety of backgrounds with different levels of mathematical knowledge.

It would be an advantage to have:

- experience of teaching applied mathematics
- experience of Open University tutoring in mathematics, science or technology.

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

Additional information

As students on this module will have the choice to submit their TMAs electronically, via the eTMA system, you will be required to mark and provide feedback on TMAs submitted electronically and to return the marked work as an electronic file, in the prescribed form, to the eTMA system. If you are invited for an interview and the latter involves an electronic marking exercise, some guidance will be given for this. Further information and advice will be available should you be appointed to the role.

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:	3
Level of ICT requirements:	2
Number of students likely to be in a standard group:	15
Salary band:	2
Estimated number of hours per teaching week:	2.5