Presentation pattern   October to June and February to September

Further details about MST121 and MS221

Using mathematics (MST121) and *Exploring mathematics* (MS221) taken consecutively or together provide a complete foundation for higher-level mathematics and physics modules. If students already have a high level of fluency in algebraic manipulation (from, for example, study of A-level mathematics), they can study the modules together in a single year, in a manner similar to one 60-point module if they commence their studies in October. In this case, the units and assessment are interleaved and students may have the same associate lecturer for both modules. Some students start their Open University studies with *Using mathematics* (MST121) (which may have been in the previous February, in which case they would have just completed MST121 when they began their study of MS221), some may have taken *Discovering mathematics* (MU123) (or it's predecessor *Open mathematics* (MU120)) or other modules first. Students taking *Using mathematics* (MST121) and *Exploring mathematics* (MS221) (separately or together) might be intending to go on to higher-level mathematics or statistics modules, or they might be supporting other study such as science, technology or computing.

Module description

This module is intended for study with or immediately after *Using mathematics (*MST121). It builds on the concepts and techniques in *Using mathematics* and uses the same mathematical software. It also looks at questions underlying some of those techniques, such as why particular patterns occur in mathematical solutions and how students can be confident that a result is true. It introduces the role of reasoning in mathematics and offers opportunities to investigate mathematical problems.

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 (or equivalent) in mathematics

- an interest in the application of mathematics (including statistics) covered in the modules and in the use of computers in teaching mathematics

- ability to support the development of mathematical skills and study strategies in students who have different interests and aspirations.

It would be an advantage to have:

- experience of teaching mathematics at this level to adults or to students from a broad range of educational backgrounds.

Additional information

- Some appointments for *Exploring mathematics* (MS221) may be for both MST121 and MS221. Thus, associate lecturers support groups of students in which some students are taking MST121 and MS221 together.. There will also be students who, having already studied MST121, are taking MS221 alone.

- It is highly desirable that applicants for MS221 either have prior experience of tutoring MST121, or are willing to gain that experience by applying to tutor both modules.

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:	3
Level of ICT requirements:	1
Number of students likely to be in a standard group:	15
Salary band:	3
Estimated number of hours per teaching week:	3