
 Mathematical statistics M347

Presentation pattern *October to June*

Module description

This online module provides students with the mathematical underpinning for statistical methods in general and for other OU statistics modules in particular. They will gain a thorough grounding in mathematical statistics, together with generic skills. They will study distribution theory, leading on to the theory of statistical inference developed under both classical and Bayesian approaches. In the classical case, they will focus on maximum likelihood estimation in particular. Students will also explore the development of these ideas in the context of linear modelling (regression and extensions). Before they start the module, they should understand basic statistical ideas and be reasonably competent in calculus, algebra and matrices. There will be a small amount of face to face contact required for this module.

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 experience of teaching both classical and Bayesian approaches to statistical inference.
- be able and willing to give face-to-face and/or online tutorials, using materials that you may need to produce, that are appropriate for the module and students
- have appropriate IT equipment and skills
- be able to use e-learning facilities, such as:
 - the module website, and other University websites, to download essential material and to retrieve other information
 - University systems for the purposes of monitoring students' progress
 - e-mail and University forums for asynchronous communication with students, tutors, and other staff
 - online tutorial system on-screen marking of electronically submitted tutor-marked assignments in pdf format.

As students on this module will have the choice to submit their TMAs (Tutor Marked Assignments) electronically, via the University's online TMA/EMA service, 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 online TMA/EMA service. 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.

The exact nature of e-learning facilities will evolve over the life of the module, and you will need to be prepared to adapt accordingly

It would be an advantage to have:

- experience of tutoring one of The Open University's statistics modules
- 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.

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:	6
Method of submission for assignments:	3
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:	3.5