

PROGRAMME SPECIFICATION

Awarding body/institution:	Queen Mary University of London
Teaching institution (if different from above):	
Name of the final award and Programme title:	F5S1 MSc Astrophysics (full-time) F5S2 MSc Astrophysics (part-time) F5EG Postgraduate Certificate in Astronomy & Astrophysics
Duration of Study/Period of Registration	1 year for Full time MSc in Astrophysics 2 years for part time MSc in Astrophysics 1 year for Postgraduate Certificate in Astronomy & Astrophysics
UCAS code:	
QAA Benchmark Group	
Academic Department/s involved in programme delivery	Astronomy Unit/ School of Mathematical Sciences

If accredited by a professional/statutory body, please give the name, date of last accreditation visit, approximate date of next visit and details of exemptions that will be given to QMUL graduates.	N/A
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Criteria for admission to the programme

The minimum entry requirement for part time and full time MSc in Astrophysics (F5S1 & F5S2) is a (lower second) honours degree or equivalent in Astronomy, Physics or Mathematics, or in a subject with substantial mathematical or physical content.

For Postgraduate Certificate in Astronomy & Astrophysics (F5EG), the minimum requirement is a third class honours degree in similar subjects as specified above. Students will require IELTS 6.5 English Language.

Aims of the programme

- To provide an understanding of a wide range of fields in astronomy and astrophysics and to give students a detailed overview of the fundamentals of the subject as well as knowledge of the most recent research results.
- To provide an opportunity for graduates in a subject with substantial mathematical or physical content to pursue their interest in astronomy, which leads to a formal postgraduate qualification in the subject.
- To provide a starting point for a research career in astronomy, both within the College and elsewhere.
- To provide an understanding of the contemporary research in an area in astrophysics through completion of an extended project under the guidance of a supervisor at the forefront of research in the relevant subject area.
- To provide students with a friendly and supportive environment in which to enrich their learning experience through interaction with active research staff and other students
- This MSc programme has been running very successfully for over 20 years.

Learning outcomes for the programme

The programme provides opportunities for students to develop and demonstrate the following learning outcomes:

Knowledge and Understanding

The MSc students would upon completion of their programme have a very good understanding of a wide range of astrophysical topics, ranging from ranging from solar system to relativistic astrophysics and cosmology. They will be able to demonstrate an advanced understanding of theories and ideas in a number of astrophysical topics, at the level that could be used as a starting point for a research degree in astrophysics.

The students on the Certificate programme will have acquired a good understanding in four modules covering a number of areas in contemporary astrophysics.

Skills and other attributes

Students should develop a range of generic key skills, including: problem-solving, investigative and analytical skills; IT, communication and personal skills.

The students on the MSc programme would have developed and demonstrated, through the preparation of their project in writing, an ability to assimilate and understand a topic of current research in astrophysics.

They will be able to use information systems of all kinds for literature searching, to maintain and organise their work and to assist them in preparing reports, presentations and posters

Teaching, learning and assessment strategies

Students on the MSc programme will take eight taught modules at level 7 from the list of modules on the MSc Astrophysics programme, to the value of 120 credits.

Students on the Postgraduate Certificate in Astronomy & Astrophysics will take four taught modules from the same list, to the value of 60 credits.

The modules typically have 2h/wk direct contact and additional time for self-directed study and tutorials. Assessment for taught modules will be typically through written exams. A small number of modules may be assessed by coursework portfolio.

The MSc project will be assessed by written report, in line with the regulations for projects/dissertations at Masters level.

This programme is a part of the annual Faculty review of Postgraduate teaching in the School of Mathematical Sciences, and recommendations from external examiners are used to inform the review of the programme.

Programme structure(s) and requirements, levels and modules

The candidates for the MSc in Astrophysics are required to take modules to the value of 120 credits taken from:

ASTM001: Solar System
ASTM002: The Galaxy
ASTM005: Research Methods in Astronomy
ASTM041: Relativistic Astrophysics and Gravitation
ASTM108: Cosmology
ASTM109: Stellar Structure and Evolution
ASTM112: Astrophysical Fluid Dynamics
ASTM115: Astrophysical Computing
ASTM116: Astrophysical Plasmas
ASTM735: Extrasolar Planets and Astrophysical Discs

Modules from the above list may be, exceptionally, substituted with suitable level 7 modules from the School of Mathematical Sciences or other London Colleges, at the discretion of the programme Tutor.

In addition students are required to submit a dissertation of normally not more than 10000 words (excluding diagrams, tables and appendices), on a topic to be approved by the Chair of the Examination Board. The dissertation will have a value of 60 credits.

Full time students in MSc in Astrophysics complete their degree in one year.

Part time students in MSc in Astrophysics usually complete their degree in two years, taking modules to the value of 60 credits per year.

MSc students in Astrophysics having taken modules to the value of 120 credits and choosing to leave the programme without submitting a dissertation will be awarded a Postgraduate diploma in Astrophysics.

The candidates for the Postgraduate Certificate in Astrophysics shall be required to take modules to the value of 60 credits from the above list of modules approved by the Examination Board.

The College's Assessment regulations for postgraduate programmes apply to the programme with the exception that the examination board is permitted to condone failure in modules up to the value of 30 credits with no specified module mark. This outcome is known as 'fail condoned, academic credit awarded.'

Quality assurance mechanism (please include details of: SSLC meetings, student feedback mechanisms, personal tutor arrangements, programme induction, programme review and monitoring.)

Students on the above programmes will be able to participate in all our pastoral and engagement processes. These include: SSLC, student feedback for individual

modules, programme induction, programme review and monitoring by the Tutor for MSc Astrophysics and an assigned academic and pastoral tutor.

MSc students are assigned a project supervisor during their project.

Employers Links

Please provide details of any links with employers e.g.

- Details of advisory panels that include current or potential employers;
- Organisations that regularly employ graduates from this programme and the roles that graduates undertake.
- Student prizes donated by organisations that may offer employment to graduates from this programme.

If there are no links with employers consider the learning outcomes and transferable skills and explain how these might be used to inform employers about the qualities and skills a graduate from this programme might be expected to have.

Person Completing Programme Specification	Prof Reza Tavakol
Person responsible for management of programme	Prof Reza Tavakol
Date programme specification agreed by Department or teaching and learning committee	
Date of approval by Faculty Board/SMD Education Board	11 March 2009
Date of update/amendment	

