



BSc Astrophysics (F510) (Entry Year: 2023)

Key Information

Faculty

Faculty of Mathematical and Physical Sciences

Department

Physics and Astronomy

Qualifications

Qualification on Successful Completion of the Programme

Bachelor of Science with Honours (BSc)

Mode of Study

Campus at which the majority of the programme is delivered

London, Bloomsbury

Location of Study

Campus based

Full-time Duration

3 academic years

Part-time Duration

No data available

Modular Flexible Duration

No data available

Professional Accreditation

Institute of Physics (IOP)

Professional accreditation explanatory text

This programme is accredited by the [Institute of Physics](#). Holders of accredited degrees can follow a route to Institute of Physics membership and the Chartered Physicist (CPhys) professional qualification. Graduates of accredited Integrated Master's (MPhys or MSci) degrees have fulfilled the educational requirements for CPhys status, while graduates of accredited Bachelor's (BSc) degrees have partially fulfilled these requirements.

Programme Description

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Compulsory modules in the first two years provide a grounding in mathematics and classical and quantum physics. You will also undertake modules which build up an increasing exposure to topics in astronomy and astrophysics. This starts in the first year with compulsory modules in Physics of the Universe and Practical Astronomy. This is followed in the second year by Astrophysical Processes and Practical Astrophysics, leading into compulsory third-year modules in Interstellar Physics, Physical Cosmology, and Astronomical Spectroscopy. The third year also provides for optional modules to further enhance and enrich your knowledge of astrophysics topics.

This programme is offered both as a three-year BSc and a four-year MSci, with common structures and subjects for the first two years. However, the additional fourth year of the MSci programme allows for a greater depth of study and we recommend you apply for an MSci initially, as this keeps more options open.

Learning and Assessment

Types of Assessment Undertaken on the Programme

Assessment will normally involve end-of-year examinations, and an element of assessed coursework. For practical work you will be continuously assessed.

Modules

Please note that the list of modules given here is indicative. This information is published a long time in advance of enrolment and module content and availability is subject to change. Modules that are in use for the current academic year are listed for further information. Where no listing is present, further information is not yet available.

Details of any modules which are non-condonable

No data available

Compulsory modules

Module code	Year taken	Module title
PHAS0002	1	Mathematical Methods 1
PHAS0003	1	Practical Skills 1A
PHAS0004	1	Atoms, Stars and the Universe
PHAS0005	1	Waves, Optics and Acoustics
PHAS0006	1	Thermal Physics and the Properties of Matter
PHAS0007	1	Practical Physics and Computing 1
PHAS0009	1	Mathematical Methods II
PHAS0010	1	Classical Mechanics
PHAS0017	1	Developing Effective Communication 1
PHAS0018	2	Astrophysical Processes: Nebulae to Stars
PHAS0019	2	Planetary Science
PHAS0020	2	Practical Astrophysics and Computing
PHAS0021	2	Electricity and Magnetism
PHAS0022	2	Quantum Physics
PHAS0024	2	Statistical Physics of Matter
PHAS0025	2	Mathematical Methods III
PHAS0036	3	The Physics of Stars
PHAS0037	3	Physical Cosmology
PHAS0043	3	Practical Astronomy 1 - Technique
PHAS0046	3	Interstellar Physics
PHAS0047	3	Astronomical Spectroscopy

Indicative optional modules

Module code	Year taken	Module title
COMP0142	3	Machine Learning for Domain Specialists
GEOL0022	3	Ocean Physics and Climate Change
MATH0015	3	Fluid Mechanics
MATH0025	3	Mathematics For General Relativity
PHAS0038	3	Electromagnetic Theory
PHAS0042	3	Quantum Mechanics
PHAS0049	3	Theory of Dynamical Systems
PHAS0050	3	Climate and Energy
PHAS0056	3	Practical Machine Learning for Physicists
PHAS0057	3	Physics of the Earth
PHAS0113	3	Astrophysics Group Project

Additional Costs to Students

You will require the approved model of calculator for use in exams. Currently this is either the Casio FX-85GT X or Casio FX-83GT X, which can be purchased for around £11 - £15. For details please see the [UCL examinations guide](#).

Last Approved

This Programme Summary was last approved on 09/May/2022