Programme Specification (Undergraduate) FOR ENTRY YEAR: 2024/25

Date created: 04/08/2017 **Last amended:** 24/07/2026 **Version no.** 5

1. Programme title(s) and code(s):

F303 MPhys Physics
MPhys Physics with a Year Abroad*; MPhys Physics with a Year in Industry*
F3FM MPhys Physics with Astrophysics
MPhys Physics with Astrophysics with a Year Abroad*; MPhys Physics with Astrophysics with a Year in Industry*
F366 MPhys Physics with Space Science
MPhys Physics with Space Science with a Year Abroad *; MPhys Physics with Space Science with a Year in Industry*
BSc Physics Studies[$]

BSc Physics Studies with a Year Abroad[$]; BSc Physics Studies with a Year in Industry[$]

$ only available as an exit award and is not available for students to register onto and is not accredited by the Institute of Physics (IOP).
*selected when on course
Students completing the Foundation Year of the BSc Physics with Foundation, and who meet the internal transfer requirements (see section 10), will be eligible to transfer to the relevant above-named MPhys programme as an integrated programme of study.

a) HECOS Code

HECOS Code	%

b) UCAS Code (where required)

F303

F3FM

F366

2. Awarding body or institution:

University of Leicester

3. a) Mode of study

Full-time

b) Type of study

Campus-based

4. Registration periods:

The normal period of registration is four years (five years for MPhys degrees with a year in industry/abroad, five years for MPhys degrees with foundation year, six years for MPhys degrees with foundation year and a year in industry/abroad).

The maximum period of registration is six years (seven years for MPhys degrees with a year in industry/abroad, seven years for MPhys degrees with foundation year, eight years for MPhys degrees with foundation year and a year in industry/abroad).

5. Typical entry requirements

Three A-levels including Physics and Mathematics, typical offer ABB to include Physics and Mathematics. International Baccalaureate 30 points to include Physics and Mathematics, at least one at Higher Level.

For the aims, learning outcomes and application criteria for the GCSA Year Abroad please see https://le.ac.uk/study/undergraduates/courses/abroad

6. Accreditation of Prior Learning

APL will not be accepted for exemptions from individual modules, however may be considered for direct entry to year 2, on a case by case and subject to the general provisions of the University APL policy.

For Foundation Year Variant:
n/a

7. Programme aims

The programme aims to:

- provide students with a coherent working knowledge of general physics and specialised knowledge in some areas up to Masters-level (FHEQ level 7).
- provide exposure in some areas of physics to the frontiers of research
- generate interest in and understanding of the scope of physics {or astrophysics / space science}
- enable students to explore their interests in and aptitudes for a range of areas of physics
- provide the opportunity for students to achieve their full potential
- enable students to develop independent learning skills
- provide students with experience of working in a research environment
- introduce advanced data analysis and theoretical modelling techniques in areas of physical science up to Masters-level (FHEQ level 7).
- equip students with the knowledge and skills for original research, employment in R&D, education, science based industry and establishments, and for training at management levels in other professions.

In addition, for the 'with Industry' variants

- The 'Year in industry' variant of this programme is offered in accordance with the University's standard specification for year in industry programme variants.
- To provide experience of applications of professional and discipline-specific skills in Industry, and to reinforce knowledge through its use in different environments.

In addition, for the 'Year Abroad' variants

- To provide experience of study of physics, physics research, or related academic content at an appropriate level in a University in a different country, and to reinforce knowledge through its use in different environments.

For the Foundation Year variants, see Foundation Year Programme Specification

8. Reference points used to inform the programme specification

- IoP accreditation [http://policy.iop.org/IOP/accreditation.html]
- QAA Benchmarking Statement for Physics, astronomy and astrophysics (2019) [https://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/subject-benchmark-statement-physics-astronomy-and-astrophysics.pdf?sfvrsn=eff3c881_4]
- Framework for Higher Education Qualifications (FHEQ)
- UK Quality Code for Higher Education
- University of Leicester Periodic Developmental Review Report
- External Examiners' reports (annual)
- United Nations Education for Sustainable Development Goals
- Destinations of Leavers from Higher Education (DLHE) survey

9. Programme Outcomes

Unless otherwise stated, programme outcomes apply to all awards specified in 1. Programme title(s).

c) Discipline specific knowledge and competencies

i) Mastery of an appropriate body of knowledge

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: recall and apply the basic concepts and laws of physics and related mathematics as specified in the Institute of Physics 'Core of physics'; solve model problems; conduct experiments and apply techniques; discuss and describe a broad range of current research themes in physics; formulate evidence based scientific arguments; demonstrate specialist knowledge at Masters-level (FHEQ level 7) in some areas of physics.	Lectures; specified reading; problem classes; problem-based learning; group workshops; open ended group projects; laboratory practical classes; computer practical classes; research project work.	Written examinations; reports; oral presentations; assessed practical work; assessed computer exercises; assessed problems; group workshops; physics challenge problem sessions; student-led journal articles.

ii) Understanding and application of key concepts and techniques

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: solve familiar and unfamiliar physics related problems; demonstrate novel application of basic knowledge; design, construct and conduct physics experiments; describe and discuss the accumulation of scientific evidence; use computer programs to analyse data; apply conceptual knowledge in a research environment.	Lectures; specified reading; problem classes; problem-based learning; group workshops; open ended group projects; laboratory practical classes; computer practical classes; research project work.	Written examinations; reports; oral presentations; assessed practical work; assessed computer exercises; assessed problems; group workshops; assessed physics challenge sessions; student-led journal papers.

iii) Critical analysis of key issues

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: critically appraise data and discuss its limitations; draw quantitative conclusions from sample data; critically assess and compare scientific theories in some areas.	Lectures; problem-based learning; group projects; laboratory practical classes; computer practical classes; project work.	Reports; oral presentations; assessed practical work; assessed computer exercises.

iv) Clear and concise presentation of material

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: present scientific ideas, data and results in a variety of forms (e.g. reports, seminars, posters, papers etc); participate in scientific discussion and debate.	Tutorials; problem-based learning; group projects; laboratory practical classes; computer practical classes; project work.	Reports; oral presentations; assessed practical work; assessed computer exercises; physics challenge problem sessions; student-led journal papers.

v) Critical appraisal of evidence with appropriate insight

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to discuss and implement experimental methodology; collect and critically analyse data; draw valid inferences from data in a variety of settings; discuss and criticize scientific literature.	Problem-based learning; lectures; open ended group projects; laboratory practical classes; computer practical classes; research project work; student-led journal	Written examinations; reports; oral presentations; assessed practical work; assessed computer exercises; assessed problems; group workshops; physics challenge problem sessions; student-led journal.

vi) Other discipline specific competencies

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: discuss, design and implement scientific experiments; competently use a range of standard laboratory equipment; describe and adhere to laboratory safety procedures; describe and discuss novel applications of physics; describe and discuss some areas of current research in physics; design, write and implement computer code to solve physics-based problems.	Tutorials; problem-based learning; group projects; project work; group workshops.	Written reports; oral presentations; assessed practical work; assessed computer exercises; written examinations.

d) Transferable skills

i) Oral communication

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: organise, manage and present project work; collect and critically analyse data; solve unfamiliar numerical problems; design, write and implement computer programs; describe and discuss scientific concepts to a variety of audiences; apply scientific methods to novel situations.	Tutorials; problem-based learning; group projects; group workshops; physics challenge; projects.	Oral project presentations; physics challenge problem sessions.

ii) Written communication

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to write concise and clear scientific reports and papers, laboratory reports and project summaries; write CVs; clearly discuss some areas of current research in physics in written form.	Tutorials; problem-based learning; open ended group project work; laboratory practical classes; CV writing workshop; research projects; student-led journal.	Written project and laboratory reports; formatively assessed CVs; written exams; student-led journal papers.

iii) Information technology

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: write software to solve numerical problems and analyse data; use mathematical packages for data analysis; use spreadsheets/word processing facilities.	Lectures; workshops; research projects; open ended group projects; laboratory practical classes; computer practical classes.	Assessed IT tasks; laboratory/project assessment; reports; assessed problems.

iv) Numeracy

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: use analytical and graphical methods; analyse data; solve numerical problems involving e.g. calculus, linear algebra, vector and Fourier methods; apply and assess methods of numerical approximation.	Lectures; workshops; projects; group projects; laboratory practical classes; computer practical classes.	Written examinations; reports; oral presentations; assessed practical work; assessed computer exercises; assessed problems; group workshops; physics challenge problem sessions; student-led journal papers.

v) Team working

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: discuss concepts and formulate plans working with peers; organise time and tasks coherently between group members; produce joint reports/presentations.	Group problem solving; problem based learning; open ended group projects; physics challenge; student-led journal.	Group assessment (outcomes and oral questioning); physics challenge sessions; assessed supervised team project meetings.

vi) Problem solving

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: analyse problem; plan and implement projects; apply physics knowledge and problem solving ability to novel applications; write software to solve numerical problems solve unfamiliar numerical problems.	Tutorials; lectures; problem based learning; laboratory and project supervision; open ended group projects; research projects; physics challenge; student-led journal.	Marked problems; written examinations; group work assessment; project assessment; physics challenge sessions; assessed practical work; assessed computer workshops; student-led journal.

vii) Information handling

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: describe and discuss the scientific method; collect and analyse data; present data in various forms (e.g. tabular and graphical); access, search and appraise articles in scientific journals/literature.	Tutorials; lectures; problem-based learning; laboratory and project supervision; group projects.	Group presentations; poster presentations; oral presentations; viva examinations; reports; essays; physics challenge sessions.

viii) Skills for lifelong learning

Intended Learning Outcomes	Teaching and Learning Methods	How Demonstrated?
Typical students should be able to: plan and undertake projects involving elements of independent research; access, search and appraise scholarly articles; collect and analyse data; search for and pursue employment and/or further study opportunities; work effectively in teams; work to deadlines.	Resource based learning; project work; group projects; group industry projects; group education projects; study abroad experience; industrial experience; embedded employability programme.	Project reports; oral presentations; assessed practical classes; written examinations; student-led journal papers; formatively assessed CVs; Leicester Award.

10. Progression points

This programme follows the standard Scheme of Progression set out in Senate Regulations – see the version of Senate Regulation 5 governing undergraduate programmes relevant to the year of entry.

The following additional progression requirements for this programme have been approved:

Laboratory and project based modules are not available for reassessment except at the discretion of the Board of Examiners who may ask students to resubmit one or more assessed coursework elements where it is possible for students to achieve a pass mark for the module by improving their mark in individual coursework elements. This will typically be in cases of mitigating circumstances.

PA1900 is a prerequisite module that must be passed with a mark of at least 40.00% for students to progress to year 2.

PA2900 is a prerequisite module that must be passed with a mark of at least 40.00% for students to progress to year 3.

In cases where a student does not pass PA2900 at 40% but qualifies for compensation (for credit) by the end of year 2, and does meet the Senate Regulation requirements to progress to the next year of study, they will be transferred to the (un-accredited) BSc Physics Studies programme and progress to the next year of study.

In order to progress to the third year of the MPhys programme students must achieve a minimum year two mark of 55.00% (the recommended minimum year 2 mark for continuation on the MPhys programme is 60.00%).

PA3900 is a prerequisite module that must be passed with a mark of at least 40.00% for students to progress to year 4.

In cases where a student does not pass PA3900 at 40% but qualifies for compensation (for credit) by the end of year 3, and does meet the Senate Regulation requirements for a BSc award, they will be awarded the corresponding (un-accredited) BSc Physics Studies (Physics Studies / Physics Studies with a Year in Industry / Physics Studies with a Year Abroad).

In order to progress to the final year of the MPhys programme students must achieve a minimum year three mark of 51.00% (the recommended minimum year 3 mark for continuation on the MPhys programmes is 55.00%).

In the event that a student does not attain the MPhys progression criteria, they will be transferred to the BSc programme.

During year 3 or 4, and before the meeting of the Board of Examiners, a student enrolled on the MPhys may, exceptionally, request to graduate with a BSc degree. In this case, and at the discretion of the Board of Examiners, a BSc may be awarded provided the intended learning outcomes for the BSc are met.

Progression on a specialist Physics with Astrophysics or Space Science course

To progress to year 2 of the Physics with Astrophysics degree students must attempt one of PA1601, PA1602 or PA1603. To progress to year 3 of the Physics with Astrophysics degree students must attempt one of PA2601, PA2602, PA2603 in year 2. To progress to year 4 of a Physics with Astrophysics degree students must, in year 3, attempt 30 credits of elective modules in an area of Astrophysics, and successfully pass (with a mark of at least 40.00%) an appropriately themed research project. To graduate with a Physics with Astrophysics degree students, in year 4, must take an appropriately themed advanced research project and select at least 15-credits of electives material with the appropriate specialism. In cases where a student fails to take the required speciality courses but successfully attains the MPhys progression criteria they will be transferred to the Physics MPhys.

To progress to year 2 of the Physics with Space Science degree students must attempt one of PA1601, PA1602 or PA1604. To progress to year 3 of the Physics with Space Science degree students must attempt one of PA2603, PA2604, PA2605 in year 2. To progress to year 4 of the Physics with Space Science degree students must, in year 3, attempt 30 credits of elective modules in an area of Space Science, and successfully pass (with a mark of at least 40.00%) an appropriately themed research project. To graduate with a Physics with Space Science degree students, in year 4, must take an appropriately themed advanced research project and select at least 15-credits of electives material with the appropriate specialism. In cases where a student fails to take the required speciality courses but successfully attains the MPhys progression criteria they will be transferred to the Physics MPhys.

Progression from BSc programmes in Physics

Students on BSc programmes in Physics, who meet the minimum progression requirements and the pre-requisites of the equivalent MPhys programme, may transfer onto that programme.

In cases where a student has failed to meet a requirement to progress they will be required to withdraw from the course

a) Course transfers

Students may transfer to Physics with Astrophysics or Physics with Space Science degrees if they have the right prerequisites given above.

Students taking any combination of modules may transfer to a Physics MPhys degree.

Transfer to the relevant BSc degrees is possible at any point prior to the end of the final year of study.

Transfer to Year Abroad and Year in Industry degrees is possible up to the end of year 3 where students have been accepted onto these programmes.

11. Criteria for award and classification

This programme follows the standard scheme of undergraduate award and classification set out in Senate Regulations – see the version of *Senate Regulation 5 governing undergraduate programmes* relevant to the year of entry.

12. Special features

Group problem solving; student-centred learning; research-based projects; problem-based learning; opportunity of industry, business, or education-led group research projects; student-led scientific journal.

The University recognises that undertaking a work placement as part the programme of study can enhance career prospects and provide added value, and as such this programme includes a 'year in industry' variant.

By experiencing real-world scenarios and applying skills and knowledge to a professional environment, students can gain a unique insight into how their studies can be utilised in industry. This will not only showcase their abilities to future employers but will also enhance their studies upon returning to university to complete your programme.

To understand the special features for year in industry undergraduate programme variants, this programme specification should be read in conjunction with the programme specification content which can be found here. This outlines details including programme aims, support, progression and duration.

13. Indications of programme quality

Institute of Physics accreditation
QAA Subject Review
Academic Review
External examiners reports
Destinations of Leavers from Higher Education (DLHE) survey

14. External Examiner(s) reports

The details of the External Examiner(s) for this programme and the most recent External Examiners' reports for this programme can be found at exampapers@Leicester [log-in required]

UNIVERSITY OF LEICESTER

Programme Specification (Undergraduate) FOR ENTRY YEAR: 2024/25

Date created: 04/08/2017 **Last amended:** 24/07/2026 **Version no.** 5

Appendix 1: Programme structure (programme regulations)

The University regularly reviews its programmes and modules to ensure that they reflect the current status of the discipline and offer the best learning experience to students. On occasion, it may be necessary to alter particular aspects of a course or module.

Updates to the programme

Academic year	Module	Change
2027/28	PA4900 Advanced Research Project	Core module - was 15 credits, now 45 credits
2027/28	PA4400 Literature Review Project	Core module deleted
2026/27	PA3600 Medical Physics	Module title changed from 'Applied and Medical Physics' to reflect change in focus
2027/28	PA4608 Supermassive Black Holes and Exoplanets	Module title changed from 'Supermassive Black Holes and Large-Scale Structure' to reflect change in focus
2025/6	PA2602/5/6	Replacement of Applied Science option course with Climate Science
2027/28	PA4604 Radiative Processes in Astrophysics	Module title amended to better reflect content/emphasis
2026/27	PA3243 Electronics	Module removed
2027/28	PA4612 Human Spaceflight and Nuclear Systems	Module removed
2027/28	PA4613 Space Flight Dynamics and Propulsion	Module removed
2025/6	PA3250 Mathematical Physics 3	Module changed from Core to Optional

ALL MPHYS PROGRAMMES

Level 4/Year 1 2024/25

Credit breakdown

Status	Year long	Semester 1	Semester 2
Core	60 credits	n/a	45 credits
Optional	15 credits	n/a	n/a

120 credits in total

Core modules

Delivery period	Code	Title	Credits
Year long	PA1110	MECHANICS	15 credits
Year long	PA1130	ELECTRICITY AND MAGNETISM	15 credits
Year long	PA1710	MATHEMATICAL PHYSICS 1.1	15 credits
Sem 2	PA1120	LIGHT AND MATTER	15 credits
Sem 2	PA1140	WAVES AND QUANTA	15 credits
Sem 2	PA1720	MATHEMATICAL PHYSICS 1.2	15 credits
Year long	PA1010	PHYSICS SKILLS AND PROFESSIONAL DEVELOPMENT 1	n/a
Year long	PA1900	EXPERIMENTAL PHYSICS 1	15 credits

Notes
n/a

Option modules

Delivery period	Code	Title	Credits
Year long	PA1601	INTRODUCTION TO ASTROPHYSICS, MODERN PHYSICS AND SPACE SCIENCE	15 credits
Year long	PA1602	INTRODUCTION TO APPLIED PHYSICS, ASTROPHYSICS AND SPACE SCIENCE	15 credits

Delivery period	Code	Title	Credits
Year long	PA1603	INTRODUCTION TO APPLIED PHYSICS, ASTROPHYSICS AND MODERN PHYSICS	15 credits
Year long	PA1604	INTRODUCTION TO APPLIED PHYSICS, MODERN PHYSICS AND SPACE SCIENCE	15 credits

Notes
This is an indicative list of option modules and not definitive of what will be available. Option module choice is also subject to availability, timetabling, student number restrictions and, where appropriate, students having taken appropriate pre-requisite modules.

Level 5/Year 2 2025/26

Credit breakdown

Status	Year long	Semester 1	Semester 2
Core	75 credits	n/a	30 credits
Optional	n/a	n/a	45 credits

120 credits in total

Core modules

Delivery period	Code	Title	Credits
Year long	PA2710	MATHEMATICAL PHYSICS 2	15 credits
Year long	PA2260	RELATIVITY, QUANTUM PHYSICS AND PARTICLES	15 credits
Year long	PA2240	ELECTROMAGNETIC FIELDS	15 credits
Sem 2	PA2720	THERMAL AND STATISTICAL PHYSICS	15 credits
Sem 2	PA2230	CONDENSED MATTER PHYSICS	15 credits
Year long	PA2010	PHYSICS SKILLS AND PROFESSIONAL DEVELOPMENT 2	n/a
Year long	PA2900	EXPERIMENTAL PHYSICS 2	30 credits

Notes
n/a

Option modules

Delivery period	Code	Title	Credits
Sem 2	PA2601	INTERMEDIATE ASTROPHYSICS AND MODERN PHYSICS	15 credits
Sem 2	PA2602	INTERMEDIATE ASTROPHYSICS AND CLIMATE SCIENCE	15 credits
Sem 2	PA2603	INTERMEDIATE ASTROPHYSICS AND SPACE SCIENCE	15 credits
Sem 2	PA2604	INTERMEDIATE MODERN PHYSICS AND SPACE SCIENCE	15 credits
Sem 2	PA2605	INTERMEDIATE CLIMATE SCIENCE AND SPACE SCIENCE	15 credits
Sem 2	PA2606	INTERMEDIATE CLIMATE SCIENCE AND MODERN PHYSICS	15 credits

Notes
This is an indicative list of option modules and not definitive of what will be available. Option module choice is also subject to availability, timetabling, student number restrictions and, where appropriate, students having taken appropriate pre-requisite modules

Level 6/Year 3 2026/27

Credit breakdown

Status	Year long	Semester 1	Semester 2
Core	15 credits	15 credits	45 credits
Optional	n/a	30 credits	15 credits

120 credits in total

Core modules

Delivery period	Code	Title	Credits
Year long	PA3210	QUANTUM MECHANICS	15 credits
Sem 2	PA3230	RADIATION AND MATTER	15 credits

Delivery period	Code	Title	Credits
Sem 2	PA3280	PHYSICS CHALLENGE	15 credits
Sem 2	PA3900	RESEARCH PROJECT	15 credits
Year long	PA3010	PHYSICS SKILLS AND PROFESSIONAL DEVELOPMENT 3	n/a

Notes
N/A

Elective modules

Delivery period	Code	Title	Credits
Sem 1	PA3601	MEDICAL PHYSICS	15 credits
Sem 1	PA3605	QUASARS AND COSMOLOGY	15 credits
Sem 1	PA3250	Mathematical Physics 3	15 credits
Sem 1	PA3603	THE SPACE ENVIRONMENT	15 credits
Sem 2	PA3604	ELEMENTARY PARTICLES, THE STANDARD MODEL AND BEYOND	15 credits
Sem 2	PA3602	STELLAR ASTROPHYSICS	15 credits
Sem 2	PA3606	PLANETARY PHYSICS	15 credits

Notes
This is an indicative list of option modules and not definitive of what will be available. Option module choice is also subject to availability, timetabling, student number restrictions and, where appropriate, students having taken appropriate pre-requisite modules.

Elective modules

Delivery period	Code	Title	Credits
Sem 1	PA3241	INDUSTRY PROJECT	15 credits
Sem 1	PA3242	ASTRODYNAMICS	15 credits

Delivery period	Code	Title	Credits
Year long	PA3245	PHYSICS IN EDUCATION	15 credits
Sem 1	PA3246	PYTHON	15 credits
Sem 1	PA3247	NUMERICAL PROGRAMMING IN C++	15 credits
Sem 1	NT3100	SUSTAINABILITY ENTERPRISE PARTNERSHIP PROJECT	15 credits

Notes
This is an indicative list of option modules and not definitive of what will be available. Option module choice is also subject to availability, timetabling, student number restrictions and, where appropriate, students having taken appropriate pre-requisite modules.

Level 7/Year 4 2027/28

Credit breakdown

Status	Year long	Semester 1	Semester 2
Core	45 credits	15 credits	n/a
Optional	30 credits	n/a	30 credits

120 credits in total

Core modules

Delivery period	Code	Title	Credits
Sem 1	PA4980	PHYSICS SPECIAL TOPICS	15 credits
Year long	PA4010	PHYSICS SKILLS AND PROFESSIONAL DEVELOPMENT 4	n/a
Year long	PA4900	ADVANCED RESEARCH PROJECT	45 credits

Notes
n/a

Option modules

Delivery period	Code	Title	Credits
Sem 2	PA4601	QUANTUM THEORY OF SOLIDS	15 credits
Sem 1	PA4602	SCIENTIFIC INFERENCE	15 credits
Year long	PA4603	SPACE PLASMAS AND PLANETARY ATMOSPHERES	15 credits
Year long	PA4604	RADIATIVE PROCESSES IN ASTROPHYSICS	15 credits
Sem 2	PA4607	ADVANCED SPACE SCIENCE	15 credits
Sem 2	PA4608	SUPERMASSIVE BLACK HOLES AND EXOPLANETS	15 credits
Year long	PA4609	GENERAL RELATIVITY AND QUANTUM FIELDS	15 credits
Sem 2	PA4611	COMPUTATIONAL FLUID AND SPACE-PHASE FLOWS	15 credits

To note: the teaching for all Year Long *modules in this block is completed in Semester 1; some assessment activities may take place in Semester 2*

Notes

This is an indicative list of option modules and not definitive of what will be available. Option module choice is also subject to availability, timetabling, student number restrictions and, where appropriate, students having taken appropriate pre-requisite modules.

MPHYS PROGRAMMES IN PHYSICS WITH A YEAR ABROAD

Students may elect to study a year abroad during their third or fourth year of study.

FIRST AND SECOND YEAR MODULES

As for the relevant named MPhys programme (see above).

THIRD YEAR MODULES

The third year of the course will be spent abroad taking approved courses, or an equivalent research placement, in one of the institutions associated with the Department of Physics and Astronomy in an approved exchange programme. Students may be required to spend part of the preceding summer vacation undertaking language preparation if appropriate. Students will be required to pass the year either by achieving an average module mark at the pass level in modules taken or, in the case of a research placement or other equivalent unassessed courses, submitting a satisfactory project report and record of achievement which will be assessed on a pass/fail basis. Alternatively, students may also be asked to pass via submission of a reflective report or via a viva examination. The marks will not be included in the degree assessment.

FOURTH AND FIFTH YEAR MODULES

As for the relevant third and fourth year modules from the named MPhys programme (see above).

Following successful completion of the year abroad, and satisfactory completion of the programme requirements (as defined by the University Scheme of Assessment) students shall be eligible to be considered for the award of an MPhys in the named area (see above) 'with a year abroad'.

MPHYS PROGRAMMES IN PHYSICS WITH INDUSTRY

Students may elect to undertake an industrial placement. For MPhys students, a single year in industry can be taken either in the third year or the fourth year of their course. The schedule for MPhys students taking a year in industry in their third year is given below. The schedule is similar for MPhys students taking the year in industry in their fourth year, with the third year and fourth years interchanged.

BSc with Industry degrees may be awarded as an exit award if students have successfully completed the requirements of the 'with industry' and the University's standard requirements for a Bachelor's degree but have not achieved the award requirements for MPhys degrees codified in sections 10 and 11 above.

FIRST AND SECOND YEAR MODULES

As for the relevant named MPhys degree (see above).

THIRD YEAR MODULES

The third year of the course will be spent on an industrial placement. The work will be assessed on a pass/fail basis on the basis of a project report and a record of achievement. The marks from this year will not be included in the final degree assessment.

FOURTH YEAR MODULES

As for the third year modules in the relevant named MPhys degree (see above).

FIFTH YEAR MODULES

As for the fourth year modules in the relevant named degree (see above).

Following successful completion of the year in industry, and satisfactory completion of the programme requirements (as defined by the University Scheme of Assessment) students shall be eligible to be considered for the award of an MPhys in the named area (see above) 'with a year in industry'. Students may elect to undertake an industrial placement during their third year of study.

Appendix 2: Module specifications

See undergraduate module specification database [login required] (Note - modules are organized by year of delivery).