

FACULTY OF SCIENCE

DEPARTMENT OF PHYSICS

ADVANCED PHYSICS

Master of Science in Advanced Physics
Postgraduate Diploma in Advanced Physics
Postgraduate Certificate in Advanced Physics

These regulations are to be read in conjunction with the [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).

Admission

1. The [General Academic Regulations - Postgraduate Taught Degree Programme Level](#) shall apply subject to the following requirements. Applicants shall possess:
 - i. a degree (or, in the case of direct entry to the degree of MSc, a first or second class Honours degree) from a United Kingdom university (in an appropriate discipline); or
 - ii. a qualification deemed by the Programme Director acting on behalf of Senate to be equivalent to (i) above.
2. In all cases, applicants whose first language is not English, shall be required to demonstrate an appropriate level of English.

Mode of Study

3. The programme is available by full-time and part-time study.

Curriculum

4. All students shall undertake an approved curriculum as follows:
 - i. for the Postgraduate Certificate no fewer than 60 credits
 - ii. for the Postgraduate Diploma no fewer than 120 credits
 - iii. for the degree of MSc no fewer than 180 credits including a project.

Compulsory Modules

Module Code	Module Title	Level	Credits
PH949	Physics Skills	5	20
PH952	Project*	5	60

*For the degree of MSc only

Optional Modules

A total of 100 credits from the list of optional modules

Module Code	Module Title	Level	Credits
PH953	Introductory Nanoscience	5	20
PH955	Advanced Nanoscience 1	5	20

PH956	Advanced Nanoscience 2	5	20
PH957	Topics in Photonics	5	20
PH960	Advanced Topics in Photonics	5	20
PH962	Photonic Materials and Devices	5	20
PH963	Advanced Photonic Devices	5	20
PH988	Topics in Quantum Physics	5	20
PH560	Advanced Topics in Electromagnetism and Plasma Physics	5	20
PH562	Advanced Topics in Quantum Optics	5	20
PH968	Experimental Laboratories	5	20
PH913	Advanced Topics in Quantum Physics - Quantum Technologies	5	20
PH510	Advanced Computational Physics	5	20
PH9xx	Applied High Performance Computing	5	20

Such other modules as may be approved by the Adviser of Study to bring the total number of Level 5 modules to at least 150. Not all optional modules on this list will be available in each academic year. Please check your programme handbook for confirmation of which optional modules will run.

Examination, Progress and Final Assessment

- See [General Academic Regulations - Postgraduate Taught Degree Programme Level](#).
- The final award will be based on performance in the examinations, coursework and the project.

Award

- Degree of MSc:** In order to qualify for the award of the degree of MSc in Advanced Physics, a candidate must have accumulated no fewer than 180 credits of which 60 must have been awarded in respect of the project PH952.
- Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma in Advanced Physics, a candidate must have accumulated no fewer than 120 credits from the modules of the programme.
- Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Advanced Physics, a candidate must have accumulated no fewer than 60 credits from the modules of the programme.