

# FACULTY OF SCIENCE

## DEPARTMENT OF PHYSICS

### APPLIED PHYSICS

**Master of Science Applied Physics**  
**Postgraduate Diploma in Applied Physics**  
**Postgraduate Certificate in Applied 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 dissertation.

#### **Compulsory Modules**

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

\*For the degree of MSc only. If the project is not done in the Department of Physics, students are registered on a 60 credit PGT project of the Department providing the project supervision but assessed under the PH952 module rules.

#### **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 |
| PH958 | Optical Design                                         | 5 | 20 |
| PH960 | Advanced Topics in Photonics                           | 5 | 20 |
| PH962 | Photonic Materials and Devices                         | 5 | 20 |
| PH963 | Advanced Photonic Devices                              | 5 | 20 |
| EE473 | Photonic Systems                                       | 4 | 20 |
| PH560 | Advanced Topics in Electromagnetism and Plasma Physics | 5 | 20 |
| PH968 | Experimental Laboratories                              | 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 first attempt examinations, coursework and the project.

### Award

- Degree of MSc:** In order to qualify for the award of the degree of MSc in Applied 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 Applied 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 Applied Physics, a candidate must have accumulated no fewer than 60 credits from the modules of the programme.