

These programme regulations should be read in conjunction with the University's [core regulations for undergraduate programmes](#), and the [marking and classification conventions for undergraduate programmes](#).

MPhys Theoretical Physics (F344)

1. This programme is available at Durham City, in a full-time mode of study.

Level 1 (Certificate)

2. Candidates shall study and be assessed in the following modules:

| | | Credit value |
|-----------------------------|--------------------------|---------------------|
| Foundations of Physics 1 | PHYS1122 | 40 |
| Discovery Skills in Physics | PHYS1101 | 20 |

3. Either: Candidates shall also study and be assessed in the following modules:

| | | Credit value |
|------------------------|--------------------------|---------------------|
| Single Mathematics A # | MATH1561 | 20 |
| Single Mathematics B # | MATH1571 | 20 |

Or: Candidates shall also study and be assessed in the following modules:

| | | Credit value |
|------------------------------|--------------------------|---------------------|
| Linear Algebra 1 # | MATH1071 | 20 |
| Calculus and Probability 1 # | MATH1061 | 20 |

4. Candidates shall also study and be assessed in modules to the value of 20 credits from those offered by any board of studies.

Level 2 (Diploma)

5. Candidates shall study and be assessed in the following modules:

| | | Credit value |
|-----------------------------------|--------------------------|---------------------|
| Foundations of Physics 2A | PHYS2581 | 20 |
| Foundations of Physics 2B | PHYS2591 | 20 |
| Mathematical Methods in Physics | PHYS2611 | 20 |
| Theoretical Physics 2 | PHYS2631 | 20 |
| Laboratory Skills and Electronics | PHYS2641 | 20 |

6. Candidates shall also study and be assessed in modules to the value of 20 credits from List A:

| List A: | | Credit value |
|--------------------|--------------------------|---------------------|
| Stars and Galaxies | PHYS2621 | 20 |
| Physics in Society | PHYS2651 | 20 |

Level 3 (Degree)

7. Candidates shall study and be assessed in the following modules:

| | | Credit value |
|---------------------------|--------------------------|---------------------|
| Foundations of Physics 3A | PHYS3621 | 20 |
| Foundations of Physics 3B | PHYS3631 | 20 |
| Theoretical Physics 3 | PHYS3661 | 20 |
| Physics Problem Solving | PHYS3561 | 20 |
| Mathematics Workshop | PHYS3591 | 20 |

8. Candidates shall also study and be assessed in modules to the value of 20 credits from List B (subject to timetable compatibility):

| List B: | | Credit value |
|--------------------|--------------------------|---------------------|
| Team Project | PHYS3581 | 20 |
| Laboratory Project | PHYS3601 | 20 |

| | | |
|---|--------------------------|----|
| Physics into Schools | PHYS3611 | 20 |
| Planets and Cosmology 3 | PHYS3651 | 20 |
| Condensed Matter Physics 3 | PHYS3711 | 20 |
| Modern Atomic and Optical Physics 3 | PHYS3721 | 20 |
| Modules to the value of 20 credits from another board of studies. | | 20 |

Level 4 (Degree)

9. Candidates shall study and be assessed in the following modules:

| | | Credit value |
|------------------------------|--------------------------|---------------------|
| Project | PHYS4213 | 60 |
| Advanced Theoretical Physics | PHYS4141 | 20 |
| Particle Theory | PHYS4181 | 20 |

10. Candidates shall also study and be assessed in modules to the value of 20 credits from List C:

| List C: | | Credit value |
|--|--------------------------|---------------------|
| Atoms, Lasers and Qubits | PHYS4121 | 20 |
| Advanced Condensed Matter Physics | PHYS4151 | 20 |
| Advanced Astrophysics | PHYS4161 | 20 |
| Theoretical Astrophysics | PHYS4201 | 20 |
| Planets and Cosmology 4 | PHYS4231 | 20 |
| Condensed Matter Physics 4 | PHYS4271 | 20 |
| Modules to the value of 20 credits from another board of studies | | 20 |

Assessment, progression and award

11. Modules marked with a # must be passed at 40% or above in order to progress to the Ordinary Degree at the next level.
12. Students who have successfully completed Levels 1 and 2 of the MPhys Theoretical Physics in accordance with the Core Regulations may, with the permission of the Chairman or Chairwoman of the Board of Studies in Physics, change their registration to the MPhys Physics or MPhys Physics and Astronomy.
13. Students who fail to achieve the standard required under the Core Regulations for progression to Level 3 of the MPhys Theoretical Physics but who achieve the standard required for progression to Level 3 of a Bachelors programme may progress to Level 3 of the BSc Physics in the Honours or Ordinary stream in accordance with the Core Regulations.
14. A student who is qualified to progress from Level 2 to Level 3 of the MPhys Theoretical Physics but wishes to transfer to Level 3 of the BSc Physics shall be permitted to do so.
15. Students whose achievement at the end of Level 3 does not qualify them to proceed to Level 4 may be awarded the degree of BSc Physics at either Honours or Ordinary level in accordance with the Core Regulations for the award of a Bachelors degree.
16. Students whose achievement at the end of Level 4 does not qualify them to be awarded the degree of MPhys Theoretical Physics may be awarded the degree of Bachelor of Science (BSc) with Honours in accordance with the Core Regulations for the award of a Bachelors degree.

Professional accreditation

17. This programme is accredited by the Institute of Physics until February 2019.