

Durham University Faculty Handbook Online www.durham.ac.uk/faculty.handbook/

These programme regulations should be read in conjunction with the University's <u>core regulations for undergraduate programmes</u>, and the <u>marking and classification conventions for undergraduate programmes</u>.

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 #	<u>MATH1561</u>	20
Single Mathematics B #	<u>MATH1571</u>	20

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

		Credit value
Linear Algebra I #	<u>MATH1071</u>	20
Calculus I #	<u>MATH1061</u>	20

4. Candidates shall also study and be assessed in modules to the value of 20 credits offered by any board of studies (including appropriate credit-bearing language modules offered by the University's Centre for Foreign Language Study).

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
Computing Project	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

Advanced Laboratory PHYS3601 20 Physics into Schools * PHYS3611 20 Planets and Cosmology 3 PHYS3651 20 Condensed Matter Physics 3 20 PHYS3711 Modern Atomic and Optical Physics 3 20 PHYS3721 Public Engagement in Physics PHYS3731 20

Level 2 or Level 3 modules to the value of 20 credits offered by another Board of Studies, or appropriate credit-bearing Level 1 language modules to the value of 20 credits offered by the University's Centre for Foreign Language Study.

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
Modern Atomic and Optical Physics 4	PHYS4281	20
Level 4 modules to the value of 20 credits offered by another Board of Studies.		

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. Modules marked with * are not available in 2020/21.
- 13. Students who have successfully completed Levels 1, 2 and 3 of the MPhys Theoretical Physics in accordance with the Core Regulations may change their registration to the MPhys Physics or MPhys Physics and Astronomy, subject to having taken the required modules and to approval by the Department.
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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

18. This programme is accredited by the Institute of Physics until February 2024.