

## 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</u> <u>undergraduate programmes</u>, and the <u>marking and classification conventions for undergraduate</u> <u>programmes</u>.

# MPhys Physics and Astronomy (FF3N)

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	<u>PHYS1101</u>	20
3.	Either: Candidates shall also study and be assessed in the fo	llowing modules:	

Credit value
Single Mathematics A # MATH1561 20

Single Mathematics A #	<u>MATH1561</u>	20
Single Mathematics B #	MATH1571	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	<u>PHYS2581</u>	20
Foundations of Physics 2B	<u>PHYS2591</u>	20
Mathematical Methods in Physics	PHYS2611	20
Stars and Galaxies	PHYS2621	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
Theoretical Physics 2	<u>PHYS2631</u>	20
Physics in Society	<u>PHYS2651</u>	20

#### Level 3 (Degree)

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

		Credit value
Foundations of Physics 3A	<u>PHYS3621</u>	20
Foundations of Physics 3B	<u>PHYS3631</u>	20
Planets and Cosmology 3	<u>PHYS3651</u>	20
Computing Project	PHYS3561	20

8. Candidates shall also study and be assessed in modules to the value of 40 credits from List B (subject to timetable compatibility):

List B:		Credit value
Either: Team Project	<u>PHYS3581</u>	20
Or: Advanced Laboratory	<u>PHYS3601</u>	20
Mathematics Workshop	<u>PHYS3591</u>	20
Physics into Schools	<u>PHYS3611</u>	20
Theoretical Physics 3	<u>PHYS3661</u>	20

Condensed Matter Physics 3	PHYS3711	20
Modern Atomic and Optical Physics 3	PHYS3721	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	<u>PHYS4213</u>	60
Advanced Astrophysics	PHYS4161	20
Theoretical Astrophysics	<u>PHYS4201</u>	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	<u>PHYS4121</u>	20
Advanced Theoretical Physics	<u>PHYS4141</u>	20
Advanced Condensed Matter Physics	<u>PHYS4151</u>	20
Particle Theory	<u>PHYS4181</u>	20
Theoretical Physics 4	<u>PHYS4241</u>	20
Condensed Matter Physics 4	<u>PHYS4271</u>	20
Modern Atomic and Optical Physics 4	<u>PHYS4281</u>	20
Level 4 modules to the value of 20 credits offered by another Board of Studies.		

#### Assessment, progression and award

- 11. Modules marked with the # symbol must be passed at 40% or above in order to progress to the next level of study.
- 12. Students who have successfully completed Levels 1, 2 and 3 of the MPhys Physics and Astronomy in accordance with the Core Regulations may change their registration to the MPhys Theoretical Physics or MPhys Physics, subject to having taken the required modules and to approval by the Department.
- 13. Students who fail to achieve the standard required under the Core Regulations for progression to Level 3 of the MPhys Physics and Astronomy 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 Physics and Astronomy 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 Physics and Astronomy 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 June 2029.