

**UNIVERSITY OF SUSSEX**  
**DEPARTMENT OF PHYSICS AND ASTRONOMY**

**MSC IN PHYSICS**  
**MODULE CHOICES FOR PARTICLE PHYSICS 2023-24**

- **Email this form at the [mps\\_pqtooffice@sussex.ac.uk](mailto:mps_pqtooffice@sussex.ac.uk) by Friday 29<sup>th</sup> September 2023 12 noon.**
- **If at any point you wish to change a module you must complete a new version of this form.**
- **Please note that the Department reserves the right to withdraw any of these modules.**

Student's first name .....

Year of Entry .....

Student's last name .....

Code	Modules	Credits (Level)	Tick here
<b>Semester One</b>			
<i>The following modules are recommended</i>			
885F3	Further Quantum Mechanics	15 (7)	
890F3	Data Analysis Techniques	15 (7)	
<b>Semester Two</b>			
<i>The following modules are recommended</i>			
880F3	Particle Physics Detector Technology	15 (7)	
894F3	Frontiers in Particle Physics	15 (7)	
<b>Plus TWO of the following recommended options, at least one of which in Semester One</b>			
823G5	Programming through Python (Semester One)	15 (7)	
877F3	Quantum Field Theory 1 (Semester One) <b>*STRONGLY RECOMMENDED for those taking a particle theory project*</b>	15 (7)	
878F3	Symmetry in Particle Physics (Semester One)	15 (7)	
900F3	Cosmology (Semester One)	15 (7)	
901F3	Beyond the Standard Model (Semester Two) <b>PRE REQUISITE 877F3</b>	15 (7)	
F3214	Particle Physics (Semester Two)	15 (6)	
879F3	Advanced Cosmology (Semester Two) <b>PRE REQUISITE, 900F3</b>	15 (7)	
865G1	Monte Carlo Simulations (Semester Two)	15 (7)	
<b>Year</b>			
919F3	MSc Project Research Skills	30 (7)	√
920F3	MSc Project P&A	60 (7)	√

**Note:**

A recommended module can be exchanged for a different module if the supervisor considers it appropriate. If the substitute module is given by a different department then the course convenor must sign off on the module (in addition to the supervisor).

Six modules should be taken over two terms, either four in autumn and two in Semester One or three in each semester.  
No more than 30 credits to be taken at level 6.

**You will not be allowed to change modules after week 2 of the semester that the module is given.**

**Supervisor/Convenor's Signature** .....

**Declaration**

- I understand the terms 'Collusion', 'Plagiarism' and 'Fabrication of Results' as defined in the *Examination & Assessment Handbook* at <http://www.sussex.ac.uk/adqe/standards/examsandassessment>
- I declare that all work submitted for assessment will be solely my work and that reference to the work of others will be properly acknowledged by me.

**Student's Signature** .....

I agree that this student can take the following module(s) that are not on the 'recommended' list above.

**Supervisor's Signature** .....

**For office use only:**

<b>Entered by:</b>	<b>Date:</b>
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**UNIVERSITY OF SUSSEX**  
**DEPARTMENT OF PHYSICS AND ASTRONOMY**

**MSC IN PHYSICS**  
**MODULE CHOICES ATOMIC, MOLECULAR AND OPTICAL PHYSICS 2023-24**

- **Email this form to [mps\\_pgtooffice@sussex.ac.uk](mailto:mps_pgtooffice@sussex.ac.uk) by Friday 29<sup>th</sup> September 2023 by 12 noon.**
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Student's first name .....

Year of Entry .....

Student's last name .....

Code	Modules	Credit/ Level	Tick here
<b>Semester One</b>			
<i>The following recommended options are offered:</i>			
885F3	Further Quantum Mechanics	15 (7)	
890F3	Data Analysis Techniques	15 (7)	
893F3	Quantum Optics and Quantum Information	15 (7)	
897F3	Atom Light Interactions	15 (7)	
823G5	Programming through Python	15(7)	
877F3	Quantum Field Theory 1	15(7)	
F1047	Computational Chemistry	15 (6)	
<b>Semester Two</b>			
<i>The following recommended options are offered:</i>			
893F3	Practical Quantum Technologies	15 (7)	
888F3	Electrons, Cold Atoms and Quantum Circuits <b>PRE REQUISITE 897F3</b>	15 (7)	
F3218	Lasers and Photonics	15 (6)	
F3231	Advanced Condensed State Physics	15 (6)	
865G1	Monte Carlo Simulations	15 (7)	
907F3	Introduction to Nano-materials and Nano-characterisation	15 (7)	
<b>Year</b>			
919F3	MSc Project Research Skills	30 (7)	√
920F3	MSc Project P&A	60 (7)	√

**Note:**

A recommended module can be exchanged for a different module if the supervisor considers it appropriate. If the substitute module is given by a different department then the course convenor must sign off on the module (in addition to the supervisor).

Six modules should be taken over two terms, either four in autumn and two in Semester One or three in each semester. No more than 30 credits to be taken at level 6.

**You will not be allowed to change modules after week 2 of the semester that the module is given.**

**Supervisor/Convenor's Signature** .....

**Declaration**

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**Student's Signature** .....

I agree that this student can take the following module(s) that are not on the 'recommended' list above.

**Supervisor's Signature** .....

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**UNIVERSITY OF SUSSEX**  
**DEPARTMENT OF PHYSICS AND ASTRONOMY**

**MSC IN PHYSICS**  
**MODULE CHOICES ASTRONOMY 2023-24**

- **Email this form to [mps\\_pgt@sussex.ac.uk](mailto:mps_pgt@sussex.ac.uk) by Friday 29<sup>th</sup> September 2023 by 12 noon.**
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- **Please note that the Department reserves the right to withdraw any of these modules.**

Student's first name ..... Year of Entry .....

Student's last name .....

Code	Modules	Credit/ Level	Tick here
<b>Semester One</b>			
<i>The following modules are recommended</i>			
900F3	Cosmology	15 (7)	
889F3	Galactic Astrophysics	15 (7)	
<b>Semester Two</b>			
<i>The following modules are recommended</i>			
902F3	Astrophysical Processes	15 (7)	
F3244	Stella and Planetary Physics	15 (6)	
<i>You must take TWO of these recommended options</i>			
890F3	Data Analysis Techniques (Semester One)	15 (7)	
881F3	General Relativity (Semester One)	15 (7)	
823G5	Programming through Python (Semester One)	15 (7)	
894F3	Frontiers in Particle Physics (Semester Two) PRE REQUISITE 890F3	15 (7)	
865G1	Monte Carlo Simulations (Semester Two)	15 (7)	
879F3	Advanced Cosmology (Semester Two)	15 (7)	
<b>All Year</b>			
919F3	MSc Project Research Skills	30 (7)	√
920F3	MSc Project P&A	60 (7)	√
<b>Note:</b>			
A recommended module can be exchanged for a different module if the supervisor considers it appropriate. If the substitute module is given by a different department then the course convenor must sign off on the module (in addition to the supervisor).			
Six modules should be taken over two semesters, either four in semester one and two in semester two, or three in each semester. No more than 30 credits to be taken at level 6. Credits must total 180.			
<b>You will not be allowed to change modules after week 2 of the semester that the module is taught.</b>			
<b>Supervisor/Convenor's Signature</b> .....			
<b>Declaration:</b>			
<ul style="list-style-type: none"> <li>• I understand the terms 'Collusion', 'Plagiarism' and 'Fabrication of Results' as defined in the Examination &amp; Assessment Handbook at <a href="http://www.sussex.ac.uk/adge/standards/examsandassessment">http://www.sussex.ac.uk/adge/standards/examsandassessment</a></li> <li>• I declare that all work submitted for assessment will be solely my work and that reference to the work of others will be properly acknowledged by me.</li> </ul>			
<b>Student's Signature</b> .....			

I agree that this student can take the following module(s) that are not on the 'recommended' list above.

**Supervisor's Signature** .....

**For office use only:**

<b>Entered by:</b>	<b>Date:</b>
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**UNIVERSITY OF SUSSEX**  
**DEPARTMENT OF PHYSICS AND ASTRONOMY**

**MSC IN PHYSICS**  
**MODULE CHOICES COSMOLOGY 2023-24**

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Student's first name .....

Year of Entry .....

Student's last name.....

Code	Modules	Credit/ Level	Tick here
<b>Semester One</b>			
<i>The following modules are recommended</i>			
900F3	Cosmology	15 (7)	
881F3	General Relativity	15 (7)	
877F3	Quantum Field Theory 1	15 (7)	
<b>Semester Two</b>			
<i>The following modules are recommended</i>			
879F3	Advanced Cosmology	15 (7)	
<i>You must take TWO of these recommended options, at least one of which should be in the Spring Semester</i>			
889F3	Galactic Astrophysics (Semester One)	15 (7)	
890F3	Data Analysis Techniques (Semester One)	15 (7)	
885F3	Further Quantum Mechanics (Semester One) <b>*STRONGLY RECOMMENDED if you do not have a strong enough background in this area*</b>	15 (7)	
823G5	Programming through Python (Semester One)	15 (7)	
894F3	Frontiers in Particle Physics (Semester Two)	15 (7)	
902F3	Astrophysical Processes (Semester Two)	15 (6)	
F3244	Stella and Planetary Physics (Semester Two)	15 (6)	
882F3	Quantum Field Theory 2 (Semester Two) <b>PRE REQUISITES: 877F3, 885F3</b>	15 (7)	
865G1	Monte Carlo Simulations (Semester Two)	15 (7)	
<b>All Year</b>			
919F3	MSc Project Research Skills	30 (7)	√
920F3	MSc Project P&A	60 (7)	√

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**You will not be allowed to change modules after week 2 of the semester that the module is taught.**

**Supervisor/Convenor's Signature .....**

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**Student's Signature .....**

**Supervisors**

I agree that this student can take the following module/s that are not on the 'recommended' list above:

**Supervisor's Signature .....**

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