



UNIVERSITY OF  
**BATH**

*Faculty of Science*  
**Department of Physics**  
Programme Handbook  
2022/23

This handbook is available in alternative formats. Please contact the Physics Programmes Administrators ([phys-prog-admin@bath.ac.uk](mailto:phys-prog-admin@bath.ac.uk)) if required.

**Issued October 2022**

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## ABOUT THIS HANDBOOK

This is the 2022-23 Handbook for undergraduate students on the Physics programme(s).

The contents of this Handbook are accurate at the time of publication, 3 October 2022, but information contained within may sometimes be subject to change after this Handbook has been issued.

The Important Links and Information section of this Handbook contain links to information about the topics in this Handbook and other key topics. It is important that you familiarise yourself with the online information as well as the contents of this Handbook.

Information about the structure of your programme (which units you take when, which units are compulsory etc), as well as key unit information (including learning outcomes, synopsis and assessment), for the upcoming academic year can be found online in the Unit and Programme Catalogues (see **Unit and programme catalogues** in this Handbook and [www.bath.ac.uk/catalogues](http://www.bath.ac.uk/catalogues)). You will also receive details about unit content and assessment via the University's online learning environment, Moodle.

You will be informed, normally by your Director of Studies or Unit Convenor, of any further changes that will affect your programme or a unit. See also **Unit and programme changes** in this Handbook.

While this Handbook signposts information about regulations for students, it does not have regulatory status itself, and the Regulations available online (Regulations for Students: <http://go.bath.ac.uk/regulations> and Assessment Regulations: [www.bath.ac.uk/corporate-information/new-framework-for-assessment](http://www.bath.ac.uk/corporate-information/new-framework-for-assessment)) are the most up-to-date and take precedence over the contents of this Handbook. It is your responsibility to take the time to familiarise yourself with the Regulations.

If in doubt about what applies to you, or if your circumstances change, please ask for advice from your Director of Studies:

Dr Steve Andrews	Years 1 & 2 Physics/Physics with Astrophysics/Physics with Theoretical Physics
Dr Yarden Brody	Years 3, 4 & 5 Physics/Physics with Astrophysics
Dr Alex Narduzzo	Mathematics and Physics

## IMPORTANT LINKS AND INFORMATION

### UNIVERSITY INFORMATION ONLINE

This Handbook is an accompaniment to important information available to all students on the University's website. It is expected that you will familiarise yourself with the online information signposted below.

If you cannot find the information you are looking for in this Handbook or on the web, please contact your Director of Studies or [phys-prog-admin@bath.ac.uk](mailto:phys-prog-admin@bath.ac.uk) in the first instance.

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### CORE UNIVERSITY SERVICES AND INFORMATION

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#### Student Support Services

<https://www.bath.ac.uk/professional-services/student-support/>

#### Students' Union Advice and Support Service

[www.thesubath.com/advice/](http://www.thesubath.com/advice/)

#### Personal Tutoring

[www.bath.ac.uk/guides/personal-tutoring/](http://www.bath.ac.uk/guides/personal-tutoring/)

#### Student wellbeing

<https://www.bath.ac.uk/guides/engagement-monitoring-for-student-wellbeing/>

#### Library and Study Spaces

<https://library.bath.ac.uk/home>  
[www.bath.ac.uk/campaigns/where-you-can-study-on-campus-and-in-the-city](http://www.bath.ac.uk/campaigns/where-you-can-study-on-campus-and-in-the-city)

#### IT advice, guidance, and support

[www.bath.ac.uk/professional-services/digital-data-and-technology/](http://www.bath.ac.uk/professional-services/digital-data-and-technology/)

#### Careers Service

[www.bath.ac.uk/professional-services/careers-service](http://www.bath.ac.uk/professional-services/careers-service)

#### Health and Safety

[www.bath.ac.uk/guides/student-health-and-safety](http://www.bath.ac.uk/guides/student-health-and-safety)  
[www.bath.ac.uk/guides/be-safe-on-campus-and-in-bath/](http://www.bath.ac.uk/guides/be-safe-on-campus-and-in-bath/)

#### Equality, Diversity, and Inclusion

[www.bath.ac.uk/professional-services/equality-diversity-and-inclusion/](http://www.bath.ac.uk/professional-services/equality-diversity-and-inclusion/)

#### Updating your personal details

[www.bath.ac.uk/guides/keep-your-contact-details-up-to-date/](http://www.bath.ac.uk/guides/keep-your-contact-details-up-to-date/)  
[www.bath.ac.uk/guides/change-your-name-gender-and-pronouns-as-a-current-student/](http://www.bath.ac.uk/guides/change-your-name-gender-and-pronouns-as-a-current-student/)

#### Data Protection

[www.bath.ac.uk/guides/data-protection-guidance](http://www.bath.ac.uk/guides/data-protection-guidance)

#### Tackling harassment: support and report

[www.bath.ac.uk/campaigns/support-and-report/](http://www.bath.ac.uk/campaigns/support-and-report/)

#### SU Code of Practice and membership

[www.bath.ac.uk/corporate-information/code-of-practice-for-the-students-union-su](http://www.bath.ac.uk/corporate-information/code-of-practice-for-the-students-union-su)

#### Climate Action Framework

<https://www.bath.ac.uk/campaigns/climate-action/>

#### Dissatisfaction with a University service or facility (Complaints)

[www.bath.ac.uk/guides/student-complaints-policy-and-procedure](http://www.bath.ac.uk/guides/student-complaints-policy-and-procedure)

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### ADVICE AND SUPPORT FOR SPECIFIC GROUPS OF STUDENTS

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**International students**

<https://www.bath.ac.uk/professional-services/international-support-service/>  
<https://www.bath.ac.uk/professional-services/student-immigration-service/>  
[www.bath.ac.uk/topics/visas](http://www.bath.ac.uk/topics/visas)  
<https://www.bath.ac.uk/publications/student-tier-4-visa-handbook/>  
[www.bath.ac.uk/campaigns/studying-at-bath-as-an-erasmus-exchange-or-visiting-student](http://www.bath.ac.uk/campaigns/studying-at-bath-as-an-erasmus-exchange-or-visiting-student)

**Care-leavers**

[www.bath.ac.uk/publications/university-and-leaving-care/](http://www.bath.ac.uk/publications/university-and-leaving-care/)

**Estranged students**

[www.bath.ac.uk/publications/university-and-estranged-students/](http://www.bath.ac.uk/publications/university-and-estranged-students/)

**Disabilities, long-term illness, and specific learning difficulties**

<http://go.bath.ac.uk/disability-service>

**Refugees**

[www.bath.ac.uk/publications/university-and-refugees/](http://www.bath.ac.uk/publications/university-and-refugees/)

**Students with caring responsibilities**

[www.bath.ac.uk/publications/university-and-young-adult-carers/](http://www.bath.ac.uk/publications/university-and-young-adult-carers/)

**Pregnancy and maternity**

[www.bath.ac.uk/guides/getting-advice-if-you-are-pregnant-while-studying-or-have-a-young-child/](http://www.bath.ac.uk/guides/getting-advice-if-you-are-pregnant-while-studying-or-have-a-young-child/)

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**SUPPORTING YOUR LEARNING**

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**Your Programme**

[www.bath.ac.uk/guides/your-programme](http://www.bath.ac.uk/guides/your-programme)  
*Year Dates and Timetables*  
*Changes to programmes and units*  
*How your programme and learning experience are enhanced*

**Registration**

[www.bath.ac.uk/guides/registering-with-the-university](http://www.bath.ac.uk/guides/registering-with-the-university)

**Timetabling**

[www.bath.ac.uk/professional-services/timetabling-and-room-bookings/](http://www.bath.ac.uk/professional-services/timetabling-and-room-bookings/)

**Programme and unit catalogue**

[www.bath.ac.uk/catalogues/](http://www.bath.ac.uk/catalogues/)

**Student Representation and Engagement**

[www.bath.ac.uk/campaigns/student-engagement-shape-your-university](http://www.bath.ac.uk/campaigns/student-engagement-shape-your-university)

**Regulations for students**

<http://go.bath.ac.uk/regulations>

**Exams and assessments**

[www.bath.ac.uk/topics/exams-and-assessments/](http://www.bath.ac.uk/topics/exams-and-assessments/)

**Assessment guidance for students**

<https://www.bath.ac.uk/guides/assessment-guidance-for-students/>

**Skills Support and Development**

<https://www.bath.ac.uk/professional-services/skills-centre/>  
<http://go.bath.ac.uk/my-skills>  
[www.bath.ac.uk/campaigns/get-ahead-with-skills-at-bath](http://www.bath.ac.uk/campaigns/get-ahead-with-skills-at-bath)

**Placement handbook (for students on a placement)**

<http://go.bath.ac.uk/placements-information-for-students>

**Withdrawing from or suspending your studies**

[www.bath.ac.uk/guides/suspending-your-studies-or-leaving-the-university](http://www.bath.ac.uk/guides/suspending-your-studies-or-leaving-the-university)

## **HEAD OF DEPARTMENT WELCOME 2022/23**

Welcome to the 2021-2022 academic session in the Department of Physics!

This handbook provides a comprehensive overview of the Physics, Physics with Astrophysics, Physics with Theoretical Physics and, Mathematics and Physics undergraduate degree programmes offered by the Department of Physics. It contains the key information you will need as a student within the Department, so please familiarise yourself with its contents and save this URL in your favourites list, so that you can refer to it throughout the year.

If you have any questions regarding procedural or other aspects of your course, do look in this handbook first; you may well find the information you need. If you cannot find the answer to your question in the handbook, please consult your tutor, your Director of Studies, the Undergraduate Programmes Administrator, or the Director of Teaching.

Best wishes for a successful and enjoyable year with us!

***Prof Ventsi Valev***  
***Head of Department***  
***October 2022***

## **ABOUT THE DEPARTMENT 2022/23**

This is an exciting year for the Department as we have moved our home from 3W to 8W where you will find all the academics' offices and where you will have your tutorials. It also includes social space for you – the New Physics Square – on 8W level 1 and available space outside the new home for our UG labs in the East Building.

This year the default expectation for teaching for all students is that teaching will be in-person teaching and you will attend the in-person sessions. We are committed to providing a high-quality learning experience that is rich and varied. In-person teaching with immediate feedback and discussion enables this high-quality experience.

You should expect to spend approximately 35 to 40 hours a week studying on your course. These hours consist of structured activities and independent learning. You will experience a mix of in person teaching, that will take place on campus, and possibly a few online sessions – clearly labelled in your timetable – of structured online learning delivered through the University's virtual learning environment.

Typically, you can expect to spend between 18 to 22 hours on structured learning activities per week, of which approximately 90 to 95% will be in timetabled sessions on campus, and the remainder online.

Timetabled sessions delivered in person on campus will be a mix of lectures, problem-solving sessions, small group tutorials, experimental laboratories, and computing classes.

The exact nature of these sessions will depend on the combination of any optional units that you have chosen.

Online activities may include following a recorded lecture, or other learning materials, or joining a timetabled live interactive session through Teams or Zoom.

The remainder of your time outside these structured activities will be spent in independent learning which includes individual research, reading journal articles and books, working on individual and group projects, preparing coursework assignments, presentations, or revising for exams.

To support you in your studies you will be able to access outside of timetabled learning facilities on campus and in Bath such as study spaces, computers, and the Library. You will also have access to our departmental study spaces.

### **Locations**

Please note these locations that are new to us for this year.

### **Physics Square in 8 West [8W level 1]**





**Physics Labs: East Building Level 2 (EB 2.03)**



## Physics Computer Room: East Building Level 2



## East Building – Social/Work Space



**East Building: Front – Top Level**



## KEY CONTACTS/STAFF LIST

[People in the Department of Physics](#)

[Department of Physics academic staff](#)

[Department of Physics administrative staff](#)

[Department of Physics technical staff](#)

### Key Contacts

Role	Name	Tel ext.	Room	Email prefix (@bath.ac.uk)
Head of Department	Prof Ventsislav Valev	3370	8W 3.27	V.K.Valev
Director of Teaching & Chair of the Department Learning, Teaching and Quality Committee.	Dr Paul Snow	6897	8W 3.46	P.A.Snow
Director of Studies for Years 1 & 2 Physics	Dr Steve Andrews	6651	8W 4.06	S.R.Andrews
Director of Studies for Years 3-5 Physics	Dr Yarden Brody	7860	8W 3.42	ymb26
Director of Studies for Maths & Physics	Dr Alex Narduzzo	3324	8W 3.41A	A.Narduzzo
Senior Tutor	Dr Vicky Scowcroft	3132	8W 4.03	V.Scowcroft
Placement Tutor	Dr Steven Davies	6472	8W 3.20	S.R.Davies
Faculty of Science Placements & Industrial Engagement Manage	Mrs Louise Oliver			csslo
Study Year Abroad Tutor	Dr Andriy Gorbach	6307	8W 3.54	ag263
Department Library Liaison Rep	Prof Stijn Wuyts	4598	8W 4.04A	sw2122
Students' Union Liaison Officer	Dr Paul Snow	6897	8W 3.46	P.A.Snow
UG Programmes Administrator	Mrs Eleni Galanti			eg708
UG Programmes Administrative Assistant	Miss Charlotte Checkley			cc2828

Contact Directors of Study for help with – Changing programme, changing units, coursework deadline extension and individual mitigating circumstances.

## ABOUT YOUR PROGRAMME

The Department of Physics offers undergraduate degree programmes which lead to the qualification of Master of Physics (MPhys), Master in Science (MSci) or Bachelor of Science (BSc). There are a number of options for our MPhys degrees; students may choose between a four-year full-time programme, a four-year programme which includes a research placement, or five-year programmes which also include a professional placement year or study abroad. BSc degrees have similar options, with a three-year full-time programme, or four-year programmes with a professional placement year or a study year abroad. The degree programmes are described in detail in the sections below. The way in which students register for a particular programme or change their registration during their course of study is described in Section 3. The Department also offers, jointly with the Department of Mathematical Sciences, degrees in Mathematics and Physics. Further details on all of our programmes are at <http://www.bath.ac.uk/catalogues/2022-2023/ph/ph-proglist-ug.html>. We aim to cultivate physicists who combine a high level of numeracy with the ability to apply their skills and experience. We aim to develop in our students the ability to think clearly and logically, and to be enquiring, open minded, imaginative and creative. Our programmes are designed to develop students' awareness of the role of physics in contemporary applications, together with the skills of logical thought and a flexibility of mind that will help them continue their personal development throughout their subsequent career. It is not expected that all graduates will necessarily choose a career within mainstream physics, but we aim that all will leave with a good understanding of the fundamentals of the discipline, good mathematical, practical and computing skills, and an ability to develop and adapt their knowledge and skills to unfamiliar situations and new challenges.

Our degree programmes are fully compliant with the QAA's (Quality Assurance Agency for Higher Education) subject benchmark statement for Physics, Astronomy and Astrophysics ( <https://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/subject-benchmark-statement-physics-astronomy-and-astrophysics.pdf>). This framework prescribes Physics graduates' expected level of achievement and knowledge; for example, the "M level" outcomes expected of an MPhys graduate, and the "H level" outcomes expected of someone receiving a BSc degree. All Physics, Physics with Astrophysics and Physics with Theoretical Physics programmes share a common first two years, which covers core material in physics (theory and practical), mathematics and computing.

### PROGRAMME DESCRIPTION: STRUCTURE OF YOUR PROGRAMME

The structure of your programme year for 2022/23 can be found in the 2022/23 Unit and Programme Catalogues (see below). The content of the Programme Catalogues is correct for teaching being delivered in 2022/23 at the time of publication. Programmes and units may be subject to reasonable change (see [Unit and programme changes](#) in this Handbook).

Information on later years of your programme will be provided separately.

### UNIT AND PROGRAMME CATALOGUES

This is where you will find details about all individual units for the current academic year.

Physics Programme & Unit Catalogues: <https://www.bath.ac.uk/catalogues/2022-2023/ph/ph-proglist-ug.html>

The Catalogues also provide links to the relevant areas of the University's assessment regulations, showing how these are applied to your programme of study.

For the online Catalogues, please refer to **Important Links and Information** in this Handbook. See also the section in this Handbook on **Assessment**.

### **PROFESSIONAL BODY ACCREDITATION**

Our programmes are all accredited by the Institute of Physics. Accreditation allows our graduates to become members of the Institute of Physics. The Institute of Physics currently requires an accredited integrated MPhys/MSci degree for Chartered Physicist status; BSc Physics graduates partially fulfil the IoP's educational requirements for CPhys, but will have to demonstrate equivalence to an integrated Master's degree during the application process.

### **YOUR TIMETABLE**

Using MyTimetable, you can access your personal timetable and download it into an electronic calendar.

Your teaching on campus and any Live Online Interactive Learning (LOIL) sessions you may have will show in your timetable. Links to LOIL sessions can also be accessed through the relevant unit page on the University's online learning environment, Moodle.

When you start your units, you will be able to access associated online material at a time that suits your schedule.

MyTimetable updates regularly, so should there be a change to your timetable, it will be reflected in MyTimetable.

Full information is available online. Please refer to [Important Links and Information](#) in this Handbook.

### **PHYSICAL STUDY SPACE – 2022/23**

As in previous years, you will have access to drop-in and bookable study space on campus and in the city for individual or group study. Information on how to book and any usage guidelines or requirements are available online. Please refer to [Important Links and Information](#) in this Handbook.

## **OPTION CHOICES**

If your programme has option choice then information about how and when to choose your option units can be found online (please refer to [Important Links and Information](#)). If applicable, you will receive an email notification at the relevant point in the year when online unit selection is available. If you want to discuss your option choices, please contact your Director of Studies.

## **PLACEMENT SUPPORT**

The University is committed to enhancing students' vocational outcomes and learning experiences by supporting placements. We have a dedicated placements team to support and guide you through the process of applying for, securing and successfully completing a placement.

The contact details for your Placements Manager and Placement Tutor can be found in the 'key contacts' section at the start of the handbook.

If you have any queries or concerns then please contact the Placements team.

For some placements, there is a requirement for a Disclosure and Barring Service (DBS) check and you should liaise with the placement support team for further guidance.

Before going on placement, you should consult the University Placements Handbook containing generic advice and information for whilst you are on placement. Please refer to [Important Links and Information](#) in this Handbook. You will receive programme specific information directly from your Department.

If you are on a placement of one semester or longer you can normally expect to be visited by staff, in person or remotely, at least once during your placement.

A re-induction activity will be conducted to welcome you back from placement and update you on any changes that may have occurred at the University during your time away.

### **Professional Placements (unit PH20040)**

All students have the option to spend a year of their BSc, MPhys or MSci degree programme working on a professional placement in a research establishment or in industry. Students become a member of professional teams within their placement organisation; many opportunities exist to acquire specialised skills that can be put to good use during the final academic year, besides providing students with greater confidence, experience, and maturity when applying for graduate employment. A number of students choose to explore opportunities outside science and engineering – particularly in the financial and management consultancy fields where problem solving, mathematical and reporting skills are sought after.

### **MPhys Research Placements (unit PH40082)**

MPhys students who choose the research placement option (either in addition to, or instead of, a professional placement) spend six months from July to December of their final year working on a high-level Physics research project in an external organisation, before returning to the University for the final semester of their degree. The research placement replaces the on-campus full-semester research project undertaken by full time MPhys students, and is assessed in the same way as these projects.

### **MPhys Research Placements (unit PH40082)**

MPhys students who choose the research placement option (either in addition to, or instead of, a professional placement) spend six months from July to December of their final year working on a high-level Physics research project in an external organisation, before returning to the University for the final semester of their degree. The research placement replaces the on-campus full-semester research project undertaken by full time MPhys students, and is assessed in the same way as these projects.

### **Support while on Placement**

Before leaving the University to embark on the placement, students attend a briefing session with the Placement Tutor and/or the Faculty Placements Manager, when the University requirements for the placement and the expectations of a commercial employer are stressed. At the same time, the Student Money Service explains how the placement period works with regard to tax, council tax, loan, insurance etc. The main points of contact with the University while on placement are the Placement Tutor, the Faculty Placements Officer and the student's Personal Tutor. Students are encouraged to keep in contact via e-mail or telephone.

During the placement students will complete an initial Personal Objectives and Learning Outcome (POLO1) form; this is the case for both professional and MPhys research placements. This initial POLO form is intended to help students to start planning their personal development over the course of the placement. After completing six months on placement, students undertaking a professional placement will revisit their personal objectives and reflect on what has been achieved so far. Further objectives will be set to help ensure that students are able to fulfil their full potential by the end of the placement year. At the end of the placement all students complete a final POLO form that allows reflection on their achievements and development. The POLO forms are submitted to the Placements Moodle course during the year, and are included in the appendix of the Placement Report written at the end of the placement.

Every three months, students ask their placement supervisor/manager to complete a Goals Objectives and Learning Form (GOLF). This provides students with direct feedback on their progress, and informs the objectives set for the following three months. These reports are also uploaded to the Placements Moodle course.

Students are visited by a member of staff during their placement, who discusses the student's POLO1 form with the student, and their progress and performance with their supervisor/manager.

### **Assessment of Professional Placements**

A Placement Conference is held at the end of the professional placement year, during which students are required to give a poster presentation on their work. Although the professional placement year does not contribute towards the degree classification awarded, satisfactory performance is recorded on the student's transcript.

### **Assessment of MPhys Research Placements**

MPhys Research Placements are assessed in the same way as MPhys Research Projects, and carry the same weighting within a student's Overall Programme Average. An MPhys Conference is held during the semester 1 assessment period, at which all MPhys students give an oral presentation on the work they carried out for their research project or placement. Students also submit a written report on their research placement, and undertake a viva voce examination.

### **STUDENT EXCHANGE/STUDY ABROAD**

The catalogue shows the courses which allow you to undertake a study period abroad. The Department has excellent partners in a variety of countries across the globe including Europe, Australia, Asia, Latin America, Canada, and the USA – but the exact links fluctuate with time. Taking semesters abroad means you'll get an understanding of what it's like to study at another university. It's also a great opportunity for you to travel and embrace a new culture while studying for your degree.

If you have queries or concerns, then please contact Dr Andriy Gorbach (ag263@bath.ac.uk).

### **UNIT AND PROGRAMME CHANGES 2022/23**

All programme and unit changes are managed through formal University processes. This is to ensure that changes are academically appropriate, properly supported and are made in a way that safeguards the interests of students.

We continually look for ways to develop and improve our programmes, aimed at enhancing your learning experience and maintaining high academic standards and quality. Such changes could be, for example, to update content to reflect latest developments in a particular field of study, or to respond to student feedback on delivery and/or assessment. Students who would be affected by proposed changes are consulted about them, either via their Staff/Student Liaison Committee or directly, depending on the nature of the change.

In addition, it is sometimes necessary to make changes due to unforeseen or unavoidable circumstances. The need to adapt to circumstances created by the global pandemic was a significant example of this.

This could also be for reasons such as:

- the accrediting body requiring changes to be made to the course, or,
- being unable to run an option unit because too few students selected it.

When this happens, we always try to ensure that the impact on students is minimised and that those affected are informed of the changes at the earliest opportunity.

Information on how we assure the quality and standards of your programme of study is available online. Please refer to [Important Links and Information](#) in this Handbook.

### **GIVING FEEDBACK ON YOUR PROGRAMME TO THE UNIVERSITY**

The University is committed to continually improving its practice and aims to engage students as active partners in their education (The University of Bath Strategy 2021 to 2026). The three main ways in which your feedback will be sought will be through:

- Staff / Student Liaison Committees (SSLCs)
- surveys and evaluations
- the Students' Union.

Full information is available online. Please refer to [Important Links and Information](#) in this Handbook.

### **ASSESSMENT**

Full information is available online. For signposts to important information on many aspects of assessment, please refer to [Important Links and Information](#) in this Handbook.

### **SUBMISSION DEADLINES**

You will be informed of the deadline to submit your assessments by your unit lecturers. Each semester you will also be sent a collated list of all coursework deadlines, along with the dates by which you will receive the marks and feedback for each item of coursework

### **LATE SUBMISSION OF COURSEWORK**

To ensure fairness to all students, you will be expected to hand in all assessed coursework and dissertations/projects by a specified date and time, and there are penalties for submitting work after the specified deadline.

If there are valid circumstances preventing you from meeting a deadline, your Director of Studies may grant you an extension to the specified submission date. Forms to request an extension are available from the Department: Look at the relevant Moodle page for Physics or Mathematics and Physics students for information and contact your Director of Studies.

### **WORD COUNTS**

Coursework tasks will normally have a word limit or word range. This, and the penalty for non-compliance, will be confirmed when you receive an assignment. You will be required to declare the word count for your work when submitting it for assessment. If you do not observe the given word range or limit for the coursework task, for example if you exceed the word limit, then a penalty will be applied. The penalty that would apply should be stated in writing when the assignment task is distributed. You should take note of what is included when calculating the total word count (e.g. whether or not contents pages, appendices, footnotes, bibliographies and other elements that are not part of the main text are included). You should check with your Director of Studies if you have questions about word counts and penalties

## **FEEDBACK ON ASSESSMENT**

During your course, you will receive feedback on your assessed work. This feedback may take different forms, depending on the subject and type of assessment. You will be informed of the timing and nature of the feedback you will receive on each assessment, including whether the piece of work itself will be returned to you. For exam-type assessment, you may receive general feedback relevant to all who took the assessment rather than individual feedback. You can discuss feedback you receive on assessments alongside your performance and progress in your studies at meetings with your Personal Tutor.

### **Department of Physics Feedback on Assessed Work Policy**

Feedback on assessed work is an integral part of the assessment process. The purpose of feedback is to help you to better understand your strengths and weaknesses, so that you can further improve your learning. The feedback you receive should enable you to evaluate the quality of your work, to compare your performance with the ideal, to build on your successes, to reflect on your learning, and to understand what action you need to take to correct your mistakes and misunderstandings.

You will receive feedback on your work and progress throughout the academic year in a number of different ways. Feedback can be formal or informal, written or verbal, and may be provided individually or to a group, for example to the whole class. The nature and amount of feedback that is given will vary, depending on the nature of the unit and the type of assessment involved.

Feedback on formative assessments (i.e. assessments that do not contribute towards the unit mark) is more likely to be informal and oral. As an example, day to day interactions with staff and students in problems classes, laboratories and tutorials will provide you with regular feedback on your progress and enable you to clarify particular concerns. The feedback that you gain on formative assessments such as mock exams can be usefully thought of as “feed-forward”: since it is provided before the main summative assessment, it enables you to ascertain and reflect upon your current level of knowledge and understanding, and hence to improve your future performance.

Feedback on summative assessment (i.e. assessments that do contribute towards the unit mark) will include the marks that you obtain for that item of assessment, and may also include individual or group feedback in a written or verbal form. Some units use pro-forma feedback sheets, which may include tick-boxes or lists of feedback statements that may be highlighted by the lecturer as appropriate. These feedback sheets may include detailed assessment criteria, and may be combined with individual written or verbal feedback. Continuing students receive general feedback on exams by means of a report written by the unit lecturers, summarising performance on each question, and these reports may be found on the Moodle course page for your student year group.

For the case of closed-book, on-campus examinations, students are also offered the opportunity to view their marked examination scripts after each semester, in the presence of their Director of Studies or another member of staff. You should note that this process is

solely for the purpose of receiving general feedback on your exam performance, and that no remarking will take place.

You are also advised that lecturers do not write many comments on exam scripts when they mark them, and that most comments written on exam scripts will be directed towards the other members of staff (and the External Examiner in the case of 2nd, 3rd and final year units) who check the marking on the script, to explain how marks have been arrived at. The feedback that you can gain from this process is therefore more likely to be “big picture”, rather than being necessarily particularly detailed. For example, you are unlikely to be able to use this opportunity to gain detailed feedback on why you obtained a particular number of marks for a particular question, but this process may help you to learn whether you are providing an appropriate amount of detail in bookwork questions, or whether there are general issues in the way you set out your mathematical working.

You are provided with feedback on your level of achievement in each of the units studied during an academic year by viewing your unit results on SAMIS. In addition to feedback on individual units, you will also periodically receive more general feedback on your overall progress. This feedback is provided in the form of credit-weighted averages displayed on SAMIS and by your transcript, which provides a formal record of your performance. You also have the opportunity to request a discussion of your general progress with your tutor or the Director of Studies. The Director of Studies will particularly wish to hold such discussions with students who appear to be “at risk”.

#### **Responsibilities of Physics Staff with regard to feedback:**

- Within their role as unit lecturers:
  - i. to inform students of the methods of assessment and feedback that will be used within the unit at the beginning of each unit;
  - ii. to provide students with general feedback on performance in the unit’s examination;
  - iii. to provide students with the opportunity to undertake at least one piece of formative assessed coursework within each ‘standard’ lectured unit, and to provide them with feedback on this formative assessment to enable them to ascertain their current level of knowledge and understanding and help them understand how they can improve their future performance;
  - iv. to mark work and provide feedback to students in a timely manner, i.e. normally within three semester weeks following the submission deadline for the assignment.
  
- Within their role as tutor:
  - i. to be aware of their tutees’ overall performance;
  - ii. to provide feedback on their tutees’ draft laboratory reports;
  - iii. to provide their tutees with the opportunity to discuss their general progress on an individual basis.

- Within their role as Director of Studies, to provide students with the opportunity to discuss their general progress on an individual basis;
- Within their role as project supervisors, to provide students with the opportunity for regular weekly contact to discuss progress, and to provide feedback on students' draft project reports.

#### **Responsibilities of Students:**

- To attend all timetabled sessions within units and to undertake all assessments (both summative and formative) within units;
- To attend all tutorial sessions and to avail themselves of the opportunities for receiving feedback on their performance from their tutor;
- To reflect upon and engage positively with the feedback provided to them on these assessments, and to use this feedback to deepen their knowledge and understanding.

#### **ACADEMIC INTEGRITY**

The University has a wide range of resources available to you to help you understand the importance of academic integrity and how you can enhance your academic writing and practice.

All students will be unable to progress beyond the next progression point in their studies until they pass the University's Academic Integrity Test. The test has a pass mark of 85% but you can take the test as many times as you need to.

When you submit your assessment, you will be expected to make a declaration that the work is your own and, where you have re-used your own work and/or used other sources of information, that you have referenced the material appropriately. The University uses a plagiarism detection service (currently Ouriginal), which searches the web and databases of reference material and content submitted by other students, to identify duplicated text. Where practical, all summative assessment is submitted to this service to check for similarities as an initial indicator of whether work has been plagiarised and an assessment offence committed.

#### **Submission of your assessment to the Plagiarism Detection Service - Data Protection statement**

The Plagiarism Detection Service complies with European Data Protection legislation. When you registered with the University, you gave it permission to process your personal data for a variety of legitimate purposes. This includes allowing the University to disclose such data to third parties for purposes relating to your studies. The University, at its sole discretion, may submit the work of any student to the Plagiarism Detection Service (in accordance with Regulation 15.3e) and may make, or authorise third parties to make, copies of any such work for the purposes of:

- 1) assessment of the work
- 2) comparison with databases of earlier work or previously available works to confirm the work is original
- 3) addition to databases of works used to ensure that future works submitted at this institution and others do not contain content from the work submitted.

The University will not make any more copies of your work than are necessary, and will only retain these for so long as remains necessary, for these purposes.

Please note that, if at any time the University submits any of your work to the Plagiarism Detection Service, the service will be provided with, and will retain, certain personal data relating to you – for example, your name, email address, programme details and the work submitted. Such data may be transferred by the Plagiarism Detection Service to countries worldwide (some of which may not be governed by EU data legislation) in order for the work to be checked and an originality report generated in accordance with the proper workings of the Plagiarism Detection Service. Personal data is retained indefinitely by the Plagiarism Detection Service upon submission of work. You may ask for your personal data to be removed by contacting the University's Data Protection Officer.

### **PENALTIES FOR ASSESSMENT OFFENCES**

Academic misconduct can be described as 'the use of unfair means in any examination or assessment procedure'. Any student who is found to have used unfair means and therefore committed an assessment offence will be penalised. Potential types of assessment offence include plagiarism, self-plagiarism, collusion or unauthorised collaboration, contract cheating (including impersonation), fabrication or falsification, or breaching of examination regulations. Penalties for assessment offences depend upon the severity of the offence but may include failure of the assessment, unit or part of a degree, with no provision for reassessment or retrieval of that failure. Severe cases of academic misconduct, for example, contract cheating could lead to an Inquiry Hearing or disciplinary proceedings. Claims of inadvertence or ignorance will not be accepted as a basis for mitigation of a penalty.

If you are accused of an assessment offence, the Students' Union's welfare services are available to support you. You have the right to appeal against the outcome of the investigation.

Important information on academic integrity, the Plagiarism Detection Service, assessment offences and penalties, and support, as well as the Academic Integrity Test itself, is available online. Please refer to [Important Links and Information](#) in this Handbook.

### **IF CIRCUMSTANCES IMPACT ON YOUR ASSESSMENT ATTEMPT**

Individual Mitigating Circumstances (IMCs) are the conditions which temporarily prevent you from undertaking assessment or significantly impair your performance in assessment. As such, the measure of their severity is not about impact on you, but the impact on your affected assessment. Full information about IMCs is available online. Please refer to [Important Links and Information](#) in this Handbook. **It is strongly advised that you become familiar with the available guidance and related regulations.**

### **ASSESSMENT PROCESSES**

Assessment and marking processes at the University are designed to ensure that assessment of your work is fair and consistent, and that academic standards are appropriate

and comparable between the University and other higher education institutions. This is achieved in several ways.

**Marking:** Assessments you will complete during your programme are marked according to:

- *marking criteria (or assessment criteria)* - these are the knowledge, understanding and skills that students should demonstrate in the assessment. They are based on the learning outcomes being assessed
- *marking schemes* - these are detailed descriptions of how specific numbers of marks should be assigned against individual components of an answer within the assessment task
- *grade descriptors* - these are descriptions of the levels of achievement required in order to get a result within a given band of marks (e.g. 70% or more).

**Anonymous marking:** The University has adopted a principle of anonymous marking in order to protect students and staff from bias, and the perception of bias, in the marking process. It applies to all assessment where practicable. It is not possible to mark all coursework anonymously as in some types of assessment the student can be easily identified by the marker (e.g. presentations, group work, laboratory work) or it might not be practical, or in the student interest, to do so. You will be informed when your coursework is to be marked anonymously.

**Moderation:** Both the setting and the marking of assessments are independently checked through a process known as moderation to ensure that questions test the learning outcomes and are set at the right standard, and that marking is consistent and fair. Moderation is conducted by internal examiners and also by your External Examiner (see below).

**Boards of Examiners:** Assessment decision-making at the University is the responsibility of Boards of Examiners established at three levels: assessment outcomes go first to *Boards of Examiners for Units*, then *Boards of Examiners for Programmes*, then finally to *Boards of Studies*. Boards of Studies confirm decisions relating to student progression, re-assessment, and the final award. **The assessment marks you are given initially by markers are therefore provisional up until the point when they have been confirmed by the Board of Studies (BoS) for your programme.** An official release date is set when your confirmed results will be made available to you via SAMIS (the University's student records system). An academic appeal can only be made in relation to a confirmed result (see the section in this Handbook on **Academic Appeals**).

**Scaling:** All marks for a unit are reviewed at a meeting of a Board of Examiners for Units which will verify that the assessment process has been conducted appropriately and that the marks are an accurate reflection of the standards achieved. A Board of Examiners can decide to recommend a change to the provisional marks, based on evidence that there was a problem with the assessment which means the initial marks do not reflect the standards achieved by students. This adjustment is known as scaling and under these circumstances the marks of all affected students will be changed.

**External Examiner:** An External Examiner is someone from another University or professional organisation who is qualified and experienced in the field of study. At least one External Examiner is appointed for each programme or group of programmes. The role of External Examiner is an important one in assuring that assessment processes are fair, academic standards are appropriate, and supporting the development of your programme. External Examiners review draft assessment and samples of assessed work, and attend Boards of Examiners. They are members of Boards of Examiners.

Once a year, the External Examiners will provide a written report. University staff, including the Head of Department and Director of Studies, will look at these reports and a response will be made to the External Examiner's comments. External Examiner reports and responses are made available to students. Staff/Student Liaison Committees (SSLCs) also discuss External Examiner reports as part of routine monitoring activity.

The External Examiners for your programme are:

- Dr John Stott, Department of Physics and Astronomy, Lancaster University (Mathematics and Physics, Physics, Physics with Astrophysics programmes);
- Prof Nicola Wilkin, School of Physics and Astronomy, University of Birmingham (Physics and Physics with Astrophysics programmes).

It is not appropriate for students to make direct contact with External Examiners. If you are dissatisfied with the process or outcome of an assessment, and are considering whether to raise this either informally or formally, the sections of this Handbook on [Academic Appeals](#) and [Dissatisfaction with a University Service or Facility \(Complaints\)](#) give some more information about the University's procedures for student complaints and academic appeals. The University's mechanisms for student representation are designed to enable students to engage with the quality management process through which the University considers and responds to External Examiners' comments and suggestions.

Full information is available online. Please refer to [Important Links and Information](#) in this Handbook.

## **ASSESSMENT REGULATIONS**

The University's New Framework for Assessment: Assessment Regulations: Phase 1 for first-degree programmes ('NFAAR-UG') specifies the rules governing students' progression from one stage of their programme to the next as well as for the award of degrees. The rules cover all areas of assessment, including supplementary assessment and the extent to which failure may be condoned.

Your programme is covered by the NFAAR-UG, so your work will be assessed according to its rules. If at any time you are in doubt about how NFAAR-UG provisions apply to your work, please consult your Director of Studies.

This section highlights areas of the University's assessment framework for the type of programme you are undertaking. It explains the regulations that govern your assessment

and outlines how the University makes decisions concerning your progression through your programme and award. Complete information is available in the NFAAR-UG document.

The full NFAAR-UG, a student introduction to it, and definitions of terms used in it, are available online. Please refer to [Important Links and Information](#) in this Handbook.

## **YOUR PROGRAMME AND HOW YOU ARE ASSESSED**

Within a programme of study, there are compulsory units (i.e. those units in a programme which must be taken by every student registered on the programme), and there may also be optional units (i.e. those units students may choose from a range of options).

In the Programme and Unit Catalogues, there are links to the relevant appendices of the NFAAR-UG which state exactly how the assessment rules operate for each stage of your programme.

There are some units that you must pass in order to progress to the next stage of your programme and to achieve the normal award for the programme at the end. Such units are called Designated Essential Units (DEUs). Failure in a DEU – even marginal failure – will prevent you from progressing (or completing) your programme.

Programmes are divided into a number of parts and stages. For full-time students, stages usually correspond to the year of study (so, for example, most first-year students will be in Stage 1 of their programmes).

Within each stage of a programme, the contribution of each unit's assessment to the calculation of the Overall Stage Average (OSA) is normally directly proportional to the credit-values of the unit concerned. Placement units form part of a stage and have a credit weighting. Some placement units carry marks and some are just pass/fail. Only enhanced placement units contribute to the Overall Programme Average (OPA) however.

The normal pass mark for a unit is 40%. In some units, you might need to achieve a threshold mark in one or more component assessments in order to pass the unit overall.

The rules differ slightly between 'Coexistent Master Programmes' (which lead to a Master's degree but have an associated programme leading to a Bachelor's degree) and other programmes.

If you fail a stage, you will be required either to repeat the entire stage or to transfer to a Designated Alternative Programme (DAP), if one exists, or if you fail very badly, to withdraw from the University. Where stage repeats are possible within the set limits, the repeating of any stage will be permitted once only.

At the end of each stage a Board of Examiners will decide whether you have passed the stage. The outcome will depend on both (1) your average mark in the stage and (2) the marks you obtain for each unit. Generally, if you pass each of your units (and, in a Coexistent Master programme, reach any OSA requirement set in addition), you will progress (or, after the final stage, be recommended for an award).

If you fail a large number of units (or, in a Coexistent Master programme do not reach any OSA requirement set in addition), you might fail the stage outright without any opportunity for supplementary assessment. (Further information on supplementary assessment is provided below.)

Particular rules apply to failure of units. They are as follows:

- if you fail any DEUs, you will have to undertake supplementary assessment - unless you have failed so many DEUs that you fail the stage outright
- if you fail any non-DEUs badly (i.e. achieve less than 35%), you will have to undertake supplementary assessment - unless you have failed so many units that you fail the stage outright
- if you fail only non-DEUs marginally (i.e. achieve 35%-39%), you might be able to progress without supplementary assessment. Whether you do progress will depend on the total credit value of the failed units and also on your OSA.

### **CALCULATING YOUR DEGREE OUTCOME**

Your degree result is based on the calculation of your Overall Programme Average (OPA) based on the stages in Parts 2 and 3 of your programme. The contribution of each stage of the programme is set out in the Programme and Unit Catalogues. Stages in Part 1 are not included in the OPA calculation.

### **SUPPLEMENTARY ASSESSMENT**

‘Supplementary assessment’ is the term normally used for an opportunity given to a student to retrieve failure before starting the next stage of a programme.

Academic year dates, including the supplementary assessment period, can be found online. See **Important Links and Information** in this Handbook.

Each unit’s method of supplementary assessment is shown in the online Unit Catalogue.

If you pass all your supplementary assessments, you will be able to progress onto the next stage of your programme.

The outcomes of failing a supplementary assessment are as follows:

- if you fail supplementary assessment in a DEU, you will fail the stage
- if you fail supplementary assessment in a non-DEU badly, you will fail the stage
- if you fail supplementary assessment in a non-DEU marginally, you might be able to progress; whether you may do so will depend on how many units you have failed (and in some cases also on your Overall Stage Average).

### **EXIT AWARDS – CERTHE AND DIPLHE**

If you leave your programme early you may be eligible for a generic exit award, either a Certificate of Higher Education (CertHE) or a Diploma of Higher Education (DiplHE).

## **ACADEMIC APPEALS**

If you wish to submit a request for an academic appeal you should refer to Regulation 17 (Conduct of Student Academic Reviews and Appeals), which outlines the process and grounds for an appeal against formal Board of Studies decisions.

You are also strongly advised to read the online guidance on Appeals provided by the Academic Registry.

Independent advice about academic appeals is offered by the Students' Union Advice and Support Centre.

Full information is available online. Please refer to [Important Links and Information](#) in this Handbook.

## CORE UNIVERSITY INFORMATION

### UNIVERSITY REGULATIONS FOR STUDENTS

All registered students of the University are subject to the University's Regulations for Students. The Regulations contain rules and other important information about being a student at the University of Bath, including regulations governing the payment of fees due to the University, student discipline, fitness to study and those governing attendance, conduct and progress in studies. They also form part of the formal contract between you and the University. **You are strongly advised to read them carefully as they contain a lot of important information.**

For a link to the full Regulations for Students, see [Important Links and Information](#) in this Handbook.

### ACCESSING UNIVERSITY EMAIL

You will need to use your University username and password to access your University email account. Your username also forms your email address (**username@bath.ac.uk**).

The University will often communicate with you about a range of important matters requiring action from you, including registration, assessment, degree ceremonies, and matters such as tuition fees, via your University email account. It is a University regulation that you access your University email account regularly, even if you are out on placement or study abroad.

You therefore have a responsibility to ensure that your University email account can receive incoming mail and that you read your email regularly.

*To increase the security of your University account you will need to set up [Multi Factor Authentication \(MFA\)](#) so you can authenticate your identity and access your email.*

Once you graduate or withdraw from your course, you will receive an email stating exactly when your account will be closed. The email will give at least 30 days' notice.

### STUDENTS' UNION MEMBERSHIP

All students registered with the University are automatically given membership of the Students' Union; however you have the right not to be a member. Information on opting out of this membership, and the Code of Practice for the Students' Union, are available online. Please refer to [Important Links and Information](#) in this Handbook.

### DATA PROTECTION

The University's Data Protection Policy and Guidelines on Data Protection may be accessed via the data protection website (see [Important Links and Information](#) in this Handbook).

### REGISTRATION STATUS

You will be asked to register online at the start of your programme of study and then to re-register at the start of every academic year thereafter until you have completed your programme. It is a requirement that you register when asked to do so, and failure to do so

may impact on your access to certain University facilities such as Moodle. Tuition fees for each academic year are payable at registration in full or in instalments.

Regulation 1.1 explains the requirement to register, regulation 1.5 explains that the University reserves the right to terminate the registration of continuing students who do not complete registration in accordance with Regulation 1.1. Regulations 2.4 and 2.10 explain the consequences of non-payment of tuition fees. Please refer to [Important Links and Information](#) in this Handbook.

### **ACADEMIC ENGAGEMENT MONITORING FOR STUDENT VISA HOLDERS**

Guidance and requirements on academic engagement for students who are Student visa holders, including the University's **Academic Engagement Monitoring Policy for Student visa holders**, and information on when and how to request an authorised absence, are available online. Please refer to [Important Links and Information](#) in this Handbook.

### **CHANGE IN YOUR CIRCUMSTANCES**

It is important to ensure that the University holds your correct, up-to-date, personal and academic details within SAMIS, the University's student records database. If you change your address – either your semester-time or home address – please update your details online (see [Important Links and Information](#) in this Handbook).

You can make changes to the data that we hold about your identity including your name, gender, title, and the pronouns you use. Please refer to [Important Links and Information](#) in this Handbook.

If you develop or if there is a change to your disability, impairment, long-term health condition or specific learning difficulty, please get in touch with our Disability Service for advice on the support you may be entitled to.

If you are ill or are likely to be ill for more than three days, you must notify your Head of Department. Where you have a planned absence to undergo medical or surgical procedures that requires time off for more than three days, you can apply for a leave of absence from your Head of Department. Your department can arrange in advance for time off study and may be able to consider other options.

If you are considering suspending your studies, transferring from one programme to another, or withdrawing from your programme, please discuss your situation with your Director of Studies. They will be able to advise you on an appropriate course of action.

The financial implications of withdrawing from the University or suspending your studies can be significant. See [Important Links and Information](#) in this Handbook.

The Student Money Advice Team in Student Support and Safeguarding and the Student Finance Office will be able to advise you on the implications for fees in your situation and on how to suspend any student funding you are receiving.

If you are an international student holding a Student visa, you should consult the advisers in the Student Immigration Service about the implications of suspending or withdrawing from your programme. See Important Links and Information in this Handbook.

You will need to register any change of academic circumstance, including a change of optional units, with the University. Please speak to your Department or Faculty/School administration who will advise you on how to do this.

### **DISSATISFACTION WITH A UNIVERSITY SERVICE OR FACILITY (COMPLAINTS)**

We want to ensure that, if you have a problem concerning the University, it is resolved as quickly as possible. The University is committed to continuing review and improvement, and seeks regular feedback from students. There are student representatives on the University's formal decision-making committees who can raise issues so that they can be dealt with promptly. The University is also committed to providing an environment within which students are encouraged to raise any matters of concern in an informal manner as soon as they arise. This often removes the need for formal complaints.

It is expected that most complaints can be resolved at an early stage by discussing the matter informally at a local level. If you have a problem concerning the University, you should bring the matter to the attention of an appropriate member of staff, who will aim to resolve it by informal discussion. If you have attempted to resolve matters informally but are not satisfied with the outcome, you may elect to proceed to the next stage by submitting a formal complaint. You may also submit a formal complaint if the issue involved is too complex or serious for informal resolution.

If you do need to make a complaint, there are procedures in place to deal with it, outlined in the University's **Student Complaints Procedure**. These procedures are designed to ensure that your complaint will be dealt with in good faith and that you will not be penalised for complaining.

There are separate procedures for requesting a review of progression or award classification decisions. See the section in this Handbook on [Academic Appeals](#).

The University recognises that making a complaint can be stressful. Students are therefore advised to seek advice and support before making a complaint, from Student Support and Safeguarding, or from the Students' Union Advice and Support Centre, whose advice is independent of the University.

Full information is available online. Please refer to [Important Links and Information](#) in this Handbook.