

Department of Mathematics and Statistics

UNDERGRADUATE HANDBOOK

For Students Entering Programmes in 2025/2026

Please retain for the duration of your degree programme



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The contents of this Handbook are, as far as possible, up to date and accurate at the date of publication, and this version has been updated to incorporate changes made through feedback. The URLs quoted were available on 19/08/2025.

Changes and restrictions are, however, required periodically and the University reserves the right to add to, amend or withdraw modules, programmes and facilities; to restrict student numbers; and to make any other alterations as it may deem desirable and necessary. Changes are published by incorporation in the next edition of the University Regulations available online at

www.strath.ac.uk/studywithus/academicregulations/

Note that the information in this Handbook is available on request in large-text format. Contact the Departmental Administrator, Ms Sandra Miller (<u>s.j.miller@strath.ac.uk</u>).



Welcome to the Department

I am delighted to welcome you to the Department of Mathematics and Statistics. This is a dynamic and friendly department, and we are proud to offer excellent teaching and state-of-the-art facilities.

In accordance with the University of Strathclyde's commitment to 'Useful Learning', our undergraduate degree programmes emphasise the applicability of mathematics and statistics to the real world. We will enable you to acquire the knowledge and skills that employers need. We also have internationally renowned research groups in areas such as industrial mathematics, numerical analysis and scientific computation, applied analysis and combinatorics, liquid crystal theory, population modelling and epidemiology, mathematical biology and stochastic analysis.

In this Undergraduate Handbook you will find useful information about the Department and our activities. I hope that you will find the handbook of interest and assistance throughout your course.

I wish you all the best in your studies.

Professor Ke Chen (Head of Department)

Introduction

This Undergraduate Handbook is intended to:

- 1. provide the information you need about the Department of Mathematics and Statistics and our degree programmes;
- 2. offer advice on how to get the best out of your chosen programme.

It covers the structure of our degree programmes, highlights the teaching methods we use to deliver module material, and describes how you will receive feedback and be assessed. Your responsibilities as a student will also be explained, and guidance will be provided on how to express your views to us and to ask us for help. Information on general University Services and Procedures, and other student-related matters, is provided in Strathlife

www.strath.ac.uk/studywithus/strathlife/

and on University web pages, so we shall not repeat it here; where appropriate, we shall give the URL of the web page where relevant information can be obtained.

Please take some time to read through and examine the contents of both the University Student Handbook and this Departmental Undergraduate Handbook as many of the questions you are likely to have concerning your studies will be addressed by the handbooks. You may, of course, have questions which are not dealt with by the handbooks. In this case, you should contact your Personal Development Advisor, the appropriate Year Coordinator, the Undergraduate Teaching Director or the Departmental Administrator (contact details on the next page). If we cannot answer your question, we will usually know who can, so do ask!

Information about the Department is also provided at:

www.strath.ac.uk/science/mathematicsstatistics/

Information on individual modules and other useful information can also be found via the Myplace module *Mathematics and Statistics: Information for Current Students*.



1 General Information

1.1 Department of Mathematics and Statistics: Contact Details

The Department is located on Levels 8, 9 and 10 in the Livingstone Tower on Richmond Street, with the Departmental Office on Level 9 (Room LT916). Our contact details are:

Department of Mathematics and Statistics University of Strathclyde Livingstone Tower, Room LT916 26 Richmond Street Glasgow G1 1XH

tel: 0141 548 3804 / 3805 / 3812 / 3382/ 3805

email: ma-contact@strath.ac.uk

If you have a problem or request, it is usually best to speak first with your module lecturer, Personal Development Adviser or Year Coordinator. The Department's Administrator or administrative staff can also deal with many routine enquiries.

The following table gives the names and contact details of staff in the Department who have major responsibilities related to undergraduate studies. Note that additional material and information, specific to a programme or a year of study, will be published by the appropriate Year Coordinator, as required, as your studies progress.

Department Role	Name	Room	Ext	Email
Deputy Head of Department	Dr L Kelly	LT831	3659	louise.kelly@strath.ac.uk
UG Teaching Director	Dr P Knight	LT1038	3818	p.a.knight@strath.ac.uk
Administrator	Ms S Miller	LT914	3598	s.j.miller@strath.ac.uk
Year 1 Coordinator	Dr L Corson	LT1008	3547	lindsey.corson@strath.ac.uk
Year 2 Coordinator	Dr A Miller	LT1002	3720	ainsley.miller@strath.ac.uk
Year 3 Coordinator	Dr M Langer	LT1025	3821	m.langer@strath.ac.uk
Year 4 Coordinator	Dr B Miller	LT813	3654	barry.miller@strath.ac.uk
Year 5 Coordinator	Dr D Young	LT826	3806	david.young@strath.ac.uk
Exchange Coordinator	Dr M Langer	LT1025	3821	m.langer@strath.ac.uk
Disability Coordinators	Prof M Osipov Ms S Miller	LT1040 LT914	3655 3598	m.osipov@strath.ac.uk s.j.miller@strath.ac.uk
Examinations Coordinator	Ms S Miller	LT914	3598	s.j.miller@strath.ac.uk
Departmental Safety Coordinator	Ms S Miller	LT914	3598	s.j.miller@strath.ac.uk

For up-to-date information on all Departmental staff, see

www.strath.ac.uk/staff/?department=Mathematics%20and%20Statistics



1.2 Additional Contacts

Careers: Mr Stephen Smith (stephen.m.smith@strath.ac.uk)

Student/Staff Committee: See Myplace, Maths & Stats Student Staff Liaison Committee for

names/contacts. (Information on how to access Myplace can be found

later in this section.)

Departmental Offices for Students on Joint Degree Programmes:

• Computer and Information Sciences: Level 11, Livingstone Tower

• Mathematics, Science and Technological Education

(School of Education): Level 5, Lord Hope Building

Physics: Level 8, John Anderson Building

Accounting and Finance: Level 3, Stenhouse Wing, Strathclyde Business School

• Economics: Level 5, Duncan Wing, Strathclyde Business School

Management Science:
 Level 7, Duncan Wing, Strathclyde Business School

1.3 Year Coordinator (Adviser of Study) and Personal Development Adviser

For each year of your degree programme, there will be a specified member of staff in the Department, the Year Coordinator (or Advisor of Study), who will be able to assist you with academic-related matters throughout the year. The current Year Coordinators are listed on the previous page. Detailed information on matters such as programme content and progress requirements will be provided by the Year Coordinators via supplements to this Undergraduate Handbook.

In addition to the Year Coordinator, you will also have a Personal Development Adviser (PDA) who, like the Year Coordinator, is a member of staff in the Department. The role of the PDA is slightly different from that of the Year Coordinator. You normally have the same PDA throughout your studies, and they act as a point of contact within the Department. Students who are experiencing difficulties that are affecting their studies (for example, medical, domestic or financial problems), or who feel that unreasonable demands are being made of them, are encouraged to consult their PDA (or some other member of staff) as soon as possible. Experience shows that problems can often be resolved if discussed at an early stage. Your PDA will treat anything you say as confidential unless you mutually agree to do otherwise.

You will meet your PDA at the start of each session, and again later in the session. But, if you are worried about anything at all, do not wait until a scheduled meeting - contact your PDA immediately. If they are not able to answer your questions directly, your PDA should know someone who can.

1.4 Computer Access and Email

Once you have registered you will be allocated a university computer DS user account. This will give you access to PEGASUS and Myplace. If you have any queries then contact the Information Services Help Desk in the Andersonian Library (Curran Building, level 3) or email help@strath.ac.uk. A booklet on IT services at Strathclyde will be issued to you at Registration. You will also be given a university email account, and it is essential to check it regularly – staff will usually send information by email and will assume that all students are reading these messages. It is your responsibility to ensure that you read all messages from staff.



1.5 PEGASUS

The University uses a web-based system PEGASUS (also known as the Student/Staff Information Server) to provide integrated access to various systems. PEGASUS will allow you to view your student record, module results, examination timetable, etc. As a registered student you can access PEGASUS via pegasus.strath.ac.uk/login/ using your university computer account DS username and password.

1.6 Myplace

Myplace is the university's VLE (Virtual Learning Environment) which brings together services and functionality to support learning, teaching and related administrative functions. Myplace can be accessed through the PEGASUS portal (see above), or directly via classes.myplace.strath.ac.uk/

Myplace is very easy to use but if you do experience a problem logging in, please contact your lecturer or the Myplace support team. Full documentation is available from the Myplace home page.

1.7 Faculty of Science

The Department of Mathematics and Statistics is one of the five departments in the Faculty of Science at the University of Strathclyde. Further information on the Faculty, including a list of Faculty Officers, is available at www.strath.ac.uk/science/aboutus/ourstaff/

1.8 Year at a Glance: Calendar of Key Events and Dates

2025

Monday 15 September – Friday 19 September Welcome and Induction Week

Monday 22 September – Friday 5 December Semester One Teaching

Monday 8 December – Friday 19 December Semester One Examinations

(MONDAY 29 SEPTEMBER IS A LOCAL HOLIDAY. THE UNIVERSITY IS CLOSED AND THERE WILL BE NO TEACHING ACTIVITIES.)

Monday 22 December, 2025 – Sunday 11 January, 2026 Winter vacation Tuesday 23 December, 2025 – Sunday 4 January, 2026 University closed.

2026

Monday 12 – Friday 18 January Consolidation and Development Week

Monday 19 January – Thursday 2 April Semester Two Teaching

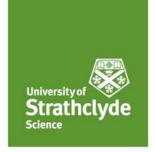
(THE UNIVERSITY IS CLOSED FRIDAY 3 APRIL and MONDAY 6 APRIL.)

Monday 6 April – Sunday 19 April Spring Vacation

Monday 20 April – Friday 22 May Semester Two Examinations

There will also be a diet of resit examinations from 29 July - 11 August 2026.

The dates of Examination Boards in session 2025/26 are to be confirmed.



2 Our Degree Programmes

The following notes are to be read in conjunction with the General Regulations that can be found in the University Regulations 2025-2026, available online at

www.strath.ac.uk/studywithus/academicregulations/

You will find the regulations for the relevant Year of Study of each of our programmes, and the requirements for progress to the next Year of Study, in the appropriate Year Supplement.

2.1 BSc, BSc Honours and MMath Degrees

The Bachelor of Science (BSc, BSc Honours) and MMath degrees offered by the Department of Mathematics and Statistics are credit-based. Each module, or component of the programme, is given a credit rating; most are worth 20 credits, but some 10 credit modules may also be available in certain programmes. Full-time students must take a curriculum made up of modules equivalent to at least 120 credits in each year of study. Both progress to the following year of a programme and the ultimate award of a degree are dependent upon gaining a specified total number of credits from the programme curriculum.

All students on our BSc programmes are admitted and initially registered as BSc Honours students. If a student experiences difficulty with the level of work required for Honours, then they may apply to transfer to the corresponding Bachelor's degree programme at any time after the first year. (This is sometimes known as the Pass degree.) In certain cases, the Board of Examiners may require a student to transfer to the Bachelor's degree. Transfer from the MMath degree to the BSc Honours or BSc degree is possible at any time if the student requests it. Students who do not complete the final year of the MMath degree will be considered for the award of BSc with Honours.

Information about credit requirements:

- Students must accumulate no fewer than 360 credits to be eligible for the award of the Bachelor's (Pass) degree after three years of study.
- To enter the fourth (Honours) year of a programme, students require a minimum of 360 credits
 AND their overall level of performance must be commensurate with an Honours standard. In
 particular, students are expected to achieve a credit weighted average of at least 40% in level
 3 modules at the first attempt.
- For students who gain entry into fourth year Honours, the award of an Honours degree normally requires 120 credits in Honours year (level 4) modules. The class of degree awarded is then determined by the level of performance across both Year 3 and Year 4.
- Similarly, the award of an MMath degree requires students to achieve 120 credits in level 5 modules. The MMath with Distinction (or Merit) is awarded when the performance across Year 4 and Year 5 is of an exceptional (or meritorious) standard.
- Exit awards of Certificate and Diploma of Higher Education also exist for our programmes, normally after one or two years of successful study by which time you would have gained 120 or 240 credits, respectively.



2.2 Planning Your Programme

Flexibility is a key aspect of our portfolio of degree programmes – the different degree courses all allow some choice of modules, while also incorporating common modules in Mathematics and Statistics. This provides some scope for transfer between programmes. Although the programmes include *Compulsory* modules, which must be included in the curriculum each year, other modules – designated as *Optional* or *Elective* modules – have also to be included. Optional modules are offered by the principal departments involved with the degree programme, while Elective modules may be chosen from any Faculty (timetable permitting).

Plan your curriculum properly. It is essential that you choose your optional modules carefully, possibly with co-requisites of current modules or pre-requisites of future modules in mind. Your choices may also be influenced by:

- your career plans
- your other module choices
- · what subjects you enjoy or interest you the most
- · how the timetable is constructed
- what alternative degree(s) you might consider transferring to
- your intended choice of final year project topic.

Above all, your interests in Mathematics, Statistics and beyond should dominate your choice. It is worth noting that employers do not often look for particular technical knowledge (except in a broad sense, e.g., some understanding of statistics, numerical analysis or mechanics), but they are looking for excellence in, and commitment to, your studies. You should discuss your choices and your future widely, including with your Personal Development Adviser.

2.3 Changes to Curriculum

Elective and Optional modules may be changed during the first two weeks of each semester by a 'Curriculum Amendment' request online via PEGASUS and are subject to approval by your Year Coordinator. Changes to your curriculum later in a semester may not be possible. At all times you must have a valid curriculum, as defined by the Programme Regulations, with modules amounting to at least 120 credits for full-time students. During each semester you will be asked to confirm your curriculum via PEGASUS. It is important that you check your University record is accurate as it determines your examination arrangements and, ultimately, the modules that appear on your official results transcript/Diploma Supplement.

2.4 Transfer Between Undergraduate Programmes

The opportunities to transfer between undergraduate degree programmes occur primarily at the beginning, in the middle and at the end of Year 1, and at the end of Year 2. Transfer possibilities naturally become more limited as your studies progress, although transfer to the single subject programme in Mathematics (or Mathematics and Statistics) is sometimes possible right up to the start of Year 4.

If, at any stage, you are considering changing your degree programme then you should consult with your Personal Development Adviser and/or Year Coordinator as soon as possible, no matter how tentative your plans may be. If you are looking to transfer to a programme outside of Mathematics and Statistics, you also need to contact the relevant Head of Department or Advisor of Studies who can advise on the feasibility of such a transfer.

Having obtained advice, you should then submit a written application to the University Student Lifecycle section, ideally by early June to allow for processing before the next academic session – a Voluntary Transfer Form is available from

www.strath.ac.uk/professionalservices/studentexperience/studentlifecycle/transfers/



(Note, students who delay a transfer request while awaiting resit assessment results in August may not discover the outcome of their application, including any conditions that must be satisfied, in time to register for the start of the new academic session.)

If you should decide that you wish to graduate with a Bachelor's (Pass) Degree on completion of the Third Year, then you must formally transfer from the Honours degree to the appropriate Pass Degree programme. Similarly, for transferring from MMath to BSc Honours in Mathematics (or Mathematics and Statistics) you must make a formal application

Holders of an award from the Student Awards Agency for Scotland (SAAS) or a Local Education Authority (LEA) must seek approval for any transfer from one degree programme to another as there is no guarantee that your award (fees) will be continued on the same terms.

Credits gained while at Strathclyde may be used within the Higher Education system in the UK if transferring to another institution. Each Strathclyde credit gained is equivalent to a SCOTCAT credit.

2.5 Graduation

In order to graduate formally, you must complete and submit a Graduation Enrolment Form available from

www.strath.ac.uk/graduation/.

Students who withdraw from a degree programme may also be eligible for the award of a Certificate or a Diploma of Higher Education.



3 Teaching and Learning

At University much more emphasis is placed on you learning for yourself rather than being taught a set of techniques through repetitious practice. The following notes give information on the various ways in which material in modules may be taught, and, equally importantly, offers some advice on how you can get the most out of what we provide. Additionally, the following books, available from the University Library, provide further guidance:

- Kahn, P. Studying Mathematics and its Applications, Palgrave. [D510 KAH]
- Schiavone, P. How to Study Mathematics, Prentice Hall. [510.711 SCH]

Another useful document to read is 'Developing Study Skills in Mathematics' by Dr K. Hirst (University of Southampton).

Mathcentre <u>www.mathcentre.ac.uk/</u> is a UK HE resource which offers quick-reference leaflets, teach-yourself booklets, revision exercises, online exercises and even streaming video tutorials to help you master those essential mathematical skills.

3.1 Lectures and Books

For most Mathematics and Statistics students, lectures form the central feature of their studies. First year lecture classes are often quite large, with up to 200 students. In such a large lecture it is impossible to have the kind of interaction that you may have had in a school lesson (that is why we also provide tutorials). However, most students find that their understanding of mathematics or statistics is enhanced by regular attendance at the lectures associated with their programme. There are a number of reasons why attending lectures is very beneficial – for example, there is an advantage in hearing something said at the same time as it is written down, a lecturer can underline points of importance more effectively than is easily done in a book, and it is often easier to convey the reasons for a particular sequence of mathematical manipulations in a lecture than on the printed page. Lectures also give a good indication of a reasonable rate at which to assimilate new material (and similarly help to encourage regular study), and often give a useful bird's eye view of a subject. In mathematics and statistics, as with many other subjects, a difficulty or misunderstanding arising during a lecture is often best dealt with by asking a question immediately; the chances are that many other students present have the same difficulty.

It is quite difficult to learn how to take lecture notes, and rather hard to explain the art to those who have not yet acquired it, but this should come with time. However, some things that are said, but not actually written by the lecturer, may be worth noting - but be selective. It is desirable to find the time, within a few days of a lecture, to look through the notes, correct any misprints, make sure they make sense, and make any necessary additions. You should also work through all the examples and calculations again to make sure you understand the various steps. One approach is to:

- read your lecture notes thoroughly after each lecture and put question marks in the margins in pencil against anything you do not understand;
- attempt to work through the lecture examples to see if this improves your understanding;
- ask at your next tutorial class.

Understanding is the key to learning and remembering. If you understand a principle, it is easier to remember it. Trying to learn details that you do not understand is a hopeless task. Seek to understand, rather than memorise, facts. If you still do not understand a topic, look it up in a textbook (use the index), or discuss it with another member of the class. Any difficulties that do arise with parts of lectures or books should be raised in an appropriate problems class or tutorial, or with the lecturer.

Module lecturers generally normally advise about mathematics or statistics books, but in cases where several alternative texts are suggested, it is worth thinking carefully about which text to use (the cheapest is not always the best) - the preface can give some idea of the level, and so can dipping into the book and flipping through its pages. Also make use of the University Library – often it can help to look at more than one book on a particular topic.



3.2 Tutorials, Problems Classes and Laboratory Classes

It is impossible to understand mathematics or statistics at an undergraduate level without working through a large number of problems related to the lecture material. Lecturers will normally set suitable assignment problems/exercises on a regular basis. It is very important that you make serious attempts at these problems and, when requested, submit them for marking. This enables us to judge what extra teaching may be needed and provides you with feedback on the progress you are making. It is also well worthwhile trying many more problems than are set for marking.

Depending on the module, the work you set by lecturers may:

- be assessed and contribute towards your overall grade for the module;
- not contribute to your overall grade, though not doing it may result in you not being awarded the credit for the module:
- be recommended for you to try in order to maximise your understanding of the module material.

The best way to learn and understand mathematics and statistics is by working on the problems and exercise sheets, and by active preparation and participation in tutorials and problems classes.

Many of the difficulties you may have with the exercises can be solved if you fully grasp the ideas presented in lectures and texts. If you get stuck, read your lecture notes carefully. If, after trying, you still cannot do a problem, take a break, ask a friend, or contact your lecturer. If you still cannot complete an exercise, write down what you tried to do and indicate where you were stuck. **Don't leave it all until the night before the submission is due.**

Once you discover how to solve a problem that had been causing you difficulties, spend a few minutes reflecting on why you were stuck, what was the idea that led to the solution, and (most importantly) how can you avoid getting stuck on similar types of problems in the future. You can also gain a great deal by talking about problems with fellow students, provided that all participants do genuinely try to participate rather than simply copy answers from others in the group. (That would be *plagiarism*, which is serious academic misconduct.) Always explain your notation where it differs from the lecturers') and your reasoning: a string of symbols is meaningless without such an explanation. All your work should be in (mathematical) sentences, so that the meaning is clear.

Computer labs, problem classes and tutorials are less formal than lectures. Students are often asked questions, or perhaps asked to explain a piece of mathematics or statistics to the others present. If you have tried the problems beforehand, the class tutor's explanations will be much more useful to you. Don't be afraid to ask when you do not understand a topic, no matter how basic; probably your friends will not know how to do it either.

You will get the most out of tutorials by working on points that you don't understand in advance of the tutorial: read your notes, read books, look at examples, discuss difficulties with other students.

With computer work it is important to read any documentation carefully. Think about what you are going to do before starting at the computer - it will save time in the long run. Often the material covered in a computer lab must be written up and presented in order to satisfy the module requirement before credits can be awarded.

The Department of Mathematics and Statistics regard computing laboratories, tutorials and problems classes as compulsory, and also require you to submit written work for some of your modules. Failure to attend, or to submit an adequate amount of work on time, without acceptable excuse is first referred to the lecturer in charge of a module. The lecturer, or the Year Coordinator, may send you written warnings and can impose certain requirements that have to be fulfilled before you are deemed to have completed a module.



3.3 Learning Support

- For extra help with mathematics, particularly at the level of Year 1 modules, Learner Development Services (LDS) offer practical advice and support to help students study and research more effectively, including a Maths Skills support service: www.strath.ac.uk/studywithus/strathlife/academicsupport/
- Study support and advice is available through various avenues. More details at: www.strath.ac.uk/professionalservices/studentexperience/studentadvicesupport/.
- Study Skills Advisers provide a full-time service across a range of academic and study skills for students in all years of study: www.strath.ac.uk/studywithus/strathclydeonlinelearning/supportingonlinelearning/

3.4 Computing Facilities and Software Packages

During your programme, you will use computers for a variety of purposes, from performing numerical, statistical and algebraic calculations, to communicating with staff and other students by e-mail. Some areas of mathematics - statistics in particular - make use of specialist computer packages, but no previous knowledge of these is required. Many modules use Myplace as an additional resource, sometimes supplying backup notes or model solutions to the exercises.

You will receive training in the use of mathematical/statistical software packages to aid the calculation of results. Outside the timetabled practical sessions, you are free to use the computing laboratories or library. Note, however, that you must observe the rules for their use or you may have the facility withdrawn.

3.5 Key Skills

When the University talks about key skills (sometimes called transferable skills), it is referring to those skills that employers value and look for in new employees. They tend to be the personal skills or competences that most of us possess, to a greater or lesser extent, and that do not depend on which particular subject is studied or programme followed. For example, communication and presentation; problem-solving and creativity; information and computer technology; teamwork and collaboration; project-planning and organising; personal development. An important aspect is the ease with which you can transfer these skills from one situation or context to another. When employers are considering graduates, they want to know how well you have done in your studies, but they also want to know what you can do, which key skills you possess. For example:

- · can you communicate verbally and in writing?
- can you get on with other people and work in a team?
- can you work independently, using your own initiative and judging when you need to involve others?
- · can you organise yourself and others, solve problems, make decisions?

We'd all probably say 'yes' to these questions – but how do you know? How can you persuade an employer that you have these skills at a level that meets their needs? Employers may well test your claims through interviews, aptitude tests, group exercises and other activities. It is likely that, in most instances, you will need to be able to demonstrate that you have these skills in order to get to the interview stage.

Key Skills are nurtured in many of our modules. For those areas covered in specific modules, see the module *Mathematics and Statistics: Information for current students* on Myplace. Also, contact the Careers Service for information and help on future career planning:

www.strath.ac.uk/professionalservices/careers/



3.6 Your Responsibility

As a student we expect you to:

- attend classes (arriving promptly)
- switch-off or mute mobile telephones and similar devices in class
- carry out assignments and submit them timeously
- observe good conduct at all times (see the guidelines on "Classroom Protocol")
- use the University facilities (computers, library) responsibly
- inform us of changes in your address
- spend an appropriate amount of time on private study.

Above all, a key responsibility is to make the best of the learning opportunities that you are afforded in the University, progress successfully through your programme and graduate with a degree that is a true reflection of your ability.

3.7 Attendance

You will find that the atmosphere at university is probably more relaxed than your previous school or college. You should be aware that the University (General Regulations 21-24) and the Student Awards Agency for Scotland (SAAS) or your Local Education Authority (LEA) require you to attend classes.

You must attend the University during semesters. Only illness, or some other acceptable mitigating circumstances, are valid excuses for absence from classes. On occasion there may be instances where your absence is unavoidable due to illness, or other extenuating circumstances. Where this is the case, you must update your Module Leader/Lecturer as soon as possible.

Attendance and engagement in your studies is an essential part of your successful studies and you are encouraged to reflect on this in your engagement with your scheduled teaching and the wider aspects of your university experience.

Staff responsible for each module will monitor attendance as appropriate, for instance, QR codes are widely used in classes which you can scan to confirm attendance. It is a student's responsibility to ensure that their attendance has been noted. The Head of Department (or nominee) can report an unsatisfactory attendance record to the Science Faculty Board of Study, which, in certain circumstances, may result in a report being sent to the SAAS or your LEA.

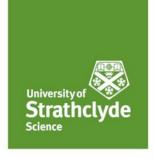
Additionally, students are required to perform satisfactorily the work of the module. Where laboratory work is an integral part of a module, it is clearly important to attend regularly and to complete the scheme of work required. In some modules, the award of the credit is dependent upon satisfactory coursework being carried out in addition to the written examination being passed. Any student whose attendance or performance has not been satisfactory may be deemed 'Not Qualified' to sit the examination and hence disqualified from the final assessment in the module concerned.

Additional work will normally be required in order for a Not Qualified student to be reinstated for a subsequent attempt at a module assessment.

3.8 Time Management

At the University you will have a high level of autonomy. You will be treated as an independent adult and, as such, you will have the final responsibility for your own studies. You will need to have quite a lot of self-discipline and self-motivation. Time-management is one of the more important skills to acquire.

University-level Mathematics and Statistics will take time and work on your part to understand. At the beginning of the programme, you may find that some of the work is revision, but even then, the standard of comprehension and level of skill required are likely to be greater than in your pre-university



programmes. In most modules there will be new material starting quite early in the semester. Spend some time reflecting on your learning, identify factors which enable you to work well or prevent you from doing so. Broadly speaking, you should think in terms of a 40 hour study week. Some students may need to work at their studies more than this in order to keep up.

Think very carefully before taking on any part-time work during term-time. A FULL-TIME degree programme requires a commitment of around 40 hours per week during term-time. If you need a part-time job during term-time, make sure that you do not work for more than a few hours per week (the University Senate recommends 10 - 15 hours maximum) or your academic work could suffer; you may not get the degree class that you should, and your starting salary and career prospects might be depressed. And remember also that you still need a social life!

There are many activities competing with academic work for your time. But the purpose of a university is learning. One of the main aims of our staff is to develop and teach Mathematics/Statistics and we expect you to be here to learn (as well as doing all sorts of enjoyable and worthwhile things in your spare time).

3.9 General Interest Books in Mathematics and Statistics

To become a good mathematician or statistician, it is important that you don't restrict yourself only to the material taught in our modules. There are a number of general interest books that are well worth reading. Some of these are listed below, with Strathclyde's Library classification given in [...]:

Beasley, J.D. The Mathematics of Games, Oxford University Press. [D511.3 BEA]

Davis, P.J. & Chinn, W.G. 3.1416 and all that, Birkhauser. [D510 DAV]

Jacobs, H.R. Mathematics A Human Endeavour, W H Freeman. [D510 JAC]

Jacobs, K. Invitation to Mathematics, Princeton University Press. [D510 JAC]

Kline, M. Mathematics in Western Culture, Penguin. [51(09) KLI]

Krantz, S.G. Techniques of Problem Solving, American Mathematical Society. D510.76 KRA]

Korner, T.W. The Pleasures of Counting, Cambridge University Press. [D510 KOR]

Mandelbrot, B.B. The Fractal Geometry of Nature, W H Freeman. [D516.15 MAN]

Peterson, I. The Mathematical Tourist: Snapshots of Modern Mathematics, H Freeman. [D510 PET]

Sawyer, W.W. A Path to Modern Mathematics, Penguin. [D510 SAW]

Sawyer, W.W. Mathematician's Delight, Penguin. [D510 SAW]

Steen, L.A. (Ed), On the Shoulders of Giants: New Approaches to Numeracy, National Academic Press. [D510.7 STE]

Stewart, I. Nature's Numbers: Discovering order and pattern in the Universe, Weidenfeld & Nicholson. [D510 STE].

Stewart, I. The Problems of Mathematics, Oxford University Press. [D510 STE]

Wells, D.G. The Penguin Dictionary of Curious & Interesting Numbers, Penguin. [D512.7 WEL]



4 Feedback and Assessment

4.1 Feedback to Students

A very important part of the learning process is the provision and use of good and timely feedback. Feedback can take a number of forms, such as written comments from a tutor, a discussion with academic staff or your fellow students, or a critical analysis of your own work. Effective learners seek out feedback from many sources. How useful the feedback is depends largely on what you do with it

The Department of Mathematics and Statistics recognises the value to students of feedback and is, therefore, committed to providing timely and appropriate feedback. To get the best out of feedback you need to be actively engaged in your studies. Feedback is only helpful if the information/comments are used by yourself to improve your future performance. Through feedback you should learn from your mistakes and misconceptions, and build on achievements. Feedback will help you identify gaps in your understanding and enable you to seek help and clarification when you need it. Individual advice can be obtained at the tutorial/problems class. Alternatively, you can arrange to consult your lecturer/tutor. **Staff will endeavour to return work you submit on time during the teaching period within 15 working days** - in many modules this will be sooner.

Feedback in Mathematics and Statistics modules may take many forms, for example:

- (i) written or oral comments on work submitted
- (ii) the supply of model solutions in class or via Myplace
- (iii) grading of submitted work (normally in conjunction with (ii)).

Feedback on examinations may be given by providing a generic commentary on students' performance (identifying common strengths and weaknesses), along with comments on those parts of questions that need particular attention. Students who wish to view their examination scripts (for feedback purposes, as an aid to future academic performance) should enquire at the Mathematics and Statistics Departmental Office (LT916). Information on the procedure to follow can be found via the Myplace module *Mathematics and Statistics: Information for current students*.

4.2 Feedback from Students

The Department welcomes feedback on modules, programmes, facilities or support services. During the programme, comments can be referred for discussion at the Student-Staff Liaison Committee. We would urge all students to complete carefully the module evaluation questionnaires that are issued during the teaching periods. This is one of the main ways in which we obtain feedback on our modules, and your views are valued. To make this exercise worthwhile it is very helpful if you:

- participate: the information is reliable only if most of the class responds
- try to separate, as far as you can, the quality of the teaching from your reaction to the personality of the lecturer; even if you dislike Dr. X, they might be giving excellent lectures, and similarly the other way round
- give considered and constructive comments.

4.3 Departmental Student-Staff Liaison Committee

Another way in which you can provide us with useful feedback is via the Departmental Student-Staff Liaison Committee which has student representatives from each year of study. Minutes are kept of its actions and these are available on Myplace. The results of these actions are scrutinised at Departmental Meetings and the Faculty of Science Academic Committee.

The committee is formed in October from willing volunteers. The year reps are announced on Myplace year group pages and may be contacted by email.



The line of student-staff communication may be defined as follows.

- Issues of student concern associated with a particular module (including individual student difficulties) should, in the first instance, be raised with the lecturer in charge of the module. If these issues cannot be resolved, students should then communicate their concerns to the appropriate Year Coordinator. Unresolved issues should then be raised at Student-Staff Liaison Committee meetings and, as a last stage, students may take particular issues to the Head of Department.
- Issues concerning the organisation of a particular year of a programme, or the operation of an entire programme in general, should be raised directly with the appropriate Year Coordinator. Once again, unresolved issues should then be communicated in the Student-Staff Liaison Committee meetings and ultimately to the Head of Department.

The Faculty Board of Study, which is the University committee that manages Science Faculty business, also has student representatives. They change from time to time, but the Faculty Manager can tell you who the current representatives are.

4.4 Methods of Assessment

There are many methods by which your progress can be assessed. The traditional method is a written examination that takes place soon after the module has been completed. There are also other ways, such as continuous assessment, in which your work can be assessed. Certain modules in Mathematics and Statistics include compulsory elements of coursework in the Final Assessment. These may involve the application of computers to relevant problems. A few of the statistics modules concerned with applications are assessed entirely on the basis of practical exercises. Module descriptors (available via the module *Mathematics and Statistics: Information for current students* on Myplace) explain each module in full.

Some departments also operate exemption schemes. These grant students exemption from the final module examination if a certain level of performance has been reached during the year in class work, class tests, etc. (Where applicable, these are again found in the module descriptors.) At the other end of the performance scale, in cases where their performance in a particular module during the year is considered especially poor, students may be told that they are 'Not Qualified' (or NQ) to sit the module examination (see the section on **Attendance**).

4.5 Plagiarism and Collusion

<u>Do not cheat in any way!</u> It is often straightforward for your marker to spot work which is not your own and, in the case of copying from another student, **both original and copied work may get zero marks**, so don't let others copy your work.

The University treats academic dishonesty of any form, particularly in examinations and other formal assessments, extremely seriously. Many professions require entrants of the very highest integrity, and proven cases of cheating may, as a result, lead to probable disbarment from professional life as well as disciplinary action by the University.

Plagiarism has been defined as "the taking of ideas, writings, etc., from another and passing them off as one's own" (*Collins Pocket English Dictionary, 1981*). In an academic environment this is regarded as a very serious offence - a form of intellectual theft.

The University's regulations on Academic Dishonesty state that candidates for assessment must not by implication or otherwise represent the work of others as their own.

In any field of academic study collaboration with others can be an important part of the learning process, and the sharing of insights and the resolution of difficulties is often desirable. However, you should not collaborate when writing out a piece of open assessed work, copy the work of another student, or allow another student to copy your work - this constitutes collusion. If in doubt as to whether to give assistance to another student, ask yourself whether a lecturer or tutor would be likely to give the same assistance,



or better still ask a member of staff for guidance as to what is permissible. In project work or reports, when drawing from previous work done by others, you must acknowledge it, and if a passage is quoted verbatim, it should be enclosed in quotation marks and its source given.

4.6 Generative AI (Gen-AI)

Generative AI tools, such as Copilot or Chat GPT, are steadily becoming more widely used in everyday life. If used appropriately, they can be effective learning tools but their misuse, particularly to generate material for assessment, will be construed as Academic Dishonesty, and will lead to disciplinary action being taken.

In modules with substantial continual assessment components, particularly project-based classes in later years, your Module Coordinator will give guidance on acceptable use of Gen-Al. The following guidelines, taken from a list of Al dos and don'ts may be helpful for you.

- Be transparent about how AI has been used in the development and creation of work
- Remain critical and questioning of content created by AI
- Always ensure that the work you do and submit is your own
- · Keep up to date with University policy and guidance in this area
- Do not use Al as a substitute or proxy for your own thinking or work.
- Do not depend on AI to produce reliable references or materials.
- Be wary of sharing data with any Al tool. Do you know how this data will be subsequently used by the tool?
- In particular, never enter personal data, research data, copyrighted materials, or University intellectual property (such as lecture slides) into an Al tool.
- Do not submit work which has been produced by AI as though it was your own.

During your time at University, the extent and utility of Gen-Al is likely to change significantly. The University will provide you with information as things develop but you are recommended to work through the Gen-Al section of the <u>Academic Library Skills Module on MyPlace</u>.



5 Assessment, Examination Boards and Progress

Module examinations are held in December and in April/May after teaching in the module has finished, with a resit diet of examinations in late July/early August. Other assessments (e.g., class tests) may be held from time to time during the semester. You can expect the different departments that teach your modules to provide details about the assessments. Copies of some examination past papers are normally available from the University Library's Electronic Library Services section: www.strath.ac.uk/professionalservices/library/.

Attendance at examinations is compulsory. Note that you may not bring written or printed material, pre-programmed graphic calculators, etc., into examinations without permission, nor may you communicate with anyone other than the invigilator during an examination.

If you are offered the opportunity to resit an examination, it is advisable that you take it. Please note that the resit examination diet takes place during late July/early August and you are normally required to sit the examination on-campus at the University. Do not make irrevocable plans for this period before the Examination Board's decisions are known in June.

All students are expected to attend for examination at the University of Strathclyde at the dates and times posted. (To say that you misread the examination timetable is not an acceptable reason for missing an examination.) Only **exceptionally** will permission be given for students to sit examinations off-campus or at different times. Students are recommended to familiarise themselves with the University's Regulations for Examinations which are published in the University Regulations:

www.strath.ac.uk/media/1newwebsite/documents/academicregulations/UG General Regulations.pdf

The marking of module examination answer papers is by an anonymous marking system. This means that the member of staff who marks your paper does not know the identity of the candidate whose paper they are assessing. For modules assessed at Levels 1 to 4 the pass mark to gain the associated credits is 40%; level 5 modules have a pass mark of 50%.

Your Departmental Examination Coordinator is: Ms S Miller (<u>s.j.miller@strath.ac.uk</u>) (LT914, extension 3598).

Students with approved Special Examination Needs should speak to the Departmental Disability Contact, Ms S Miller (<u>s.j.miller@strath.ac.uk</u>).

5.1 Preparing for Examinations

Mathematics and Statistics are subjects consisting of many parts which are covered sequentially. It is therefore important to understand the basic concepts underlying each part, to know the main results therein, and how to apply the techniques in particular problems.

It is important that you give yourself adequate time for revision. You cannot look at a topic the night before the examination and expect to learn it. Late revision is usually of little lasting value and "cramming" for exams is no substitute for methodical and sustained study throughout your programme. Remember also that effective revision involves attempting questions, writing out definitions, proofs, drawing diagrams, etc., not just reading your notes over and over again.

When sitting an examination, you should pay attention to the instructions read out at the beginning by the Invigilator. In particular, you will be asked to check that you have the correct examination paper before you and to read the instructions on the paper carefully. When attempting a particular question, make sure you understand what is required for the answer. There are certain terms which appear regularly in Mathematics and Statistics questions. The following list includes many of these, together with their meaning



<u>TERM</u> <u>MEANING</u>

Define requires the precise definition.

Explain write using simpler concepts/words.

Calculate requires an answer to be found which is not given.

(or Determine, Evaluate, Find, Obtain)

Solve find the quantity/ies which satisfy the given equation.

Verify require the statement given on the paper to be

validated - working is essential.

Show that requires a logical argument to arrive at the result

quoted.

Prove that requires a logical but more detailed and careful

argument than for 'show that'.

Expand write out as a sum of terms e.g. by multiplying out.

Simplify write as a single expression often by removing

common factors, or with fractions putting over a

common denominator and cancelling.

Express generally translate from words into mathematical

symbols.

Describe requires an answer in words and possibly

mathematical symbols but without detailed

calculations.

State (or Write down) no need to do any working, just quote the required

result.

Give similar to 'state' but a little working may be required.

Sketch means draw a graph or picture on your script - ideally

taking about half a page - need not be to scale. Label

axes and insert values and points asked for in

question.

Graph as for sketch but graph paper is to be used and the

drawing done accurately. Information may have to be

obtained from the graph.

By gives the technique or method that must be used.

Use given the method that must be used.

Hence make use of an earlier part of the question to answer

this part.

or otherwise you can use any method but generally it is best to

make use of the method (or hint) given.

Deduce that reason from the answer to an earlier part of the

question to answer this part.

Note that special Tables of Formulae, if permitted and required, will be supplied. Also, a pocket calculator that is not pre-programmable is permitted in final Mathematics/Statistics examinations, though one is not always essential. Calculators must not be used to store text and/or formulae, nor be capable of communication. Invigilators may require calculators to be reset.

If there is anything on the paper you are unsure about, ASK an invigilator for clarification.



5.2 Examination Technique

- Answers should be written clearly in ink.
- Examiners attach importance to accuracy. Marks are awarded for the choice of method and execution of the mathematical technique, as well as for the final answer. So justify your answers with full details of the analysis. Do not cross out any working unless you repeat the calculation elsewhere and are sure it is now correct you may pick up some marks for method, etc.
- Make sure you answer the question actually set, not one you wanted to be set!
- Don't waste time writing down material which is not relevant to the answer simply to provide some "padding", you will get no marks for it.
- Don't spend too long on a question you can calculate the time to allow for each question from the total number of questions and the total time allowed. Be realistic about the length of your answer compared with the possible time/marks allowed for that question.
- Attempt questions first that you think you can work through completely. Hints or additional information may be given in a question so read the entire question carefully before attempting it.
- Although attempts at complete questions are preferred it is possible that you may only recognise how to do part of a question. If you attempt the second part of a question you may use any results stated in the first part.
- When work is done with a calculator, you must show all the intermediate working for the marks to be awarded.

5.3 Examination Boards

Once the examination diet is complete in May and all module results are available, the General Board of Examiners meets in June to discuss the performance of **every** individual student. The Exam Board makes decisions on student progress based on the performance in all modules in a student's curriculum. A similar Exam Board meeting takes place in August after the resit examination diet. Results for examinations taken in the Semester 1 diet, or by continuous assessment, are **provisional** until the General Board of Examiners approves them in June.

5.4 Progress to Next Year of Study

Progress to the next year of your degree programme depends upon you successfully gaining the credits in the modules specified in the programme regulations - typically 120 credits in each year of study. Not all the credits need be obtained from the year's curriculum in order to proceed, but certain key modules must be passed and, normally, you must have no more than 20 credits outstanding after the resit examination diet. However, proceeding into the next year of study with credits outstanding will result in you carrying the failed modules. You will be expected to take the assessments in any carried module (but not attend classes), adding to the normal workload of 120 credits for that year of study. You should, therefore, make every effort to clear all of your modules before proceeding with your programme.

Note that to proceed into the Honours 4th Year, a student must have accumulated at least 360 credits from the course curriculum and have an overall credit-weighted average of at least 40% at the first attempt in level 3 modules.

To proceed into the 5th Year of MMath Mathematics or MMath Mathematics and Statistics, a student must have gained at least 480 credits and have an overall credit-weighted average of at least 60% in level 4 modules.



5.5 University Compensation Scheme and Progress

The University operates a Compensation Scheme that allows students to gain the credits for some failed modules. The application of the scheme can vary according to the programme. Typically, students can gain up to 20 credits in failed module(s) provided the mark in the module(s) is between 30% and 39% AND the student has a credit-weighted average (CWA) across their whole curriculum in the year of study of at least 45% (at the first attempt).

For details about the University Compensation Scheme and how it is applied in different programmes, see www.strath.ac.uk/staff/policies/academic/

5.6 Academic Suspension and 'Registration with Attendance'

Academic Suspension means that you have failed to meet the academic standards for continued enrolment. (It is also possible to be **suspended** for other reasons that are not addressed here.) Academic Suspension means that the Exam Board has made a formal decision to suspend your studies for the next academic session to give you an opportunity to successfully complete any outstanding modules, exams or coursework in order to proceed to the next year of your course.

Students in Academic Suspension do not attend classes on a formal basis in their year of suspension but are entitled to sit their failed module assessments at the end of that year. Informal attendance at classes may be allowed at the discretion of the academic departments concerned. There are no tuition fees payable, although there is a one-off registration charge.

UK students placed in Academic Suspension sometimes ask to be allowed as an alternative to attend a reduced number of credits for the year in which they attempt to pass their failed classes. Such 'Registration with Attendance' can have both academic benefits and, in some cases, financial benefits. You will pay a tuition fee on a "pro-rata" basis according to the number of credits you will be studying. For example, if you will be studying 60 credits, you will be charged 50% of the relevant full-time fee. Funding authorities normally allow students in this position to apply for the full student loan and, if applicable, living cost grants. SAAS, SFE, SFNI & SFW funded students may also be able to apply to have the tuition fees for the year funded under the "+1" arrangement, however, students are encouraged to seek advice from Student Financial Support before deciding to do this.

For more information on Academic Suspension and Registration with Attendance, please see www.strath.ac.uk/exams/examboardsandresultsfaq/ www.strath.ac.uk/.../registrationwithattendance/

or ask the relevant Year Coordinator.

5.7 Appeals, Complaints and Discipline

A student who believes that they may have grounds for an appeal against the decision of the Board of Examiners may submit an appeal to the Faculty of Science. Information and guidance can be found at www.strath.ac.uk/policies/academicpoliciesprocedures.

Before making an appeal, a student should also contact the Strathclyde Students' Association Advice Hub for advice and information: www.strathunion.com/support/

5.8 Prizes and Certificates

The Faculty of Science recognises exceptional performance in each year of a Science-based degree programme by the issue of a **Dean's Certificate of Excellence** to the best students in the Faculty. To obtain a Dean's Certificate, a student must pass all modules in their curriculum at the first attempt and achieve a credit-weighted average (CWA) of 80% or greater.



When a student passes all modules at the first attempt with a CWA of at least 70%, then the decision of the Exam Board is that the student has a Pass for the year 'with distinction'; if the CWA is between 60% and 70%, then the Pass for the year is 'with merit'.

The University has also been endowed with a variety of prizes it can award to students. The following are those awarded by the Department to 4th (and possibly 5th) Year students:

- Sir Hermann Bondi Prize
- Walter Brown Prize
- Kelvin Prize
- Frank Leslie Prize
- · Gary Roach Prize
- Two IMA Prizes
- Royal Statistical Society Prize

Further details on these prizes are provided in the Year 4 Supplement to this Handbook on the module page for *Mathematics and Statistics: Information for current students* on Myplace.

Note, the University will normally publish a list of prize-winners. If you are awarded a prize and, for whatever reason, you do not wish your name to be included in the list then you must notify Student Business.

5.9 External Examiners

Information about the External Examiners for the Mathematics and Statistics MMath, BSc Honours and BSc programmes can be found via the Myplace module page for **Mathematics and Statistics**: **Information for Current Students**.



6 Equal Opportunities

6.1 Equality and Diversity

We celebrate diversity and respect differences across our community, ensuring staff. A commitment to improving diversity, promoting inclusion, and advancing equality is integral to the University's vision, reflecting our shared values and dedication to social progress.

The University has in place an *Equality*, *Diversity and Inclusion Policy* and a *Disability Policy*. which you can view here:

www.strath.ac.uk/professionalservices/accessequalityinclusionservice/equalitydiversity/policies/

It is important that you understand your rights and responsibilities. Any discriminatory practice, including cyber bullying, on your part may lead to the University initiating disciplinary action.

If you have any queries please bring these to the attention of staff or the University's Equality and Diversity office via email at equalopportunities@strath.ac.uk; or by phone on 0141 548 2811.

6.2 Athena SWAN

The Athena SWAN Charter has been developed by the Equality Challenge Unit to encourage and recognise commitment to combating the under-representation of women in STEMM research and academia.

The University currently holds a Silver award while the Department of Mathematics and Statistics holds a Bronze award. These awards recognise our commitment to an inclusive and equitable environment where all individuals, regardless of background, can achieve their full potential details here

6.3 Students with Disabilities

The University is committed to providing an inclusive learning and working environment for disabled people. If you have, or think you have, a disability we encourage you to disclose it as soon as possible. Declaring your disability will enable you to access any additional support that you may need and help to ensure you become a successful student. The information you provide will be treated as confidential and will not be shared with other staff without your consent.

The University has a dedicated Disability and Wellbeing Service that offers specific advice, information and assistance to disabled students, including information on the Disabled Students Allowance (DSA). Further information is available from the website:

www.strath.ac.uk/professionalservices/disabilityandwellbeing/

In addition, each academic Department/School has at least one Departmental Disability Contact (DDC), who act as a first point of contact for disabled students.

Prof Michael Osipov and Ms Sandra Miller are the DDCs for Mathematics and Statistics.

Please inform the DDC and/or a member of the Disability and Wellbeing Service of your needs as soon as possible by email: disabilityservice@strath.ac.uk or by phone on 0141 548 3402. The Disability Service will then formally communicate your needs to your Department/School.

6.4 Issues with Physical Access on Campus

If you experience an issue with physical access anywhere on campus, please email: physicalaccess@strath.ac.uk where a member of Estates staff will be able to help.



6.5 Classroom Protocol

The University is committed to providing a safe learning environment where dignity is respected and discrimination or harassment does not occur on the basis of age, disability, race, sex, sexual orientation or any other protected characteristic. No student should intentionally be made to feel threatened or excluded from class participation.

6.6 Student Behaviour Protocol

You have a responsibility to show respect to fellow classmates and staff by remembering this following protocol for the duration of your studies:

- Attend all scheduled lectures/seminars and/or practical sessions such as labs, including any additional learning and teaching sessions.
- Arrive on time and remain in class until the end of the session. If you need to leave early for any reason, please notify the tutor at the beginning or prior to the class.
- Do not disrupt the class by habitually coming in late or coming and going from the classroom during the session. Any student arriving late, without justified reasons, may be refused entry.
- Refrain from consistently interrupting other speakers and listen to the ideas of others with respect.
- Do not be rude or make personal attacks on individuals during group discussions, or in any other form of student activity.
- Do not raise your voice or behave in a manner that would be reasonably considered aggressive during discussions with students or staff.
- Do not use abusive language, even when not directed specifically to those around you, in spoken or online discussions.
- Do not eat in the class, other than for medical reasons, e.g. diabetes. Drinking beverages may be permissible at the tutor's discretion where the room utilisation rules allow, and drinking water is normally allowed throughout campus unless excluded for health and safety reasons.
- Inform tutors of specific requirements, for example, the need to perform prayers for practising students of diverse faiths.
- Seek consent of students and staff before taking any photos, or audio recordings in the classroom.
 These must not be shared on any social network sites without permission. The recording must be used only for personal study. Making visual recordings is normally forbidden.
- During formal teaching periods, such as lectures, tutorials and labs, students should work on the topics set by the lecturer or tutor in charge.
- Where a record of attendance is being taken, it is the student's responsibility to sign any attendance sheet. Students should not, under any circumstances, indicate or sign attendance on behalf of another student or share a sign in code- this is a serious disciplinary offence.
- At any programme related external visit, you are acting as an ambassador of the University and are reminded to act as such.
- Refrain from smoking (including electronic cigarettes) in any University building or in areas where smoking/e-cigarettes is prohibited.
- Follow health and safety procedures. You are reminded at all times to take responsibility for your own safety and that of others.
- Should you have any concerns, please bring them to the attention of your tutor, lecturer, Programme Director and/or another appropriate University staff member.



7 Alphabetical Help Guide

There are several issues on which students often seek advice from staff. These are discussed in the following "Help Guide". We hope this guide will help you understand University and Departmental policy on these issues. Links to relevant University websites are provided when possible. If, after consulting the guide and websites you are still unsure of what to do, then do not hesitate to get in touch with your PDA, Year Coordinator or Academic Director.

Absences

If you are unwell and unable to attend classes, remember that your main objective should be to recover as quickly as possible. Don't struggle to keep up with your work if it will delay your recovery. We always make allowances for serious illness, or other difficulties, when we are aware of it. It is important that students keep the University informed of absences.

- For absences from classes, laboratories or tutorials of seven or fewer consecutive University teaching days you are required to record a self-certification online via PEGASUS using the 'Personal Circumstances' link under the Services tab.
- For absences of more than seven days you are required to submit a medical certificate (signed by a medical practitioner who is not a member of your family) to Student Business.
- For absences from an assessment or failure to submit coursework on time you must submit a formal medical certificate.

Certificates that are submitted to Student Business are kept in the student's file, and details are recorded on computer. Student Business will inform the relevant departments and Board of Examiners of certificates which are relevant to a diet of examinations or the corresponding period of study, including, where appropriate, the relevant details.

Student Business-Science will inform all relevant Department(s) and, if the absence continues for 14 days or more, the Student Awards Agency for Scotland or relevant grant awarding body.

For more information on Absences and Personal Circumstances, please consult: www.strath.ac.uk/.../personalcircumstances/

Access to Buildings

Access to University buildings outside normal working hours is possible by obtaining appropriate authorisation. Information on the procedure to follow to obtain access is available from administrative staff in the Departmental Office, LT916 or by emailing ma-contact@strath.ac.uk.

Accommodation

Residence Services provide a range of student accommodation on campus. If you have private accommodation which does not work out, it is worth checking for vacancies in University halls at any time during the year. The private sector expert can advise on conditions of tenancy and landlords. The office is open between 9.00 am - 4.45 pm, Monday to Friday and is located in The Lord Todd Building, 11 Weaver Street; see www.strath.ac.uk/studywithus/accommodation/

Andersonian Library

The main University library is the Andersonian Library, Curran Building. Full details of the various services that it offers are outlined in the Library Regulations available in a selection of leaflets from the Enquiry Desk. An introductory video is shown in the library, several times each day, during the first few weeks of the academic session. The Student Card, issued at Registration, includes the University



Library Membership Card. This must be produced when entering, or borrowing materials from, the Andersonian Library, www.strath.ac.uk/professionalservices/library/

Careers Service

The University Careers Service is based on Level 4 of the Teaching and Learning Building and runs a wide range of seminars and workshops aimed at new and continuing students. Stephen Smith is the Careers Consultant to the Faculty of Science (stephen.smith@strath.ac.uk). You will get to know him through Careers talks during the year in the Department, and through events and activities in the Careers Service that we encourage you to attend throughout your course.

Office hours: Monday to Friday Online and by phone 9am to 5pm. In person 10am to 4pm.

Tel: 0141 574 5090

There are also a number of key resources on the Careers Services website:

www.strath.ac.uk/professionalservices/careers/.

Change of Address

Students **must** notify Student Business-Science promptly of any change in their in-term or out-of-term addresses. The University will use these addresses for official communications and cannot be held responsible for non-delivery where a change of address is not notified. Changes can be notified on-line through PEGASUS.

Chaplaincy Centre

The Chaplaincy provides students with the opportunity to join a community offering friendship, support and advice. In addition to the University Chaplain, a team of voluntary chaplains and contacts are available to provide additional support to the University community. They offer confidential help and support, and a varied programme of events throughout the year. Information about and contact with a number of faith groups within the city is also provided. Further details can be found at:

www.strath.ac.uk/studywithus/ourcampus/whatsoncampus/faithspiritualitysupport/

Communications with Students

The formal channels of communication with students will be:

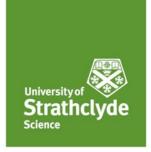
- Primarily via your individual University of Strathclyde email address;
- through the Staff Student Information Server (PEGASUS).
- via the Virtual Learning Environment Myplace; or
- via the Strathclyde Mobile App. The Strathclyde Mobile App will allow you to access enrolment information; personalised timetables; examination timetables; and other communications.

Information may also be presented by other means such as TV screens located in University buildings.

Information particular to individual Departments is also posted on noticeboards within the Departments. Notices affecting 3^{rd} and 4^{th} year students are often placed in the Student Common Room LT905, Livingstone Tower.

Council Tax

Council Tax letters are produced for students via Student Experience. These can be accessed via PEGASUS or you can submit information electronically to Glasgw City Council. Details are here: www.strath.ac.uk/.../letterscounciltaxbankstatus/



Financial Support

Information can be found at www.strath.ac.uk/.../fundingfinancialsupportteam/

First Aid

If you fall ill or have an accident while in the Department, contact a member of staff as quickly as possible. The details of Mathematics and Statistics First Aiders, their location and extension numbers are detailed on notices displayed in the foyer area of each floor in the Department. Details of the Department's Mental Health First Aiders are also presented on these notices.

First Aid is also provided by the University's Security Wardens who are qualified First Aiders and should be contacted in an emergency via extension 2222 or 0141 548 2222 if phoning from a mobile. A First Aid box is available in the Departmental Office (LT916).

Health and Safety

All matters relating to Health and Safety should be reported to the Department's Area Safety Coordinator (Ms S Miller, <u>s.j.miller@strath.ac.uk</u>, extension 3598).

Students are reminded that they must observe University Safety Regulations at all times. Laboratory and other areas with hazardous materials have special regulations that must be read and observed. Please advise the Department's Area Safety Coordinator of any dangers you see.

Fire Evacuation Procedure

Evacuation procedures are displayed in all the University buildings. Students should acquaint themselves with these instructions and be familiar with all means of exit in any University building they use. In the event of a Fire Alarm sounding the building **MUST** be evacuated immediately. Emergency doors must only be used in the event of fire or other emergency.

As part of the induction process, all new students will be instructed in the regulations regarding procedures in the event of fire, including escape routes and assembly points.

John Anderson Campus Map

Details of the campus buildings and their locations can be found here: www.strath.ac.uk/maps/

Lecturers' Availability to Students

The Department offers a flexible access scheme to students rather than unlimited access. This comprises email queries which can be answered at a suitable time by academic staff, or arranging appointments.

Mental Health Support

Dr Ainsley Miller is the Department's Mental Health First Aider. She runs Mental Health Support sessions for all students (UG, PGT and PGR) every Wednesday from 2.00 pm - 4.00 pm. Students can book appointments using an online booking system:

calendly.com/strathclyde-ainsley-miller/maths-and-stats-mental-health-appointments.

Details of University-wide support services in this area can be found at:



www.strath.ac.uk/.../accessingsupport/

Part-time Study

Students may study for the BSc or BSc Honours in Mathematics, Mathematics and Physics, or Mathematics, Statistics and Economics on a part-time basis. Note that the first two years of the BSc Honours in Mathematics with Teaching may also be studied on a part-time basis. If full-time study proves too much, it is possible to apply to transfer to one of the above programmes rather than leave the University. Contact your Year Coordinator or PDA for advice.

Personal Mitigating Circumstances Affecting Performance

Students whose performance has been, or will be, affected by circumstances that are acute, severe and outside their control should inform the University as soon as they are aware of these circumstances by recording them on PEGASUS under 'Personal Circumstances' and submitting supporting evidence as soon as such evidence is available. The self-certificate facility on PEGASUS should be used to notify the University of all Personal Circumstances (including medical reasons) that will affect your continued studies and any submissions in relation to extension requests. For details visit:

www.strath.ac.uk/professionalservices/studentexperience/studentlifecycle/personalcircumstances/

When completing the self-certificate on PEGASUS, please enter the dates of your Personal Circumstance in the boxes provided. Should your circumstance extend beyond the dates you have already recorded, you can enter a further self-certificate at a later date. You must record a brief reason in the text box below. However, please keep the number of words to a minimum to describe your circumstance e.g. self-isolation, close bereavement etc.

To record a self-certificate, log on to PEGASUS > Personal tab > Personal Circumstances > ADD SELF CERTIFICATE.

When a student's performance in examination(s) or other assessment(s) is affected, Personal Circumstances should be notified to Student Business within five working days of the latest affected examination/assessment or date of submission of affected assessment. Information that you submit is kept confidential to the examiners; in most cases the details are made available only to the External Examiners and the Chair of the Examination Board. If you have any concerns about the confidentiality of the information that you wish to submit, please come and discuss this with the Head of Department or your Year Coordinator. Where an entire semester or examination diet is affected, a Personal Circumstances Form should be submitted as soon as possible and at least one working day before the relevant meeting of the Personal Circumstances Board. In NO case will a notification of Personal Circumstances be accepted after the Personal Circumstances Board has met.

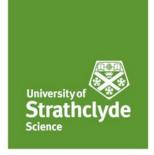
Further information can be found on the Academic Policies & Procedures page on the University website: www.strath.ac.uk/policies/academicpoliciesprocedures

Programme Details

Full details of all the Department's programmes can be found on the Myplace page for module *Mathematics and Statistics: Information for current students*.

Provisional Registration (for years 2 – 5)

In order to speed up the registration process for subsequent years, and to gauge demand for modules, you will be asked to choose a provisional curriculum for the following year of your programme by **March**. The Year Coordinator for the next year of study will provide you with documentation on the next year of your degree programme, and you will then choose a provisional curriculum using PEGASUS. The



appropriate Year Coordinator will approve this; otherwise a meeting or email conversation with the Year Coordinator will be requested to sort out any problems. This preliminary registration will only come into effect if the Examination Board decision in June or August is either PASS the year or PROCEED. The provisional curriculum choice is not binding; if your ideas change you may modify it by requesting a Curriculum Amendment via PEGASUS at the start of the session in the normal way.

Security

Access to all buildings is restricted between 6.00pm and 8.00am on weekdays, all day on Saturdays and Sundays, and on public holidays. Access is permitted, when deemed necessary, by prior arrangement with the Head of Department and the Safety Officer. Do not leave this to the last minute as relevant staff may be unavailable. Students occupying the premises at these times must notify Security Control, Livingstone Tower, 26 Richmond Street (extension 3333). Study is permitted only in rooms allocated for the purpose. The use of computing laboratories requires additionally the permission of the Director of IT Services in the Computer Centre.

Personal possessions, money, coats, bags or any valuables should not be left unattended in corridors, the laboratory area, changing rooms or classrooms. See also

www.strath.ac.uk/studywithus/ourcampus/whatsoncampus/securityservices/

Care should be taken at all times. Further information can be found at: www.strath.ac.uk/whystrathclyde/safe360/

Sexual Violence and Assault

Dr Ainsley Miller is a Level 3 first responder for sexual violence and assault, and works with the Glasgow and Clyde Rape Crisis. Please feel free to contact her directly via ainsley.miller@strath.ac.uk if you would like to talk about any related issues. She will be able to assist and support you in whatever way you require.

Smoking

The law on smoking in Scotland protects people from the harmful effects of passive smoking. The Smoking, Health and Social Care (Scotland) Act 2005 prohibits smoking in certain wholly or substantially enclosed public places, including workplaces such as the University. In alignment with this Act, the University has a No Smoking OHS Standard Local Rule. This Standard represents the University's No Smoking Policy which prohibits smoking in enclosed public places and supports a smoke free environment.

Status Letters

At various stages throughout your studies, it may be necessary to obtain confirmation of status as a student at the University. In situations where the student identity card is insufficient evidence, or documentary evidence is required, for example, visa extensions, students can apply for a status letter which will state their programme of study and other relevant information (e.g. fees). Status letter requests are **ONLY** available as an Online Service on PEGASUS **from the start date of your programme**.

Strathclyde Sport

Strathclyde Sport offers all members of the University the opportunity to participate in physical activity as a means of achieving a healthier lifestyle, to develop new physical skills, and to maintain or improve their sporting talents. Strathclyde Sport is located on Cathedral Street. For full details of facilities, classes, opening hours, and other queries: www.strath.ac.uk/strathclydesport/



Student Common Room

An undergraduate common room is provided in the Department, room LT905, 8.00am to 6.00pm during semester. As space is limited, use of the room is restricted to students in Years 3 to 5 of degree courses run by Mathematics and Statistics.

Student Exchanges Abroad

Information on student exchanges can be found at:

www.strath.ac.uk/studywithus/studyabroad/goingabroad/

Exchanges with North American universities and further afield may also be possible. The Recruitment and International Office (Learning and Teaching Building, Level 7) has details:

www.strath.ac.uk/studywithus/studyabroad/

Note, student exchanges typically occur during Year 3 of our Honours or MMath programmes. We normally expect all exchange students to have passed all their Year 2 modules at the first attempt, and to have achieved a second year credit-weighted average mark of at least 60%.

Student Experience

Student Experience been created to ensure that students are provided with the best possible experience throughout their time at the University of Strathclyde. Information on the various services offered can be found at www.strath.ac.uk/professionalservices/studentexperience/ or you can visit their helpdesk on Level 4 of the Learning and Teaching Building (open 9.30am-4.30pm Monday to Friday).

Student ID Cards

Once you are registered you will have access to your digital student card through the University app. The digital student card will be your primary form of student photo ID and can be used to access the library and is accepted as a form of ID at many venues and retail outlets. You are advised to keep a separate note of your personal Registration Number.

For formal examinations you will be required to present a form of physical ID such as a Young Scot Card, passport or driving licence. If you do not have one of these, you can request a physical student card. More details can be found here:

www.strath.ac.uk/studywithus/registration/studentcard/

Student Support and Wellbeing Services

All students should register with a general practitioner (GP) associated with the postcode area of their term-time address. Information on registering for students who live close to the campus can be found here: www.strath.ac.uk/../accessingnhsgpdentalpharmacyservices/

Student Support & Wellbeing offer support and advice across a range of services to help you get the most out of your studies whilst at Strathclyde. These include:

- Chaplaincy Centre
- Disability & Wellbeing Service
- · Funding and Financial Support
- International Student Support
- Online learning

For more information, see: Student advice and support



Termination of Studies

A student who persistently does not attend classes may be reported to the Board of Study and may have their registration terminated and be required to withdraw from their programme. (See Regulation 94-97).

Timetable

Information on timetabling can be found at: www.strath.ac.uk/professionalservices/timetables/

University Buildings' Codes

AB	John Arbuthnott Building, Robertson Wing				
AL	181 St James Road (Estates)				
AQ	Lord Todd Building				
AT	Alexander Turnbull Building				
ВН	Barony Hall				
CL	Collins Building				
CU	Curran Building (Library)				
CW	Cathedral Street Wing (Strathclyde Business School)				
DW	Sir William Duncan Wing				
GH	Graham Hills Building				
HD	Henry Dyer Building				
HL	Kelvin Hydrodynamics Laboratory				
HW	Hamnett Wing				
JA	John Anderson Building				
JW	James Weir Building				
LH	Lord Hope Building				
LT	Livingstone Tower				
RC	Royal College Building				
SH	Strathclyde Sport				
SP	St Pauls Chaplaincy Centre				
SW	Stenhouse Wing (Strathclyde Business School)				
TC	Technology Innovation Centre				
TG	Thomas Graham Building				
UC	University Centre				
TL	Teaching and Learning Building				
UC	University Centre				
WC	Wolfson Centre				

See: <u>www.strath.ac.uk/professionalservices/estates/roombooking/buildingcodes/</u>

University Regulations

A university, like any other community, has its own rules which are binding upon its members, staff and students alike. The rules of the University of Strathclyde are embodied in three separate codes:



- 1. The Charter and Statutes.
- 2. The Ordinances.
- The Regulations.

Further information can be found at: www.strath.ac.uk/whystrathclyde/universitygovernance/

The University draws its authority from its Royal Charter and, therefore, its fundamental powers and functions are defined in the Charter and Statutes which can be modified only with the consent of His Majesty's Privy Council.

More detailed rules, which are still fundamental and therefore rarely altered, are contained in the University Ordinances which are made by resolution of the University Court.

The rules which govern the day-to-day administration of the University, and which specify details such as the content of programmes and the nature of examinations, are called **University Regulations** and are made on the authority of the University Senate.

University Regulations may be classified broadly as follows:

- a) Regulations which apply to all students in the University, such as library regulations, computing regulations, discipline regulations, examination regulations, and so on;
- b) Regulations which are specific to particular degree programmes and which prescribe the requirements for student progress from one year to the next and the material content of examinations.

University Data Protection Statement

The University of Strathclyde is registered as a data user with the Office of the Information Commissioner. General enquiries about student-related data should be made to the Head of Student Experience. For department-specific information regarding the use of personal data, students should contact the Departmental Data Protection Officer (Sandra Miller, LT914, s.j.miller@strath.ac.uk) or the Head of Department.

See also www.strath.ac.uk/whystrathclyde/universitygovernance/accesstoinformation/dataprotection/

Voluntary Suspension

If circumstances warrant it, you may withdraw temporarily from your degree programme, normally for the remainder of an academic session. This is done by requesting Voluntary Suspension. You should first consult your Personal Development Adviser or Year Coordinator, and then complete the form available from Voluntary Suspension.

Approval will then be sought from the Science Faculty Vice Dean (Academic) on your behalf. You should also notify your grant awarding body SAAS or LEA if you go into Voluntary Suspension. When you are ready to resume your programme of study, you should notify Student Business-Science and your grant awarding body accordingly.