

Science and Engineering Degrees with Foundation Year and International Science and Engineering Foundation Programme (ISEFP)

Student Handbook 2023-2024

This handbook is for all students enrolled on Year 0 of a Science and Engineering Degree with Foundation or an International Science and Engineering Programme.



About this handbook ... and where else can you find information?

This handbook should be used together with the Academic Regulations and http://arcs.qmul.ac.uk/students/. This handbook provides information specific to the Science and Engineering Foundation Programmes, while https://arcs.qmul.ac.uk/students gives information common to all students at Queen Mary. The Academic Regulations provide detailed information on progression, award and classification requirements.

Nothing in this handbook overrides the Academic Regulations, which always take precedence.

The Academic Regulations are available online at: http://www.arcs.qmul.ac.uk/policy/

This Foundation Year Student Handbook is available online on the Foundation Support QMPlus page: https://qmplus.qmul.ac.uk/course/view.php?id=3829

Disclaimer

The information in this handbook is correct as of September 2023. In the unlikely event of substantial amendments to the material, we will attempt to inform you of the changes.

These changes will generally be announced using one or more of the following methods: by mailings to your Queen Mary e-mail account, and by posting on the Foundation Year QMplus page: https://gmplus.qmul.ac.uk/enrol/index.php?id=3829

Queen Mary cannot accept responsibility for the accuracy or reliability of information given in third-party publications or websites referred to in this handbook.

Important Reminders

Remember to regularly check the following programme website for announcements:

https://qmplus.qmul.ac.uk/enrol/index.php?id=3829

This website is an important source of additional information about the programme, the modules that you will be taking and other facilities at Queen Mary. You must look at this website regularly.

Remember also to regularly check your Queen Mary e-mail account for messages.

When using e-mail to contact staff, please observe the following points:

- you <u>must</u> use your Queen Mary e-mail account. Staff cannot respond to private email addresses
- you must give your full-name and Student ID number
- write your message clearly, using formal English (not text-speak)

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1.1 Director's Welcome

Science and Engineering Degrees with Foundation Year

and the International Science and Engineering Foundation Programme (ISEFP)

Welcome to our students on the Science and Engineering Degrees with Foundation Year and the International Science and Engineering Foundation Programme at Queen Mary, University of London (QMUL).

Our Science and Engineering Degrees with Foundation Year are integrated four-year programmes of study. Successful completion of the foundation year enables you to continue (without further UCAS application) onto study for a BEng Honours degree in a branch of engineering or a BSc Honours degree in a branch of science or mathematics.

The International Science and Engineering Foundation programme is a standalone one-year programme for overseas students which leads to a Level 3 qualification known as the Foundation Certificate or FdCert. This allows students to move onto a BEng Honours degree in a branch of engineering or a BSc Honours degree in a branch of science or mathematics.

The style of teaching in universities is different from the teaching methods used in most schools or colleges, and you will need to take more responsibility for your studies (*i.e.*, become a more "independent learner"). You will find the programme to be challenging and we expect you to work hard and spend about 40 hours per week on your academic studies during term time. You must also expect to do some work during vacations, especially the Christmas and Easter vacations which are your main opportunities to revise for the end of term examinations which take place in January for semester 1 and May/June for semester 2. The Foundation Year provides an excellent preparation for further study in the science and engineering fields, and many past students who have completed the year, have excelled in their studies to obtain first-class degrees.

This handbook provides you with essential information about the Foundation Year. It contains amongst other things, staff contact details, information regarding the various modules that you will be studying, rules and regulations concerning examinations and other assessments (tests and assignments), as well as general information about the participating Schools and/or support services. You will need to refer to this handbook regularly throughout the course.

The Foundation Year is administered on behalf of the five schools in the Faculty of Science and Engineering by the Foundation Education Development Unit (FEDU). If you have any queries or complaints about any aspect of your year, then we are here to listen and to try to help. Your first point of contact should normally be your advisor in your school, alternatively you can email the Foundation team at fedu@qmul.ac.uk and we will get back to you as soon as possible.

We wish you an enjoyable and successful time at Queen Mary.

Dr Giorgio Chianello

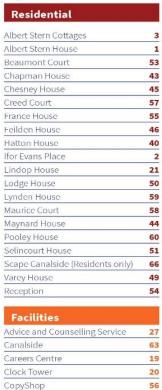
Director of Foundation Education

1.2. Campus Map (Mile End)

Maps are available online at: http://www.qmul.ac.uk/about/howtofindus/

Mile End Campus





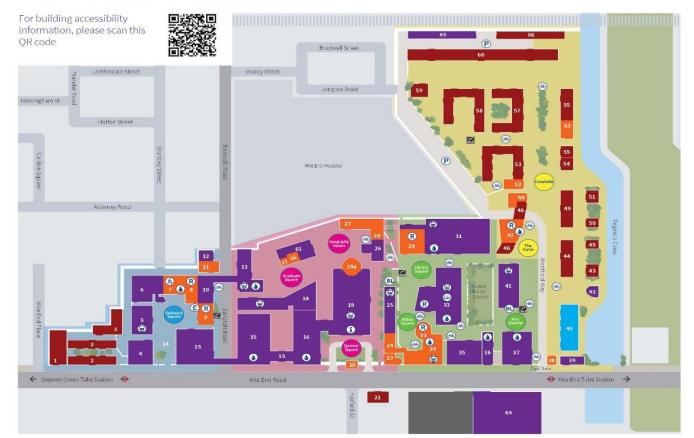
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Building closed for

(i) Information Visitors who require further information or assistance should please go to the main reception in the Queens' Building. I he smoking of cigarettes or tobacco products are only permitted at designated smoking areas / shelters indicated on this map. Flectronic cigarettes permitted on outside spaces only. These premises are alarmed and monitored by CCTV; please call Security on +44 (0)20 7882 5000 for more information. Key (Library/bookshop Fitness centre Refreshment: Bar/Eatery/Coffee place P Staff car park Bicycle parking **BL** Bicycle lockers £ Cash machine Water fountain

Smoking area/shelter

Gender-neutral toilet



2. About our Science and Engineering Degrees with Foundation Year & ISEFP

2.1 Foundation Year & ISEFP Management, Administration & Contacts

Foundation Year & ISEFP Administration team:

Foundation Year Officer: Sarahlouise Lawrence Foundation Year Administrator: Rosie Enobakhare

Main Contact Details:

Foundation Year & ISEFP Administration Office

E-mail: fedu@qmul.ac.uk

Academic Director Foundation Year:

Dr Giorgio Chianello, director-of-foundation-se@qmul.ac.uk

2.2 School Offices & Foundation Year Contacts

School Contact	Contact details
School of Biological & Behavioural Sciences Dr Chris Faulkes	School Office - 1st floor G.E. Fogg Bldg. (c.g.faulkes@qmul.ac.uk)
School of Electronic Engineering & Computer Science Dr William Marsh	School Office – CS 300, 3 rd floor, Peter Landin Building (d.w.r.marsh@qmul.ac.uk)
School of Engineering & Materials Science Dr Raza Shah	School Office – 3 rd floor Engineering Bldg (raza.shah@qmul.ac.uk)
School of Mathematical Sciences Dr Lubna Shaheen	School Office – 1st Floor Mathematics Building (l.shaheen@qmul.ac.uk)
School of Physical and Chemical Sciences Dr Theo Kreouzis	School Office – 1st Floor G.O. Jones Bldg (t.kreouzis@qmul.ac.uk)
Other Members of Staff	Contact details
Sharon Turner Foundation Year English Language & Communication Skills Co-ordinator (E1, CST)	Bancroft Building – 1 st floor (Sharon.Turner@qmul.ac.uk)

3. Enrolment and Registration

3.1 Personal Information and Data Protection

During application and at (re-)enrolment you provide us with personal information about yourself such as relevant contact details and information about your background, which is held in systems such as MySIS. It's important that you ensure this information is accurate and kept up to date. Throughout your studies (or after you graduate) you may also provide, or we may collect, other personal information and you should be aware that this also includes any work you submit for assessment in the course of your studies. Tutors may occasionally use anonymised student essays (or portions from them) as part of the teaching process. We hope you will be willing to support your fellow students by allowing this, but you may opt out by contacting the Foundation team. Other markers of engagement are monitored to help support students. If you engage with your Advisor or other support services, notes may be kept and shared with appropriate individuals. You may make use of Queen Mary's Report and Support Tool, or another user may identify you in doing so, which could result in personal data, including special category personal data or data relating to criminal offences being processed. Please refer to the privacy notice for more information.

We ensure that all personal data is held securely and will not be disclosed to third parties without your consent, unless we are obliged to do so by law – for example the annual student record that we submit to the <u>Higher Education Statistics Agency (HESA)</u> - or other conditions allow. HESA requires us to collect details of our students' ethnicities and disabilities as a means of monitoring the success of equal opportunities policies at a national level. This information is kept confidential and helps us to provide you with support and information on facilities and services that may be useful.

When you enrol or re-enrol online you will be asked to read a privacy notice about the purposes for which we use your personal data and to whom we may disclose it when required. You must read this carefully. All personal data is maintained in accordance with data protection legislation. For more information, visit: https://www.qmul.ac.uk/privacy/ and/or contact Queen Mary's Data Protection Officer via data-protection@qmul.ac.uk.

3.2 Module Registration Procedures

Students entering the Foundation Year & ISEFP must register for and take eight modules (120 credits); four modules in the first semester and four modules in the second semester.

For each Foundation Year & ISEFP programme code, there is a defined "diet" of modules (see p.35 - 41) which must be followed during module registration.

Programme diets include:

Core modules: modules that must be taken and must be passed to gain progression.

Compulsory modules: modules that must be <u>taken</u> as part of your programme.

Optional modules: modules which may be selected from a defined list of modules.

The reason for having a specific diet of modules is to make sure that you receive appropriate preparation for further study in your chosen field.

All Foundation Year modules have the same credit value (15 credits), except SEF040 Mathematics A & SEF041 Mathematics B which are double modules each worth 30 credits.

At the beginning of the academic year module registration is completed as follows:

- You will be asked to complete module registration online using the MySIS interface to the Queen Mary Student Information System. Any core or compulsory modules will be preselected, you cannot change these.
- 2. If you have any elective modules, you can find out more about these modules using the module directory https://www.qmul.ac.uk/modules/
- 3. Your module registration will then be checked and formally approved. The final outcome of your choices will be confirmed to you by email.

Changing your elective modules or programme

During the first two weeks of each semester, students on certain programmes of study are able to modify their choice of modules by reselecting their choices in MySIS. MySIS is the website you used to pre-enrol and is a portal to your student record. It shows you your personal details, such as addresses and finance, as well as your overall module results.

You are encouraged to register for your modules as soon as possible as popular modules may quickly fill up. You can find out how to change your modules on the Student Enquiry Centre website (http://www.arcs.qmul.ac.uk/students/study/module-registration/index.html).

Students may be permitted to change programmes in the first two weeks of the academic year. There may be restrictions as to whether this is permissible if students fail to meet the entry criteria or have failed to undertake core and compulsory modules. Postgraduate students are not usually permitted to transfer from a full-time to a part-time or variable mode programme after the end of November. Some changes will continue to be permitted at later points in the academic year, for example where students wish to transfer onto or off of a programme that includes a period in industry/overseas.

3.3 Further Notes about Module Registration

1. All students must take SEF030 Communication in Science & Technology in Semester 1 unless they are on the International Foundation Programme and have an IELTS score of 5.5. ISEFP students with an IELTS score of 5.5 or below must take SEF009 in Semester 1 and SEF030 in Semester 2.

3.4 Student Enquiry Centre (SEC)

The Academic Registry at Queen Mary is responsible for all aspects of student enrolment and registration. Its student-support office is named the "Student Enquiry Centre" (but it is still sometimes referred to as the Registry or Student Administration Office).

We provide support to all Undergraduate and Postgraduate Taught students and we can help with a wide variety of queries including enrolment, ID cards, student documentation, Gradintelligence accounts and more. If you are not sure about something or do not know who to contact, ask us!

We are located on the ground floor of the iQ East Court building.

Contact

Student Enquiry Centre Online (accessed via MySIS - http://www.arcs.qmul.ac.uk/students/sec/sec-online/)

Email: studentenquiry@qmul.ac.uk

Telephone: 020 7882 5005

For most day-to-day matters, however, we would advise you to first contact your Advisor or Foundation Administration staff via fedu@gmul.ac.uk.

3.5 Student ID Card

New students will be invited to collect a Queen Mary photo-identity (ID) card upon full or temporary enrolment. Guidance on where and when to collect your card can be be found here: https://www.qmul.ac.uk/newstudents/enrolment/student-id/. This card is very important, and must be carried at all times on campus. If you do not produce this card upon request and satisfy staff that it is your card through comparison of your face and the photograph, you may be removed from the building, or from campus. Misuse of your card will normally lead to an investigation under the Code of Student Discipline (http://www.arcs.qmul.ac.uk/students/student-appeals/misconduct/)

The card shows your student number. You must take your card into all face-to-face examinations, and display it on your desk for inspection. You will also need to copy the student number onto your paper.

The card also serves as your library card, and as an access card for certain buildings and equipment (such as printers and photocopiers). Many buildings have security points at which you must show your card, and others require you to scan your card to release the doors.

You may also be required to present your card to confirm your attendance (e.g you may need to touch your card on a reader in a lecture theatre).

It is vital that you keep your card safe and with you at all times on campus. If you lose your card, or if your card is stolen, you should obtain a replacement from the Student Enquiry Centre (http://www.arcs.qmul.ac.uk/students/sec/student-card/index.html). A fee is charged to replace lost ID Cards.

4. Communication, Student Records, Online Learning and IT Services

4.1 Queen Mary Email Accounts

When you first enrol as a student, you will be issued with a Queen Mary email account (often referred to as your "Queen Mary email"). You are expected to **check your Queen Mary email every weekday during the teaching semesters and examination period, and also at regular intervals during the vacations**). If you do not check your email regularly and you miss an important notice or announcement, then you will not be excused.

Important: If you wish to contact staff by email then you **must** use your Queen Mary email account. Staff will only respond to emails sent from your Queen Mary email account. To safeguard your personal information, **staff are instructed not to respond to emails sent from any other (non-Queen Mary) email accounts**, so if you fail to follow the above guidelines, then you will **not** receive a response.

You can access your Queen Mary email account by logging-on to a Student PC Service computer, and by using the e-mail client software on this service. If you are not on campus, then you should use the webversion of the mail service which is accessed from: https://mail.gmul.ac.uk

For more information on accessing and using your Queen Mary e-mail account you should look at IT Services Homepage (http://www.its.qmul.ac.uk/) and select 'Services for Students'.

4.2 Communication from Queen Mary and Foundation Year Staff

Queen Mary will communicate with you in a variety of ways. Formal correspondence will be sent to you by electronic letter, and it is important that you keep Queen Mary up to date with your personal details and address. You can do this online via the MySIS record system: http://www.arcs.qmul.ac.uk/students/mysis-record/index.html.

It is most common for Foundation Year staff, Queen Mary, and the Students' Union to contact you by your Queen Mary email. You are assigned a university email address when you enrol, and you are responsible for checking this account daily. All major notifications and updates will be sent to you by email first.

You can access your email account by logging on to a Queen Mary computer, or, if you are not on campus, at: https://mail.qmul.ac.uk.

More generally, as a student of Queen Mary you are expected to take responsibility for your studies. This includes keeping yourself informed about the programme requirements and procedures, and about any day-to-day changes in the timetable, lecture venues etc. It is therefore very important that you are aware of all the means by which Foundation Year staff will communicate with you about such matters, and to check all of them regularly.

You can expect to be treated courteously by staff but must likewise treat all administration staff, technicians, demonstrators, research, and academic staff with courtesy at all times. You should generally use academic titles when communicating with academic staff (e.g., Dr Jones or Professor Pickersgill) (see section 4.4 below for specific guidance on writing emails to staff).

Communication with relatives: Please be aware, and please inform your relatives, that university students are regarded as adults and therefore to safeguard your personal data, it is Queen Mary policy not to divulge any information concerning your progress or attendance to parents, guardians, or other relatives. The only exception would be if you have given your prior agreement *e.g.*, if you are present with your relatives or if you have given written permission to us to respond to enquiries from your relatives.

4.3 Emails (including e-mail etiquette)

When you are writing emails to Queen Mary personnel and Foundation Year teaching staff, then please observe the following points:

- use the person's appropriate academic (or other) title, e.g., Dr Andrews, Mrs Mason
- write your message clearly, using formal English (not text-speak)
- give your full-name and Student ID number
- We only respond to emails sent from your **Queen Mary email account**.

Note - the same guidance would apply in face-to-face meetings where an appropriate level of formality is expected of students – so, you should not address a staff member by their first name unless they have indicated that they are happy for this to happen (but equally you should not normally use overly-formal methods of greeting such as "Sir").

4.4 MySIS and QMplus

As a Foundation Year or ISEFP student you will need to use two systems: MySIS and QMplus.

At the start of term, you need to access the **MySIS** system (mysis.qmul.ac.uk) to **enrol/re-enrol** and to complete **module registration**. Some announcements about assessment matters will also be posted on MySIS; these will be evident on the first page that you see when you login to the database.

You can also use MySIS to update certain personal information, such as your home address (in vacations) and your term-time contact details. At the end of each year, your **examination marks** and overall **module marks** will also be published on the MySIS system.

During the year, individual elements of coursework can be viewed on the QMplus module pages and the calculated coursework marks will be uploaded to MySIS along with the final examination mark.

You should check your coursework marks have been entered correctly at the end of each semester and report problems to the Foundation Year Administration Team immediately; it is difficult to amend marks at a later date.

4.5 Updating your Personal Details

The Registry Services website (arcs.qmul.ac.uk/students) provides detailed information on updating centrally held records. Please include the summary version of this (below), and details for updating School/Institute records (suggested):

It is important that Queen Mary has up to date personal details for all students. You will be able to update your personal contact details online using MySIS, however a change in official name must be done by providing the Student Enquiry Centre with appropriate identification and/or documentation. Guidance is also available if you wish to change your 'known as' name.

You can find out more information on the Student Enquiry Centre website. https://arcs.gmul.ac.uk/students/mysis-record/personal-details/

4.6 Foundation Year QMplus pages

QMplus is used to communicate most of the important information about the programme, including timetables and tutorial group allocations. It also has links to the webpages for individual modules, as well as links to a range of other useful websites (support services, past examination papers etc.). You need to check QMplus regularly to ensure that you stay informed about changes. QMplus also provides access to your personal record of coursework marks.

To access the website, go to http://qmplus.qmul.ac.uk/course/view.php?id=3776. The website may be accessed from on-campus using the computers of the Student PC Service, or from off-campus (in which case you will be asked to provide your student service username and password when you first access the website)

4.7 MyQMUL

The my.qmul website is another student portal providing access to a range of online student-oriented information. The site can be accessed via: my.qmul.ac.uk

my.qmul should be used together with this handbook for general information on your time at Queen Mary. my.qmul contains a wide range of information, including:

- Academic and student support services
- The academic year
- Campus facilities
- Details of some key Academic Regulations
- How to? advice
- QM contact information
- Calendar

- Graduation
- Student administration, and enrolment advice
- QM policies
- Campus and QM information

4.8 WiFi Access from your own Laptop/smartphone

Wi-Fi: The wireless network you use to connect your devices is **Eduroam**. Instructions on how to connect your devices to our Wi-Fi network can be found at https://www.its.gmul.ac.uk/services/students/wifi/.

4.9 IT Services

We aim to provide exceptional support and innovative solutions to make your academic journey smoother and more enjoyable.

From the moment you step foot on campus, our comprehensive range of services is available. We understand that seamless access to email and the internet is essential for your studies, and we have implemented state-of-the-art technology to ensure a fast and reliable connection. Our high-performance computing resources are tailored to support your research endeavours, enabling you to push boundaries and make ground-breaking discoveries.

We have strategically placed computer rooms throughout the campus to cater to your needs. Equipped with the latest technology, these rooms are readily available for you to utilise. Logging in with your Queen Mary username and password grants you access to all the applications necessary for your coursework. We want to empower you with the tools you need to succeed.

Video Introduction to IT Services: https://www.youtube.com/watch?v=B7W9qa_qPdE

Your IT Account: Details of your Queen Mary username and password will be emailed to your personal address before enrolment. Don't hesitate to contact the service desk – details below – if you have not yet received these.

The IT Service Desk is your primary contact for all IT help, support and advice. Students and staff can use Live Chat with the Service Desk 24/7 https://www.its.qmul.ac.uk/about/contact/, call on 020 7882 8888 or raise a ticket via the Self Service portal https://servicedesk.qmul.ac.uk/. The QMUL IT Service Desk is the first point of contact for all IT issues for our entire user community (including staff, students and visitors). We are dedicated to providing you with a high-quality user experience and are on campus Monday to Friday, from 7 am-7 pm (with out-of-hours support available 24/7/365).

Find an available PC on campus: Use the interactive map at http://availability.stu.qmul.ac.uk/ to locate available PCs on campus.

Laptop Loan Service - for Students

QMUL students can borrow DELL laptops from the self-service machine on the ground floor at Mile End and Whitechapel Library. We offer 180 laptops for loan at Mile End Library and 24 at Whitechapel Library. Laptops can be borrowed for up to 8 hours*.

*More details can be found here: https://www.qmul.ac.uk/library/using-library-services/borrowing-basics/laptop-loan-/#d.en.831133

AppsAnywhere and Free and Discounted Software for Students

Students have access to a range of free and discounted software such as Office 365, SPSS and NVivo etc.,

more details and how to request this can be found here: https://www.its.qmul.ac.uk/support/self-help/software/free-and-discounted-software/

Our 'AppsAnywhere' service allows you to access some of Queen Mary's specialised apps when away from your department or off campus using your personal computer and QMUL account https://www.its.qmul.ac.uk/services/students/appsanywhere/

Mobile app: Queen Mary's mobile app is available as a native app for Android (version 2.3.3 or higher) and iOS (version 6.0 and above) devices. The app allows you to do a number of things on the move, including: checking your course timetables, logging into QMplus and your Queen Mary email, searching for and renewing library books directly from your phone.

Policies: The use of IT facilities is covered by University regulations prohibiting, among other things, software piracy and unauthorised computer use. IT Services policies are published here: http://www.its.qmul.ac.uk/governance/policies/index.html.

The IT Services website contains information on several of our services and includes a range of self-help guides http://www.its.gmul.ac.uk/support/index.html.

Contact the IT Service Desk

IT Live Chat: www.its.gmul.ac.uk

Self Service: https://servicedesk.gmul.ac.uk/

Email: servicedesk@qmul.ac.uk
Telephone: 020 7882 8888 (24/7)

Copying, Printing, Binding and Scanning Facilities

The Central Print Service has printers located across every campus for student use, offering copying and scanning facilities in addition to printing.

Our wireless printing services offer you the convenience of printing from anywhere at any time.

More information about wireless printing services is available on the ITS web page at https://www.its.gmul.ac.uk/services/students/printing/.

The cost of printing and photocopying is automatically deducted from your MyPrint account linked to your student ID card. Printing and photocopying are charged per click with one click equalling one side of printed paper (Each Side).

- Black & White A4 5p
- Black & White A3 10p
- Colour A4 20p
- Colour A3 40p

The CopyShop:

With an on-campus location, the CopyShop offers comprehensive print services to students, staff and external customers both locally and globally, and are always available to give advice. The quick, professional and cost-effective service supports students throughout their time at Queen Mary offering fast turnaround times from two hours.

The CopyShop can print a range of items, some of which include leaflets/flyers, invitations, tickets,

lecture notes, programmes, posters, theses/dissertations, display banners and exhibition stands.

We offer

- a range of finishing services, including wire binding, soft (Morgana) binding and booklet production.
- Large format posters: printed up to size A0 on gloss, matt or fabric materials with bespoke sizes up to 900mm wide-to-any length.
- Your thesis or dissertation can be printed and bound in-house with an external service available for hard-bound copies.

Book Scanning Service: The CopyShop offers students a professional scanning service. If you wish to retain a section of a publication for study use, the CopyShop produce high quality, clear images without fingerprints, black areas and poor-quality results.

We can also scan materials you wish to include in your research materials in the correct format you need.

5. Student Support and Feedback

5.1 What are our expectations and what can you expect in return?

By accepting a place to read a science and engineering degree at Queen Mary, you have entered into a learning community. Within that community, the **Queen Mary Charter** (published at http://www.qmul.ac.uk/ourcommunity/) defines **reasonable expectations** that you can have of staff, and which staff can have of you, as summarised below (and elaborated in QMplus):

We can expect of each other:

- Teaching and learning informed by research
- Ethical approaches in support of our values and mission
- Respect for one another and our diversity of views and backgrounds
- Promotion of tolerance
- Active participation in our learning community
- Shared responsibility for our learning experience and development
- Fair and constructive feedback
- Commitment to providing adequate resources to support our endeavours
- Effective and open communication
- Awareness of the need to maintain a safe environment

You can expect from staff:

- High quality teaching informed by research
- Constructive and effective use of contact time
- Opportunities to develop additional skills for life after QM
- Commitment to following procedures
- Commitment to supporting the development and success of students
- Commitment to fairness and equality of treatment

Staff can expect from you:

- Attendance and active engagement in learning and research
- Commitment to your own learning experience

- Commitment to following procedures
- Engagement in developmental opportunities for life after QM

You can expect from your fellow students:

- Responsibility for their own actions
- Acceptance of a shared responsibility in collaborative working

Staff can expect from fellow staff:

- Respect for the contribution and expertise of all colleagues
- Cooperation and collaborative working

The above expectations are as agreed between the Principal and the Queen Mary Students Union (QMSU). Within the School, we express the reasonable expectations of student and staff more specifically as follows:

During your Foundation Year, you can expect:

- **support of your learning** that reflects the best scholarship in the subject and which introduces you to work that is both stimulating and challenging
- to have your learning supported in a **professional manner**, with effective use of learning technology and with provision of appropriate supporting resources
- to have access to detailed information regarding your programme, individual modules and methods of assessment via QMplus
- to receive information regarding the scheduled classes for your modules, including the timetables for your lectures, tutorials, workshops and practical classes
- to be provided with an Advisor who will also act as your personal tutor and first point of contact throughout your studies and will advise you regarding your choice of modules
- to receive reliable **advice and guidance** regarding academic issues, and assistance with contacting the relevant Queen Mary advice centre (if necessary)
- to **receive feedback** on coursework assessments **within 15 working days** (unless advised otherwise by the relevant module organiser)
- To have the opportunity to provide us with both informal and formal feedback about your modules and your programme, including via representatives on the Student/Staff Liaison Committee (SSLC).

As a Foundation Year or ISEFP student you are expected:

- to take responsibility for and engage in your own learning and personal/professional development
- to enrol and register on your programme by the published deadlines
- to familiarise yourself with the Academic Regulations and Assessment Handbook and specifically with the school and university management of suspected plagiarism to abide by the Queen Mary Code of Student Discipline.
- to adhere to health and safety rules and regulations at all times (especially in laboratories)
- to familiarise yourself with your programme structure and modules
- to attend all scheduled classes, unless there are extenuating circumstances

- if on campus, to arrive for classes on time (no later than 5 minutes past the hour) and to submit coursework assessments by the specified deadline
- to behave in a mature and reasonable manner in all classes, and to avoid disrupting lectures (e.g. by late arrival)
- to participate fully in modules, by engaging in discussion and all module-related activities.
- to keep yourself informed by reading your Queen Mary email daily and accessing the relevant pages on QMplus
- to ensure that your Queen Mary records on MySIS remain accurate and up to date
- to commit yourself to self-paced and independent study of around 20 hours/week in support of your studies
- to commit yourself to a total of at least 1,200 hours of study in each year at Queen Mary

Conduct

The Code of Student Discipline may apply to any action of misconduct whether it takes place on or off Queen Mary premises. The Code also applies to actions that are electronic and occur via electronic means such as (but not limited to) the internet, email, social media sites, chat rooms or text messages.

(http://www.arcs.gmul.ac.uk/students/student-appeals/misconduct/)

Report + Support: tackling harassment, gender-based violence and hate crime.

Queen Mary is committed to creating an environment for work and study where staff, students and visitors are treated with dignity and respect. We have no place for bullying, harassment and hate. We recognise that these behaviours can take <u>many forms</u>. Any allegation of harassment, hate crime, bullying or victimisation will be treated seriously, regardless of the seniority of those involved, and anyone found to have behaved unacceptably may be the subject of disciplinary action subject to the processes detailed in the relevant <u>Queen Mary policies</u>.

Report + Support is our secure online platform for anyone at Queen Mary to report harassment, gender-based violence or hate crime, and find out about support options. If you have experienced or witnessed any form of bullying, harassment, violence or hate crime, please see <u>reportandsupport.qmul.ac.uk</u>.

All members of Queen Mary have a collective responsibility to: encourage a culture of dignity and respect; to treat others fairly, with courtesy and consideration; and to challenge inappropriate behaviour when it is safe to do so. More information can be found

here: https://reportandsupport.qmul.ac.uk/campaigns/our-commitment.

5.2 Administration Team for the Foundation Year (FEDU) & ISEFP

The Administration Team have responsibility for many Foundation Year matters and can be consulted at any time during the year if you are unsure about matters relating to course registration, programmes of study, examinations, progression *etc*. You can e-mail them at fedu@qmul.ac.uk.

5.3 Under 18s

Queen Mary is an adult environment where students are expected to behave like adults, assume adult levels of responsibility, and live independently alongside people from a wide variety of ages and backgrounds. Queen Mary has a duty of care towards all its students, but in the case of students joining before their 18th birthday, this duty is enhanced as such students are considered to be minors under UK law. Queen Mary has a Safeguarding Policy for the protection of children, and this can be accessed via http://sas.qmul.ac.uk/safeguarding/

If you enrol on the Foundation Year or ISEFP before your 18th birthday, all of your teachers will be made aware that you are a minor, and the Advisor will arrange a meeting with you at the beginning of the programme to help you understand the university's policies and procedures for providing you with special protection.

5.4 Advisors

All students are allocated an Advisor by their home school. In some cases, this Advisor may be the Foundation Year contact for the school but in other cases your Advisor may be another member of staff from the school. Your Advisor will fulfil a number of roles:

- they are the first point of contact between yourself and your home school (although you can also refer matters to the main Foundation Year contact for your school)
- they will advise you on matters relating to the degree programme you wish to study after the foundation year or ISEFP
- if there are matters affecting your studies on which you need advice, then they are one of the people you can turn to for help
- they will provide references upon request (although you must normally provide them with at least 2 weeks before any deadline)

You will be expected to see your Advisor regularly throughout the year, and it is essential that you attend these meetings.

5.5 Who should you go to for help and guidance?

If you are in need of information and advice, then you should first check the relevant QMplus pages, as the information you seek may well already be there. If it is not then there are, as previously mentioned, a range of people who can help you.

If you need information or advice about matters relating to the programme organisation, the scheduling of lectures and tutorials, or similar matters, then you should contact the Foundation Year Administration Team at fedu@gmul.ac.uk

If you wish to discuss problems of a personal nature that are affecting your studies, then your first contact should normally be your Advisor. Sensitive issues can be discussed in confidence and details will not be discussed with any other person without your agreement should you so desire. Your Advisor may not always be able to help you, but if they can't then they should be able to refer you to one of the university support services (such as Advice and Counselling) who will be able to help.

Some important points to remember....

- Staff will not be able to advise and help you, or make any allowances, unless they are aware of any
 problems you may be experiencing. You should therefore not hesitate to ask for advice if something
 is worrying you, especially if it is interfering with your academic work. Problems can usually be dealt
 with more easily and effectively if you ask for help at an early stage. Do not wait until your academic
 progress (perhaps, even your ability to complete the programme) begins to be affected.
- You must inform the Foundation Year Administration Team, if anything happens that affects your ability to attend lectures and tutorials, your ability to complete your coursework or any other aspect of your studies. Remember that you may be required to provide documentation to support longer absences, or if you miss important elements of assessment.

 In extreme cases, if there are medical or other circumstances which are preventing you from attending the programme adequately over an extended period, then you may be required to interrupt your academic studies until the following academic year.

5.6 Disability and Dyslexia Service

Disability and Dyslexia Service

The university's Disability and Dyslexia Service (DDS) offers advice, guidance and support for students with disabilities, including specific learning differences like dyslexia and dyspraxia, as well as mental health diagnoses, from application through to graduation. The range of support that the DDS is able to provide includes:

- Support and guidance in applying for the Disabled Student's Allowance (DSA)
- Support for international disabled students
- Liaison with staff in Queen Mary's Schools and Institutes regarding 'reasonable adjustments'
- Support in ensuring that course materials are fully accessible
- Diagnostic assessments for students who think that they might have specific learning differences
- Specialist one-to-one study skills support for students with dyslexia and other specific learning differences
- Specialist mentoring support for students with mental health diagnoses and autism
- On-site and online DSA needs assessments
- · Access to 'non-specialist' human support, e.g. note-taking
- Access to assistive technology
- Guidance in accessing Examination Access Arrangements, e.g. additional time

Contact

Telephone: 020 7882 2756 Web: <u>www.dds.qmul.ac.uk/</u> Email: <u>dds@qmul.ac.uk</u>

5.7 Advice and Counselling Service (ACS)

Advice and Counselling Service

The Advice and Counselling Service offers confidential, professional support services to all Queen Mary students. We have helpful advice and guidance for financial, immigration and other practical issues as well as emotional, mental health and wellbeing support on our website

(https://www.qmul.ac.uk/welfare/). You will also find information there about our services and how to contact us: https://www.qmul.ac.uk/welfare/about-us/contact-us/.

Money and practical advice

Managing practical and financial matters while also focusing on your studies can be challenging. Welfare Advisers provide confidential advice and guidance about funding your studies; planning and managing your budget; tuition fees and fee status; and the practical implications of a change to your studies. We offer dedicated support for students who are estranged (no longer have contact with their family), students who have experience of local authority care, students from a forced migration (asylum seeker/refugee) background and students who are carers. We also provide support for students experiencing, or at risk of, domestic abuse, so called 'honour'-based violence and forced marriage. Check our website: https://www.qmul.ac.uk/welfare/money-and-practical-advice/ to see the range of advice and guidance we offer, and how to contact us.

Visa and international students' advice

Immigration rules change frequently and can be complicated. Welfare and International Student Advisers provide confidential advice and guidance about visas for study (and visas for dependents) as well as other immigration issues, financial advice, and practical matters relating to life in the UK as an international student. Check our website: https://www.qmul.ac.uk/welfare/visas-international-advice/ to see the range of advice and guidance we offer, and how to contact us.

Counselling

Life can seem like a struggle at times, and it is normal to sometimes feel a bit low or anxious. Sometimes, though, emotional and psychological issues can become too challenging, and may have a negative effect on your studies and well-being. Our Counsellors can help you to make sense of difficult experiences and feelings by providing the opportunity to think and talk reflectively, which can bring relief and meaningful changes.

The first step is meeting confidentially with one of our Counsellors to discuss what type of support might be most useful to you. This might be short term counselling, group therapy, cognitive behavioural therapy or a referral for longer term support or specialist services outside Queen Mary / in the NHS. For many students, just one or two sessions can really help. Our Counsellors are all highly experienced in working with students, and all types of issues.

Mental Health

We also have a mental health team who can advise and support you to manage a mental health condition while you are studying at Queen Mary. Our Mental Health Advisers can advise you about the local NHS and other support services available in Tower Hamlets and the neighbouring boroughs as well as offering a range of interventions to help you manage your mental health.

Sexual assault and harassment advice

The Sexual Assault and Harassment Advisers (SAHAs) are specialist advisers who provide emotional and practical support to any student who has experienced sexual assault or harassment, whether that's happened recently or in the past. The SAHAs can support you whether this happened at University or not.

The SAHAs can provide you with practical support, such as advice around your safety, impartial information and support around your options for reporting both within the University and externally, and signposting/referring you to appropriate support services both within the University and out. The SAHAs can also provide emotional support, including supporting you to understand and manage the impact of sexual violence, working with you to develop positive coping strategies and helping you to re-build your self-esteem and trust in yourself and others.

Contacting the Advice and Counselling Service

For more information about available services and contact details please visit the Advice and Counselling Service's website: https://www.qmul.ac.uk/welfare/

Email: via website online form: https://www.gmul.ac.uk/welfare/about-us/contact-us/contact-us-form/

5.8 Student Health Service

We have an NHS Student Health Service on campus, if you live (a) **on campus** in our halls of residence, or (b) off campus but within the London Borough of **Tower Hamlets**. Further details on how to access healthcare if you live inside or outside these areas are given on the Student Health Service website at: www.studenthealth.qmul.ac.uk

5.9 Faith at QMUL

Queen Mary welcomes over 25,000 staff and students on its campuses in London and is committed to encouraging religious understanding, freedom of speech and open social interaction.

Queen Mary is proud of its diverse multicultural population. With a variety of faiths among staff and students, our facilities are designed to be places where people of all faiths are welcome to use the spaces for contemplation, reflection, meditation and worship.

Please, visit <u>Faith at QMUL</u> for further information, including facilities and services, policies and guidelines and other useful information.

5.10 Academic Skills Enhancement (ASE)

Library Services at Queen Mary is your source for knowledgeable, helpful staff, study environments supporting a range of modes of learning and research, and access to your core and wider reading needs.

Academic Skills

The Teaching and Learning Support team within Library Services works in a number of ways with taught students at any level, undergraduate or postgraduate, from any subject discipline, to develop the skills and practices needed to become more effective in their academic work and excel at university.

Areas covered include: writing for academic purposes, finding and evaluating relevant literature and sources of information, adapting to university, effective reading and note-making, maths and statistics support, presentation skills, time management, critical thinking, understanding marking criteria, using feedback, writing in different disciplines, revision, and exam preparation, and avoiding plagiarism.

Faculty Liaison Librarians, Senior Academic Skills Advisers and Information Skills Assistants offer support and developmental opportunities in the form of one-to-one tutorials, workshops, drop-ins, and self-access resources. In addition, they host <u>Royal Literary Fund (RLF) Fellows</u> who offer writing advice to both taught and research students.

For more information on the services and resources available, and how to access them, visit https://www.qmul.ac.uk/library/academic-skills/

Where do I study?

Library Services manages a range of study environments that support different modes of study, including the three London campus libraries at Mile End, Whitechapel, and West Smithfield; each has a character and ambience of its own. From individual silent study to small group study, to hybrid working, their spaces are open seven days a week for long hours to meet your needs.

Find out more about Libraries and library-managed study and research spaces

How do I find the reading materials I need for my course?

Their collections cover core reading texts and media set via reading lists, wider reading for context and deeper understanding, as well as research texts and other material to support broader exploration. These collections are a mixture of physical and electronic editions. Where they do not hold an item that you would like to access, Library Services may be able to purchase it, borrow it via Inter-library loan from elsewhere, or provide you with access via membership to another university or research library.

Start searching the collections using Library Search

Your reading list is a good place to start or see the guide for your subject on their website for a wider overview of the types of resources supporting your area of study.

How do I find help?

All the up-to-date information on their services is available on their website. If you need help getting answers to questions, you can contact them remotely via webchat or email, and in person at the Welcome Desks in each of the libraries.

Contacts for Library Services

Website: https://www.qmul.ac.uk/library/

Email: library@qmul.ac.uk

Webchat: https://qmul.libanswers.com/

Telephone: 020 7882 8800

5.10 Careers Advice

It's never too early to start thinking about your longer-term career options! Queen Mary's Careers Service (https://www.qmul.ac.uk/careers) is available to all students and graduates of Queen Mary. Its professional advisors can help you choose a career, help you present yourself favourably to prospective employers, liaise with employers of previous graduates and provide facilities for employer/student interviews. Please visit the Careers Service website, using the link above, for their location, contact details and opening hours.

5.11 Student Feedback & Questionnaires

Your views are important to the school and to Queen Mary and there are a variety of ways in which you can communicate your opinions to us.

At the programme level there are a variety of ways in which you can communicate your opinions to us. One of the best methods of bringing matters informally to our attention is through your Advisor or the Foundation Year Administration Team. However, we also have the following methods in place for soliciting feedback, and for processing any complaints that you might have.

At various points throughout the programme (including at the end of each module) you will be asked to complete a questionnaire. These questionnaires provide you with an opportunity to anonymously comment on matters relating to teaching and other aspects of the programme. The results from these questionnaires are fed back to individual module organisers but are also reviewed at Student-Staff Liaison Committee (SSLC).

6. Queen Mary Calendar and Semester Dates

6.1 Structure of the Academic Year

Queen Mary operates two twelve-week semesters, each corresponding approximately to one term. Semester A runs from September to December, Semester B runs from Late January to April (depending on the timing of Easter)

The university also holds semester-based exams. After the end of the first semester in December 2023 there is a two-week examination period in January 2024 that covers modules studied in the first semester. After the end of the second semester there will then be another examination period for modules covered in that semester and yearlong modules. Please note that you should be available to attend University throughout this time. The school is closed on weekends, Bank Holidays and University closure dates.

For 23/24 the main semester and examination dates are as follows:

Welcome week: 18th – 22nd September 2023

Semester A Teaching: 25th September 2023–15th December 2023
Semester A Examination period: **4th January 2024 – 19th January 2024**Semester B Teaching: 22nd January 2024 – 12th April 2024
Bank Holidays: 29th March 2024 and 1st April 2024
Semester B Examination period: **2nd May 2024 – 31st May 2024**

Bank holidays: 6th and 27th of May 2024

Late Summer Exam period: 5th August – 16th August 2024 (for resit and deferred first sit

exams)

These and other key Queen Mary dates are available online at www.gmul.ac.uk/about/calendar/

7. Scheduled Teaching & Timetables

For most modules, staff-directed learning ("teaching") happens through a module-specific balance of lectures, tutorials, or workshops. The complete timetable for a typical module is therefore a combination of two or more of these different components which must be supplemented by 80 to 120 hours of self-paced and/or self-directed, independent study.

Classes may be scheduled at any time during the university's normal operational teaching hours (Monday – Friday, **09:00h – 18:00h**) and you must be available to attend all scheduled classes. Exceptionally, classes may be scheduled outside of these normal hours. **Your personal timetable can be found via the following:**

- The Timetable icon via the QMUL Mobile App, which can be downloaded from the Apple and Google app stores. Search for 'QMUL' and look for the icon. Further information can be found here.
- QMplus_under "My Timetable" on MY QMPLUS DASHBOARD or by clicking on Personal timetable on a module page. For more information, please use this link: <u>Accessing your personal timetable</u> <u>Technology Enhanced Learning Team (qmul.ac.uk)</u>
- <u>The Central Timetabling Website</u>. For more information, please use this link: <u>https://elearning.qmul.ac.uk/learning-applications/qmplus/student-guides/accessing-your-personal-timetable/</u>

7.2 Accessing your Personal Timetable of Lectures/Practicals/Workshops

You are registered for your modules on MySIS, and the central university administration uses this registration information to generate your personalised timetable, which can then be accessed via the links provided on QMplus. Lecture timetabling (and some other scheduled sessions) will be available before the start of each semester. You must ensure that you are registered on each module correctly in order to ensure that your timetable accurately reflects your studies.

You should ensure that you know which of your modules are running in Semester A, which are running in Semester B, and which run throughout Semesters A and B.

Any timetable queries should be directed to the Foundation Year Administration Team at fedu@qmul.ac.uk remember that student timetables are individual, and your friends may have a different timetable to you.

8. Attendance & Engagement with your Studies

Queen Mary expects students to engage with **all** the lectures and other sessions associated with the modules for which they are registered as part of their programme of study.

As a full-time student you are expected to be available to attend classes scheduled (online or on-campus) at any time between 9 am and 6 pm, Monday to Friday, during the teaching semesters. You are also expected to attend all 12 weeks of each semester. Students are also expected to submit all coursework by the published deadlines and to participate in summative and formative assessments.

More specifically, for the Foundation Year and ISEFP students, unless you have accepted extenuating circumstance as defined by the University Regulations, you are expected to attend all scheduled classes and submit all coursework assignments in each module. If your attendance and/or lack of coursework submission is cause for concern, then we will follow the necessary procedure with you. This would include warning emails followed up by a meeting.

If you fail to meet the programme requirements with regard to attendance and/or submission of coursework, and are unable to provide satisfactory explanation with appropriate supporting evidence for this deficiency, then you are liable to:

(i) Deregistration from the Programme (in which case your registration as a student at Queen Mary will also be terminated).

8.1 Absence as a Result of Illness or Other Good Reasons

You are required to attend all scheduled classes, but we understand that an occasional absence due to minor illness can occur.

However, if circumstances beyond your control ("extenuating circumstances") prevent you from attending Queen Mary for an extended period (more than 5 working days) then you must contact the Foundation Team by e-mail or telephone as soon as possible (no later than 5 days after the start of your absence), so that we are aware of the reasons for your absence.

If you miss an assessment/s as a result of your absence, you should submit an **EC Form via MySIS**, specifying the precise dates and reasons of the absence, and what assessments you have missed.

8.2 Absence for religious reasons

Queen Mary is a diverse community of over 30,000 students and staff. With a variety of faiths and beliefs represented on campus, we are committed to tolerance, understanding and co-operation, as well as to

ensuring as far as possible that our policies are consistent across all needs. Many religions and beliefs require their members to pray at specific times during the day, or have special festivals or spiritual observance days. We recognise therefore that students at Queen Mary often strike a balance between their educational and religious commitments.

One of Queen Mary's fundamental aims is to provide an education that is judged internationally to be of the highest quality. It would be both impractical and inconsistent with our aims as a university to suspend teaching for reasons of religious observance, but we will accommodate students' religious commitments where we reasonably can do so. This may include providing learning materials (potentially including QReview recordings) online and permitting students to attend classes at different times where there is availability.

Students are expected to stay engaged and up-to-date with their studies throughout their time at Queen Mary. Schools and Institutes should make their expectations for attendance and submission of coursework clear to students at the beginning of their studies, and students should inform themselves beforehand about the potential implications of missing learning and teaching activities. Students must also inform their School or Institute beforehand if they intend to miss any teaching. We will take religious commitments into reasonable account when reviewing students attendance, but we expect students to plan their studies so that they can submit coursework on time.

The following procedures apply in the event that a special festival or spiritual observance day would result in absence from a scheduled assessment.

- In the case of an in-class test, students may request permission in advance from their Head of School or Institute to be absent on that occasion. The Head of School or Institute will consider whether reasonable adjustments can be made, for example by permitting late submission or rearranging the test. It is important to submit requests well in advance, in case reasonable adjustments cannot be made.
- In the case of formal examinations, students may notify Queen Mary of any special festivals or spiritual observance days by submitting the online 'Notification of Religious Holidays form' by the deadline specified in the Academic Calendar. We will accommodate such requests where we reasonably can do so. More information can be found here: https://arcs.qmul.ac.uk/students/exams/.

8.3 Student Engagement Policy Framework

For the timely and effective administration of support, the Foundation Team wishes to use the following markers of student engagement. This is to ensure that students are well supported and given every opportunity to progress with their studies and to achieve to their fullest potential whilst here.

1. Markers of Student Engagement

- 1.1 Attendance: All undergraduate students are expected to attend scheduled taught sessions including lectures, practical classes, group work, workshops, tutorials, seminars, computer lab sessions, problem-solving classes, exercise classes, lab sessions, project meetings, and other events which are associated with the modules for which they are registered as part of their programme of study. Attendance will be captured via registers and electronic logs. When a student is absent from two successive taught sessions their absence will be flagged to the Administration team.
- 1.2 Coursework Submission: All undergraduate students are expected to submit reports, exercises essays, and other pieces of coursework associated with each module for which they are registered as part of their programme of study, by the individually advertised deadlines and method of submission. Coursework submissions will be monitored via QMplus.

- 1.3 Participation in Formative Assessments: All undergraduate students are expected to participate in a range of activities (with or without the allocation of marks) that help to inform teaching and learning during the learning process. Examples of such activities are subject related quizzes, or exercises linked to module materials on QMPlus.
- 1.4 Marks from Summative Assessments: All undergraduate students are expected to participate in a range of activities assessing the outcomes of a learning process. Provisional and/or confirmed marks allocated from such summative assessments e.g., weekly tests, coursework, and examinations, often contribute to the overall module grade.
- 1.5 Other Student Engagement Activities: All undergraduate students are expected to participate in a range of formal or informal activities that signify continued engagement with their programme of study. Examples of such activities are scheduled meetings with Advisors, and group work.

What is Learner Engagement Analytics and what does it have to do with me?

Let's begin with the basics! Learner Engagement Analytics is a term that is used to describe the data the University holds about your engagement with various services, as well as your demographic data. Learner Engagement Analytics is often referred to as LEA, so you may also have heard about it under that name. Currently, your engagement data comes from the digital footprints that you leave when you use QMPlus and other University systems and data about your grades and academic history. When all this data about you is brought together in one system, it's called Learner Engagement Analytics.

The following types of data may be used for the LEA system at Queen Mary:

- Background information: your name, identifiers used by the University, contact details, and a link to the photo we hold of you.
- Details about your course, the modules you are taking, the credits you have achieved and your advisers.
- Details of your assessments, marks and grades obtained.
- Details of your activity in **QMPlus and other digital systems**: such as logins, resources viewed, and assessments submitted and graded.
- Details about your engagement with teaching activities, such as attendance.
- Any extenuating circumstances that have been approved.
- As part of the ongoing development of the LEA platform we will be including some data about your use
 of reading lists.
- We may link data for **Statistical Purposes only** to your date of birth, ethnicity, gender, declared disabilities, entry qualifications, whether your parents were in higher education, your socio-economic background, and whether you are an overseas student. Two of these data types are what is known as special category personal data: Ethnicity and Disability. They are being included within our models to improve our monitoring of equality of opportunity and improve the accuracy of the models. By conducting statistical analyses, we can distinguish various engagement patterns among different groups without identifying individuals. These analyses will be conducted anonymously.

As you can see, LEA has a lot to do with you – it's data about you! The University has collected this data about you for a long time, but the University has decided to create a system that brings your data from different sources together, and this system is going to be used to analyse your data to better understand and support your journey through the University.

What will my data be used for?

It's good to be careful with your personal data, and we can assure you that your data will only be used to improve the student experience and provide tailored support when you need it. For example, in Schools where

LEA has been implemented, if we can see that your engagement has decreased, your Advisor and the student support staff in your School might reach out to you to see if you need a bit of extra support to get back on track. Another benefit is that the engagement data from all the students in your cohort can help academic staff to improve their learning materials. If a lecturer can see that most students in your class aren't opening the resources on QMPlus, it might be sign that they need to redesign the QMPlus page, so it is easier for you to access the right resources at the right time.

Now that you know what we do with your data, we also want to make it clear that your data will never be used for assessment unless you have explicitly been told that this is the case (this is only the case for a small minority of courses that have relied on engagement data for assessment for a long time, so this isn't a new feature of the LEA system). Similarly, if we can see that you have disengaged, the LEA system will never be used to make any automatic decisions about your progression. Finally, your data will never (not now, not in the future) be used for the purpose of the Prevent scheme.

Your data – like all other kinds of data the University collects about you – will be processed in accordance with the University's **Data Protection Policy** and **Student Privacy Notice**.

Who will have access to my data?

We know that you probably don't want lots of people to see your data, and only a small group of people will have access to your data. Only two groups of people will have access to your data. The first group is staff whose job it is to support you and your learning. This includes your Advisers, academic staff and student support staff. Only staff that work directly with you (so not all staff across all parts of the university) have access to see your data. The second group is staff whose job it is to develop and maintain the LEA software. This may include IT staff and staff from external software suppliers. When staff from both of these groups access your data, they must adhere to strict data protection rules. Your data will also be combined with other students' data to find trends and enable comparison. When your data is used this way, it will not be possible to identify you.

What will happen if my LEA data shows a lack of engagement?

Our first step will always be to try to get in contact with you to find out what is going on. Usually, your Advisor or someone from your Schools' student support team will contact you. If you're going through a difficult period or you are struggling to keep up with your academic work, the staff member will signpost you to relevant support services and see if any additional support needs to be put in place.

We know that all students have different study habits, so if you feel the LEA data doesn't accurately reflect your engagement, you can discuss this with the staff member that contacts you.

Your LEA data will never be used to make automatic decisions about your progression – a staff member will always reach out to you before any decisions are made!

What's the future of LEA?

First of all, we're working on a dashboard that will give students a simple way to see their own Learner and Engagement Analytics. The intention is that students can choose to use this data to monitor their progress and get an accurate idea of their progress compared to the rest of their cohort. It will of course not be compulsory to check your LEA Analytics data – it's a tool you can choose to use if you find it helpful.

As the LEA system develops, the system will also be able to make predictions based on the data that comes into the system. This feature is not available yet, but when it becomes available, it will allow staff to identify if you might need a bit more support. It will also be a way for you and your Advisor to discuss your expectations for

your academic results and see if you need to adjust your engagement to make it more likely that you can achieve the results you want.

I have a concern or a question. Who can I contact?

We want to be completely transparent about the way LEA works at Queen Mary, so don't hesitate to get in touch if you have a concern or a question. In the first instance, please contact your Adviser.

2 Action Following Identification of Students Who May Require Support

- 2.1 Actions by the Foundation Team are designed to support students to engage or re-engage with their study programme. The underpinning principles are that Queen Mary, once it has admitted a student to a programme of study, has a duty of care to that student, whilst in turn the student has a responsibility to engage with the available support. In such cases, support will be designed around the needs of the individual student.
- 2.2 A student identified as approaching or falling below the minimum requirements of engagement set by the Foundation Team will be contacted alerting them to this, outlining support mechanisms to deal with the issues that may be contributing to this.
- 2.3 Students may also be invited to a meeting with the Foundation team, to discuss issues that might be affecting their studies, and for the provision of encouragement/advice (with possible referral to Queen Mary support services if necessary). The first port of call is either the Foundation Team or your Advisor, who in turn may liaise with the relevant Student Support Staff.
- 2.4 The Foundation Team will always try to help students who are experiencing problems, but we cannot do so if we are not kept informed of them. If there are factors making a student's engagement with their programme difficult, it is essential that the student discusses these with their Advisor, or an appropriate person, at an early stage. This will give us the opportunity to intervene and provide the necessary support.

8.4 Extenuating circumstances (ECs)

An Extenuating Circumstances guide for students can be found at https://www.qmul.ac.uk/student-experience/student-wellbeing-hub/extenuating-circumstances-a-guide-for-students/

Extenuating circumstances are defined by Queen Mary as:

"Circumstances that are **outside a student's control** which may have a **negative impact** on a student's ability to **undertake or complete any assessment** so as to **cast doubt on the likely validity of the assessment** as a measure of the student's achievement."

Extenuating circumstances are usually personal or health problems. Health problems include your emotional wellbeing and mental health, as well as your physical health. Extenuating circumstances do not include misreading your exam timetable, planned holidays or events, or local transport delays.

Queen Mary operates a **fit to sit policy**, which covers all assessments including coursework and exams. If you sit an exam or submit a piece of coursework you are deemed to be fit to do so. In such instances a request for extenuating circumstances will not normally be considered. If you do not feel you are well enough to attend an invigilated exam, then you should not attend and should submit a claim for extenuating circumstances instead.

To submit an extenuating circumstance request you must submit a claim via the Extenuating Circumstances section of MySIS. Once you have submitted the claim you will be able to check the progress and will be notified of any decisions or enquiries made. Claims for Extenuating Circumstances should be submitted within 2 days of the assessment deadline.

If you are submitting a **standard EC** claim it must be accompanied by **relevant supporting evidence** (for example medical certification, death certificate, police report and crime number, or other written evidence from a person in authority). Please note that although accompanying documentation can be submitted after the EC form, claims for EC that are not supported by appropriate documentary evidence **cannot be considered**. It is in your best interest to provide evidence and supporting documentation that is as comprehensive as possible.

You are entitled to **self-certify** on up to three occasions each academic year. This means completing and submitting the Queen Mary self-certification form in place of independent evidence. Please note that self-certification does not mean automatic approval of a claim – your school/institute will consider it in the normal way and will need to be satisfied of the validity of the claim and satisfied that it justifies the outcome.

Each self-certification can cover a period of up to seven calendar days from the assessment deadline - this is the maximum amount of time that each instance of self-certification can cover.

Students are not permitted to use consecutive self-certification applications, that is, you cannot claim for two back-to-back seven-day periods using self-certification. Also, you cannot use a self-certified application more than once for the same assessment.

When you submit an EC form you will be issued with a receipt via email.

All extenuating circumstances claims are kept confidential until they are considered by a subcommittee of the School/Institute's Subject Examination Board. All proceedings of the subcommittee are strictly confidential and will not normally be discussed at the full examination board meeting.

It is **your own responsibility** to submit any claims for extenuating circumstances. Please ensure that if you have what you believe is a valid case for ECs, you complete the submission process in accordance with Foundation Year guidelines and deadlines.

It is not possible to make a retrospective claim for ECs, specifically once you know your results of any assessment that might have been affected. Consequently, claims for ECs submitted after the deadline will not be considered by the EC panel.

All claims must be received no later than three working days before the relevant examination board meeting otherwise they cannot be considered.

Important dates for Coursework ECs

- In order to arrange extensions, Coursework ECs should be submitted within **7 days** of the missed assessment
- The deadline for Semester A Coursework ECs is **Monday 18th of December 2023.**
- The deadline for Semester B Coursework ECs is **Monday 15th of April 2024**.

Important dates for Exam ECs

- The deadline for January exam ECs is **Friday 26th of January 2024.**
- The deadline for May exam ECs is **Friday 7th of June 2024**.
- The deadline for August exam ECs is Friday 23rd of August 2024.

What types of requests for absence might be approved?

- A scheduled hospital appointment (e.g. for surgical procedures)
- Jury service

- A visit to see a terminally ill relative (if this cannot be accomplished over a weekend)
- A recognized, major religious holiday (as detailed on the BBC Interfaith Calendar)
- A scheduled appointment with a UK government agency (e.g. the UKVI)

What types of requests for absence are likely to not be approved?

- A family celebration (e.g. a parent's birthday party)
- Social, leisure and holiday commitments
- An appointment that could easily have been made outside the normal teaching hours
- Employment

8.5 Extenuating circumstances of extended duration

- As previously noted, problems which are outside of your control and generally impair your ability to
 attend or complete a course are referred to as "extenuating circumstances" or "ECs" these may
 include serious health, family and other personal problems. If you are <u>regularly</u> experiencing problems
 in either attending or in completing your coursework due to extenuating circumstances, then you
 should notify the Foundation Year Administration Team at <u>fedu@qmul.ac.uk</u>. These extenuating
 circumstances may then be considered when we are monitoring attendance, and when matters of
 deregistration are considered.
- Any detailed information that you provide will be regarded as confidential and only the broad nature
 of the circumstances will be disclosed to Queen Mary teaching staff; however, if the matter is
 particularly sensitive then you may wish to first discuss the matter with your Advisor or the Foundation
 Year team.
- Further guidance about Extenuating Circumstances can be found here. If the circumstances are impacting your ability to complete assessments, then you must formally record the extenuating circumstances by completing and submitting an Extenuating Circumstances form which is available via MySIS.
- Please note that if the extenuating circumstances are of extended duration and particularly severe, then you will normally be advised to interrupt your studies (see section 8.9) until the problems are resolved. Although we would normally wish students themselves to take such a major decision, in extreme cases we may have to deregister you from the programme if the extenuating circumstances are preventing you from properly engaging with the programme of study, and you have failed to interrupt your studies.

8.6 Deregistration Policy & Practice

Deregistration from the Programme

Should you not meet programme requirements for attendance or for submission of coursework, you may be deregistered from your programme of study. You will be given warnings before deregistration occurs, and you will have the right to represent your case to the Foundation Team.

Tuition Fee deregistration

When you enrol or re-enrol at the start of each academic year you agree to Queen Mary's Tuition Fee Regulations, https://www.qmul.ac.uk/tuition-fee-regulations/, which set the deadlines for paying tuition fees. Failure to pay your tuition fees by these deadlines may lead to your deregistration from your programme of study, under College Ordinance C3

http://www.arcs.gmul.ac.uk/governance/council/charter/

8.7 Interruption & Withdrawal of Studies

It is occasionally necessary for students to cease their studies for either personal or academic reasons. This is clearly a major decision which should not be undertaken lightly; so please do discuss your difficulties with Foundation Year staff before making such a decision. You are also strongly advised to make an appointment with Advice and Counselling who will be able to give you up-to-date and accurate information and advice, about the personal, financial and academic consequences of such action, and (if you are an overseas student) whether this will affect your right to remain in the UK.

Information on interruption & withdrawal of studies, including links to the relevant forms, found here: http://www.arcs.qmul.ac.uk/students/study/interrupting/index.html
http://www.arcs.qmul.ac.uk/students/study/withdrawing/index.html
https://www.arcs.qmul.ac.uk/students/study/withdrawing/index.html
https://www.arcs.qmul.ac.uk/students/study/withdrawing-a-change-to-your-studies/

There are two possible mechanisms by which you can cease your current studies:

Interruption of Studies: this is appropriate on those occasions where your personal circumstances (medical, financial, family *etc.*) are preventing you from adequately attending the programme, or from devoting the necessary time to your studies. The interruption provides you with a break from your studies for a period up to 12 months, during which you can hopefully resolve any problems. *Interruption of studies is not permitted after the end of the second semester.*

Withdrawal of Studies: this involves complete withdrawal from the programme; your studies at Queen Mary are terminated with immediate effect and you are no longer a registered student at the university. You cannot return to your studies at a later date.

If you do decide, after taking advice, that it is appropriate to interrupt or terminate your studies then it is very important that you:

- 1. inform the Foundation Year team, and
- complete an Interruption of Studies form, or a Programme Withdrawal form, which can be found here: http://www.arcs.qmul.ac.uk/students/study/interrupting/index.html http://www.arcs.qmul.ac.uk/students/study/withdrawing/index.html

If you are terminating your studies at Queen Mary and fail to complete the programme withdrawal form, then you may find that this will prevent you from starting on a course at a different university in the future.

Please note that the deadlines for both forms to be signed off by students registered on the majority of programmes are 3 January 2024 and 1 May 2024 (students who sign forms after these dates will remain registered for examinations in either the January or May examination periods and failure to attend may result in marks of 0 being entered and being used towards progression and award outcomes).

9. Essential Programme Information

9.1 Programme Structure

Science and Engineering Degrees with Foundation Year are integrated four-year courses of study. Provided you have met the necessary academic standards at the end of the foundation year (*i.e.*, achieve the specified "progression criteria") then you will <u>automatically progress</u> from the foundation year to first year on a relevant programme at Queen Mary.

For ISEFP students, you should have received a conditional offer for a degree programme when you were offered the Foundation place. The requirements for a place on a degree programme at Queen Mary are the same as the progression requirements listed on the following programme pages.

The full range of programme codes are listed below:

Home School	Programm	e Programme Title	
	Code		
School of Biological and	CCX2	BSc Biological Sciences with Foundation	
Behavioural Sciences (SBBS)	FGH2	ISEFP (Biological Sciences)	
School of Physical and	FFX0	BSc Physics with Foundation	
Chemical Sciences (SPCS)	FGH5	ISEFP (Physics)	
	FFX2	BSc Chemical Sciences with Foundation	
	FGH3	ISEFP (Chemical Sciences)	
School of Mathematical	GGX2 BSc Mathematics with Foundation		
Sciences (SMS)	FGH4	ISEFP (Mathematics)	
School of Electronic	ННХ0	BEng Electronic Engineering with Foundation	
Engineering and Computer Science (EECS)	FGH9	ISEFP (Electronic Engineering)	
School of Engineering and	ННХ3	BEng Engineering with Foundation	
Materials Science (SEMS)	FGH6	ISEFP (Engineering)	
	JJX3	BEng Materials Science with Foundation	
	FGH7	ISEFP (Materials Science)	

9.2 Request to Change School / Programme

If you decide part way through the foundation year that you wish to change the field in which you intend to pursue your degree-level studies, then you may apply to change your programme - however, such a transfer will not always be possible. You must first check that you are registered for an appropriate selection of modules for the programme to which you now wish to transfer. Transfers are typically only permitted within the first two weeks of starting the programme.

The next step is to contact the **Foundation Year Administration Team**, who will advise you of the rest of the process – this will involve obtaining the agreement of both your existing home school, and the school that you wish to become your new home school.

9.3 Foundation Year Module Diets and Progression Requirements

Although the information in this handbook is accurate at the time of publication, aspects of it may be subject to modification and revision. Information provided on the course during the year may therefore supersede the information contained in this handbook. All modules are 15 credits except SEF040/41 which are double modules, each worth 30 credits.

As a student on the Foundation Year, you are guaranteed progression into year 1 of your degree programme provided **you meet the academic criteria for progression.** You do not need to reapply through UCAS.

The minimum requirements that must be met in order to progress from the foundation year (year 0) into year 1 of a degree programme at Queen Mary are:

- complete and pass a minimum of 105 credits including SEF030
- pass <u>all of the required modules</u> at the specified grade for the Foundation Year for which you are registered
- achieve the required overall average, ranging between 50%-70% depending on the programme

<u>Important</u>: the inclusion of a degree programme in this handbook is no guarantee that it will be available for progression (as programmes are occasionally withdrawn at short notice).

In the event that you do not meet the additional progression requirements for your chosen degree programmes, but have met the minimum requirements outlined above, then the Foundation Year Progression Board will consider whether it is possible to make an offer of progression onto an alternative degree programme (but this may be in a different field to your original choice and is not guaranteed).

The following pages detail the Programme diets and Progression Requirements:

Page	Programme Title
35	BSc Biological Sciences with Foundation & ISEFP (Biological Sciences)
36	BSc Physics with Foundation & ISEFP (Physics)
37	BSc Chemical Sciences with Foundation & ISEFP (Chemical Sciences)
38	BSc Mathematics with Foundation & ISEFP (Mathematics)
39	BEng Electronic Engineering with Foundation & ISEFP (Electronic Engineering)
40	BEng Engineering with Foundation & ISEFP (Engineering)
41	BEng Materials Science with Foundation & ISEFP (Materials Science)

BSc Biological Sciences with Foundation (CCX2) and ISEFP (Biological Sciences)

	Semester A		Semester B
Either: SEF040 or	Mathematics A	Continued SEF040 or	Mathematics A
SEF041	Mathematics B	SEF041	Mathematics B
Compulsory		Compulsory	
SEF030	Communication in Science & Technology (CST)	SEF004	A Closer Look at Chemistry
SEF003	Introductory Chemistry	SEF032	Molecules to Cells
SEF031	Form and Function in Biology	SEF033	Diversity and Ecology

Minimum Progression Requirements

(these are also the ISEFP requirements for entry onto a degree programme at Queen Mary)

BSc Biomedical Sciences (B990)	• Pass a minimum of 7 modules (105 credits) including SEF030.
BSc Neuroscience (B140)	• Achieve an overall average of ≥70%, with ≥60% in SEF031 and
BSc Pharmacology and	SEF032 and ≥50% in all other modules passed (except
Innovative Therapies (B211)	SEF030 and SEF040/SEF041 for which ≥40% is sufficient).
BSc Psychology (C800)	• Pass a minimum of 7 modules (105 credits) including SEF030,
	SEF031 and SEF032.
	• Achieve an overall average of ≥65%, including marks of ≥60%
	in SEF031 and SEF032 and ≥ 50% in all other modules passed
	(except SEF030 and SEF040/SEF041 for which ≥40% is
	sufficient).
BSc Medical Genetics (C431)	• Pass a minimum of 7 modules (105 credits) including SEF030,
BSc Biochemistry (C700)	SEF031 and SEF032.
	• Achieve an overall average of ≥60%, including marks of ≥50%
	in all other modules passed (except SEF030 and
	SEF040/SEF041 for which ≥40% is sufficient).
BSc Biology (C100)	• Pass a minimum of 7 modules (105 credits) including SEF030,
BSc Zoology (C300)	SEF031 and SEF032.
	 Achieve an overall average of ≥60%.

If you complete the year without meeting the progression requirements, you will be offered the Foundation Certificate (FdCert) as an exit award, providing you pass 105 credits (7 modules) including SEF030.

BSc Chemical Sciences with Foundation (FFX2) and ISEFP (Chemical Sciences)

Semester A		Semester B	
Either: SEF040	Mathematics A	Continued SEF040	Mathematics A
Or		Or	
SEF041	Mathematics B	SEF041	Mathematics B
Compulsory		Compulsory	
SEF030	Communication in Science & Technology (CST)	SEF004	A Closer Look at Chemistry
SEF003	Introductory Chemistry (C1)	SEF032	Molecules to Cells
SEF005	Physics – Mechanics and Materials	SEF007	Physics – Electricity and Atomic Physics

Minimum Progression Requirements

(these are also the ISEFP requirements for entry onto a degree programme at Queen Mary)

BSc Chemistry (F100)	 Pass a minimum of 7 modules (105 credits) including SEF030, SEF040/SEF041, SEF003 and SEF004. Achieve an overall average of ≥60%, with ≥50% in SEF003 and SEF004, and ≥40% in SEF040 or SEF041.
BSc Pharmaceutical Chemistry (F154)	 Pass a minimum of 7 modules (105 credits) including SEF030, SEF040/SEF041, SEF003 and SEF004. Achieve an overall average of ≥60% with ≥50% in all other modules passed (except SEF030 and SEF032 for which ≥40% is sufficient)

If you complete the year without meeting the progression requirements, you will be offered the Foundation Certificate (FdCert) as an exit award, providing you pass 105 credits (7 modules) including SEF030.

BSc Physics with Foundation (FFX0) and ISEFP (Physics)

Semester A Semester B		Semester B	
Either: SEF0400 r	Mathematics A	Continued SEF040 Or	Mathematics A
SEF041	Mathematics B	SEF041	Mathematics B
Compulsory		Compulsory	
SEF030	Communication in Science & Technology (CST)	SEF006	Physics – Fields and Waves
SEF005	Physics – Mechanics and Materials	SEF007	Physics – Electricity and Atomic Physics
SEF026	Essential Foundation Mathematics	SEF015	Discrete Mathematics

Minimum Progression Requirements

(these are also the ISEFP requirements for entry onto a degree programme at Queen Mary)

BSc Physics (F300)	Pass a minimum of 7 modules (105
BSc Astrophysics (F526)	credits) including SEF030,
BSc Physics with Data Science (F30S)	SEF040/SEF041, SEF005, SEF006 and SEF007.
	 Achieve an overall average of ≥50% across all modules.

BSc Mathematics with Foundation (GGX2) and ISEFP (Mathematics)

Semester A		Semester B	
Compulsory		Compulsory	
SEF026	Essential Foundation Mathematics	SEF006	Physics – Fields and Waves
SEF030	Communication in Science and Technology (CST)	SEF015	Discrete Mathematics
SEF034	Computing	SEF035	Digital Electronics and Computer Systems
SEF041	Mathematics B	SEF041	Mathematics B

Minimum Progression Requirements

(these are also the ISEFP requirements for entry onto a degree programme at Queen Mary)

BSc Mathematics (G100, G101,G101Y)	Pass a minimum of 7 modules (105 credits)
BSc Mathematics and Statistics (GG31,	including SEF030, SEF041, SEF015 and
GG32,GG3Y)	SEF026.
BSc Actuarial Science (G1N3, G1N5, GN3Y)	• Achieve an overall average of ≥55% and a
BSc Mathematics with Finance and Accounting	weighted average of ≥60% across SEF041
(G1N4, G1N6, G14Y)	counted as two modules and SEF015.
Showing main code followed by Professional	
Placement and/or Year Abroad options	

Note: the GL11 programme is <u>not</u> available as a progression route from the Foundation Year.

BEng Engineering with Foundation (HHX3) and ISEFP (Engineering)

	Semester A		Semester B
Compulsory		Compulsory	
SEF005	Physics – Mechanics and Materials	SEF006	Physics – Fields and Waves
SEF026	Essential Foundation Mathematics	SEF007	Physics – Electricity and Atomic Physics
SEF030	Communication in Science and Technology (CST)	SEF024	Introduction to Engineering
SEF041	Mathematics B	SEF041	Mathematics B

Minimum Progression Requirements

(these are also the ISEFP requirements for entry onto a degree programme at Queen Mary)

BEng Sustainable Energy Engineering (H221, HF21)	• Pass a minimum of 7 modules (105 credits)
BEng Mechanical Engineering (H300, H304)	including SEF030, SEF041, SEF005, SEF006
BEng Aerospace Engineering (H421, H401)	 and SEF024. Achieve an overall average of ≥55% across all modules, including ≥55% in SEF041.
BEng Biomedical Engineering (HBF2, HBF1)	
BEng Robotics Engineering (H67A, H673)	8
BEng Chemical Engineering (H812, H811, H81Y)	

BEng Electronic Engineering with Foundation (HHX0) and ISEFP (Electronic Engineering)

Semester A		Semester B	
Compulsory		Compulsory	
SEF005	Physics – Mechanics and Materials	SEF006	Physics – Fields and Waves
SEF030	Communication in Science & Technology (CST)	SEF007	Physics – Electricity and Atomic Physics
SEF034	Computing	SEF035	Digital Electronics and Computer Systems
SEF041	Mathematics B	SEF041	Mathematics B

Minimum Progression Requirements

(these are also the ISEFP requirements for entry onto a degree programme at Queen Mary)

BEng Electrical and Electronic Engineering (H600, H602) BEng Electronic Engineering (H610, H611)	 Pass a minimum of 7 modules (105 credits) including SEF030 and SEF041. Achieve an overall average of ≥55%.
BEng Computer Systems Engineering (HI62, HI63)	 Pass a minimum of 7 modules (105 credits) including SEF030, SEF041 and SEF034. Achieve an overall average of ≥55%.
BEng Robotics Engineering (H67A, H673)	 Pass a minimum of 7 modules (105 credits) including SEF030, SEF041 and SEF034. Achieve an overall average of ≥55% across all modules including ≥55% in SEF041.

BEng Materials Science with Foundation (JJX3) and ISEFP (Materials Science)

Semester A		Semester B	
Either:		Continued:	Mathematics A
SEF040	Mathematics A	SEF040	
Or		Or	Mathematics B
SEF041	Mathematics B	SEF041	
Compulsory		Compulsory	
SEF003	Introductory Chemistry (C1)	SEF004	A Closer Look at Chemistry
SEF005	Physics – Mechanics and Materials	SEF007	Physics – Electricity and Atomic Physics
SEF030	Communication in Science & Technology (CST)	SEF006	Physics – Fields and Waves

Minimum Progression Requirements

(these are also the ISEFP requirements for entry onto a degree programme at Queen Mary)

Sandwich JM11)	Pass a minimum of 7 modules (105 credits) including SEF030, SEF040/41, SEF005 and SEF003. Achieve an overall average of ≥55% across all modules including ≥55% in SEF040/41.
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10. Module Descriptions

Module descriptions can also be accessed via the Module Directory at: www.qmul.ac.uk/modules.

SEF003 Introductory Chemistry

Module Organiser*/ Lecturer(s): Dr Yao Lu* & Dr Giorgio Chianello

Scheduled Classes: Semester 1

A 2 hour session per week and fortnightly optional (1 hour) drop-ins.

Assessment: Examination: 50%

Coursework: 50%

Expected Background: GCSE Science, or equivalent.

Module Description & Aims

This module introduces essential principles and concepts in chemistry, including atomic structure, electronic structure of atoms, chemical bonding, stoichiometry of reactions, measures of concentration, oxidation states and redox chemistry, acids and bases, and an introduction to organic chemistry.

Module Synopsis

Introduction to atomic structure: electrons, protons and neutrons, mass and atomic numbers, isotopes and radioactivity, measures of size of atoms and ions.

The electronic structure of atoms: Bohr's model of the atom, quantum numbers and introduction to the concept of orbitals and orbital shape, electron configurations, Aufbau principle, Hund's rule and the Pauli exclusion principle, valence and core electrons.

Stoichiometry and concentrations: empirical and molecular formulae, balancing chemical equations, the concept of moles and molarity.

Radioactivity: Review of radioactive processes, balancing nuclear reactions, determination of rate and half-life of radioactive processes and carbon dating.

Electromagnetic spectrum: Regions of electromagnetic spectrum, determination of wavelength, frequency and energy of radiation.

Chemical bonding: ionic, metallic and covalent bonding, molecular orbital descriptions of bonding in simple molecules, polarisation of bonds, bond strengths and lengths.

Properties of gases, liquids and solids: Interatomic and intermolecular forces and the ideal gas law.

Introduction to organic chemistry: identification of functional groups and classes of organic compounds, organic nomenclature, the hybridisation approach to rationalising bonding and isomerism.

Acids and bases: Brønsted–Lowry theory of acids and bases, strong and weak acids, acid-base pairs, pH and pK, buffers solutions, Lewis acids and bases

Learning Outcomes

By the end of the module you should be able to:

- Identify the atomic and electronic structure of elements, given their mass and atomic numbers.
- Balance chemical equations and perform calculations relating mass, concentration and molar quantity.

- Describe the various types of bonding that occur within matter and rationalise the bonding in simple molecules.
- Explain the concept of acids and bases, and perform calculations involving acids, bases and buffer solutions.
- Describe the various forms of radioactive decay and determine decay constants and half-lives of decay processes both mathematically and graphically.
- Explain the behaviour of gases, liquids and solids.
- Identify various classes of simple organic compounds and isomers of compounds, and name representative molecules from such classes of compounds.
- Demonstrate knowledge of the role and importance of chemical reactions in selected areas of biology and environmental science.

Assessment Details and Completion Requirements

The coursework will consist of:

- Mastering in Chemistry 1.1-1.3 (20%)
- Mastering in Chemistry 2.1-2.3 (20%)
- Class Test (10%)

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 90 min examination.

Recommended Textbooks

Chemistry: *The Central Science* (14th edition in SI units), T.E. Brown, H.E. LeMay, B.E. Bursten, C. Murphy, P. Woodward, Pearson, Harlow, 2018, ISBN 1292221224 or 9781292221229

This textbook would be very useful, but it is not mandatory that each student obtains his/her own copy. Additional alternative textbooks available in the library will be mentioned in the first lecture.

Additional Information

This module will implement an online homework system.

SEF004 A Closer Look at Chemistry

Course Organiser*/ Lecturer(s): Dr Yao Lu* & Dr Marc Fernández-Yagüe

Scheduled Classes: Semester 2

A 2-hour session per week and fortnightly optional (1 hour) drop-ins.

Assessment: Examination: 50%

Coursework: 50%

Expected Background: Students must have taken the SEF003 *Introductory Chemistry* module in Semester 1

Module Description & Aims

This module expands upon topics covered in SEF003 and provides a further introduction to the fundamentals of chemistry; including topics such as thermochemistry, reaction kinetics and equilibria, molecular structure, aspects of organic chemistry, and spectroscopic methods.

Module Synopsis

Revision of some basic topics: units, significant figures; moles, molarities and dilutions.

Thermochemistry: definition of enthalpy, calculation of enthalpy changes, mean bond enthalpies, Hess's Law, entropy, Gibbs free energy, spontaneous reactions.

Chemical kinetics: rates of reactions, factors affecting rates, order of a reaction, rate constants, activation energies and the Arrhenius equation, mechanisms, transition states, experimental determination of rates. Catalysts; effect on rates, mechanism of action.

Chemical equilibria: equilibria as a dynamic phenomenon, definition of K_c and K_p , calculation of equilibrium concentrations, Le Chatelier's principle, relation between free energy changes and the equilibrium constant.

Organic chemistry: specific examples of the structure and reactivity of selected organic compounds: including alkenes, haloalkanes, aromatic and carbonyl compounds.

Molecular spectroscopy: infrared (IR) and nuclear magnetic resonance (NMR) spectroscopy, and their applications in determining molecular structure.

Learning Outcomes

By the end of the courses, you should be able to:

- Understand the basic principles of thermodynamics and carry out calculations on enthalpy changes in reactive systems.
- Describe the nature of equilibrium in a chemical context and the factors that influence the position of equilibrium.
- Define the rate, order and activation energy of a chemical reaction and understand how catalysts affect the kinetics of reactions.
- Discuss the reactivity of a range of organic compounds, including alkenes, halogenated alkanes, aromatic and carbonyl compounds.
- Understand how spectroscopic techniques such as IR and NMR may be used to determine the structure of molecules.

Assessment Details and Completion Requirements

The coursework (50%) will consist of:

- Mastering in Chemistry 1.1-1.3 (20%)
- Mastering in Chemistry 2.1-2.3 (20%)
- Class Test (10%)

The final examination (50%).

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 90 minute examination.

Recommended Textbooks

Chemistry: *The Central Science* (14th edition in SI units), T.E. Brown, H.E. LeMay, B.E. Bursten, C. Murphy, P. Woodward, Pearson, Harlow, 2018, ISBN 1292221224 or 9781292221229

This textbook would be very useful, but it is not mandatory that each student obtains his/her own copy. Additional alternative textbooks available in the library will be mentioned in the first lecture.

SEF005 Physics – Mechanics and Materials

Module Organiser* / Lecturer(s): Dr Will Sutherland

Scheduled Classes: Semester 1

2-hours of lecture and 2-hour on-campus workshop per week

Assessment: Examination: 50%

Coursework: 50%

Expected Background: Students should have:

GCSE Mathematics Grade C, or equivalent, GCSE Science, or

equivalent.

Module Description & Aims

This is one of three modules providing a detailed introduction to concepts of physics. This course covers the following topics: Newtonian mechanics, including statics, linear and rotational dynamics; forces and energy, and their role in the molecular structure of matter, properties of liquids and gases; basic concepts of thermodynamics.

Module Synopsis

- Dynamics: scalars, vectors; speed and velocity, acceleration; motion under gravity.
- Force and energy: momentum; Newton's laws of motion; work, energy, power; conservation of momentum and energy; elastic and inelastic collisions; energy and efficiency.
- Statics: equilibrium of forces; moments and turning forces; centre of gravity; friction; conditions for equilibrium.
- Rotational dynamics: Uniform circular motion; angular acceleration;
- Building blocks of matter: quarks and leptons; protons, neutrons and electrons; atoms; molecules and their measurement; states of matter; intermolecular forces.
- Strengths of solids: behaviour of solids; elasticity; x-ray diffraction; structure of metals; glass; polymers.
- Thermal properties: temperature; heat capacity; thermal expansion; thermal radiation
- Gases: ideal gases; kinetic theory of gases; diffusion; real gases.

Learning Outcomes

By the end of the course students should be able to:

- Explain basic concepts in Newtonian mechanics
- Explain basic concepts involving energy, forces and motion
- Describe and account for the different states of matter
- Account for the properties of a range of materials
- Answer qualitative and quantitative questions at an appropriate level on the topics listed in the Module Synopsis

Assessment Details and Completion Requirements

Coursework assessment is based on a contribution from in-term tests. The final examination is of 4-hour duration.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 4-hour examination.

Recommended Textbooks:

OpenStax, College Physics 2e, by Paul P. Urone and Roger Hinrichs. Available for free online.

Other textbooks:

Sears and Zemansky's College Physics, by Hugh D. Young. Any edition should be a good reference.

New Understanding Physics for Advanced Level, by Jim Breithaupt. (4th edition, published by Nelson Thornes, 1999)

A-level Physics, by Roger Muncaster. (4th edition, published by Nelson Thornes, 1993). Advanced Physics, by Tom Duncan (4th edition, published by John Murray, 1994). Physics, by Robert Hutchings (published by Nelson, 1992).

SEF006 Physics – Fields and Waves

Module Organiser / Lecturer(s): Dr Andrei Sapelkin

Scheduled Classes: Semester 2

1 hour lecture and 2-hour Exercise Class per week

Assessment: Examination: 50%

Coursework: 50%

Expected Background: It is preferred for students to have taken the SEF005 Physics – Mechanics & Materials unit in Semester 1 but it is not necessary. Familiarity with mathematical topics taught in the SEF040 and SEF041 modules is also expected

Module Description & Aims

This is one of three modules providing a detailed introduction to concepts of physics. This course covers the following topics: the role of fields, in particular the gravitational and electromagnetic fields; the description of natural phenomena and the widespread occurrence of oscillations and wave motion; examples from the physics of sound and light.

Module Synopsis

- Gravitational Fields: Force and potential; Newton's theory of gravitation; planetary fields; satellite
 motion.
- Electric Fields: Field patterns; uniform electric fields; the inverse square law; charged spheres.
- Magnetic Fields: Magnetic field patterns; magnetic field strength; motors and meters; charged particles in magnetic fields; fields around current carrying wires.
- Electromagnetic Fields: Principles of electromagnetic induction; generators; induction motors; transformers; self-inductance: basic AC (Alternating Current) theory.
- Oscillations: Description of oscillations; principles of simple harmonic motion; oscillation of loaded springs; the simple pendulum; energy of oscillating systems; forced oscillations and resonance.
- Wave Motion: Progressive waves; wave properties; qualitative treatment of stationary waves; mechanical waves and resonance.
- Sound: Nature of sound waves; properties of sound; vibrations of strings and pipes; the Doppler effect.
- Physical Optics: Wave nature of light; interference by thin films and double slits; diffraction by slits and obstacles; diffraction gratings and spectra.
- Electromagnetic spectrum: production, detection and uses of different parts of the spectrum

Learning Outcomes

By the end of the course students should be able to:

- Describe and apply the concept of a field to a range of natural phenomena.
- Describe and apply the theory of waves to a range of natural phenomena.
- Answer qualitative and quantitative questions at an appropriate level on the topics listed in the Module Synopsis.

Assessment Details and Completion Requirements

Coursework assessment is based on two tests to be held during the term.

The final examination is of 4-hour duration.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 4-hour examination.

Recommended Textbooks

New Understanding Physics for Advanced Level, by Jim Breithaupt (4th edition, published by Nelson Thornes, 1999)

Other textbooks:

A-level Physics, by Roger Muncaster. (4th edition, published by Nelson Thornes, 1993). *Advanced Physics*, by Tom Duncan (4th edition, published by John Murray, 1994). *Physics*, by Robert Hutchings (published by Nelson, 1992).

SEF007 Physics – Electricity and Atomic Physics

Module Organiser / Lecturer(s): Prof David Dunstan

Scheduled Classes: Semester 2

1 lecture and one 2-hour exercise class per week

Assessment: Examination: 50%

Coursework: 50%

Expected Background: Students must have taken the SEF005 *Physics – Mechanics & Materials* unit in Semester 1. Familiarity with mathematical topics taught in the SEF040 and SEF041 modules is also expected.

Module Description & Aims

This is one of three modules providing a detailed introduction to concepts of physics. This course covers the following topics: aspects of electrical theory (current and charge, resistance, capacitors, circuits and meters); atomic structure and properties of the electron; the nucleus, radioactive decay and nuclear energy; an introduction to quantum physics.

Module Synopsis

- Current and Charge: Electrical conduction and understanding electricity, drift velocity; potential
 difference; resistance, addition in parallel and series; circuits and cells; Kirchhoff's Laws, analysis with
 loops; parallel-plate capacitor; capacitors in DC circuits; stored energy; charging and discharging of
 capacitors.
- Meters and Bridges: Ammeters and voltmeters; potentiometers;
- Properties of the Electron: Discovery of the electron, discharge tubes; specific charge; electron beams in electric and magnetic fields; electron tubes, the diode and the oscilloscope; measurement of electron charge with Millikan's apparatus, fractional charged quarks; Einstein, the photon and photoelectric effect.
- Electrons inside the Atom: Ionisation and excitation; hydrogen spectrum, energy levels; Bohr model of the atom, theory of energy levels; periodic table; X-rays and their uses.
- Radioactivity: Discovery and properties of alpha, beta and gamma radiations; radiation detectors; the nucleus, Rutherford scattering, discovery of the neutron; theory of radioactive decay, half-life; nuclear stability, isotopes; uses of radioactivity, tracers, cancer treatment, carbon dating; health hazards.
- Nuclear Energy: Einstein's relativity, mass and energy, $E = mc^2$; nuclear force; binding energy; nuclear fission, chain reactions, the atom bomb, liquid drop model; nuclear reactors; nuclear fusion, European Jet project, solar energy.
- Particles and Patterns: Nature of light, wave-particle duality, diffraction of electrons; wave mechanics, Schrödinger's equation and probability; Uncertainty principle.

Learning Outcomes

By the end of the course students should be able to:

- Describe the atomic nucleus and account for radioactive decay and nuclear energy
- Describe the behaviour of the electron
- Explain the basic ideas of quantum physics
- Answer qualitative and quantitative questions at an appropriate level on the topics listed in the Module Synopsis

Assessment Details and Completion Requirements

Coursework assessment is based on two tests held during the semester.

The final examination is of 4-hour duration.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 4-hour examination.

Recommended Textbooks

New Understanding Physics for Advanced Level, by Jim Breithaupt (4th edition, published by Nelson Thornes, 1999)

Other textbooks:

A-level Physics, by Roger Muncaster. (4th edition, published by Nelson Thornes, 1993). *Advanced Physics*, by Tom Duncan (4th edition, published by John Murray, 1994). *Physics*, by Robert Hutchings (published by Nelson, 1992).

SEF015 Discrete Mathematics

Module Organiser / Lecturer(s): Dr Mark Walters

Scheduled Classes: Semester 2

2 hours of lectures and one 2-hour tutorial per week

Assessment: Examination: 50%

Coursework: 50%

Expected Background: SEF026 Essential Foundation Mathematics module in Semester 1 is

preferred; students will be expected to have a comparable level of

fluency in mathematics.

Module Description & Aims

This module introduces students to arithmetic beyond the integers and rational numbers: modulo arithmetic, and the arithmetic of polynomials, logical propositions and sets. Applications of these concepts in prepositional logic, relational algebra and graph theory will also be covered.

Module Synopsis

Polynomial arithmetic: addition, multiplication, the laws of arithmetic; rational polynomials, polynomial division and partial fractions; powers of binomials using Pascal's Triangle.

Propositional logic: propositions; conjunction and disjunction and negation and their laws of arithmetic; implication and double implication; truth tables and proofs of equivalence of propositions, tautology and contradiction.

Prepositional Logic and Proof: prepositions and quantifiers, applications to specification of sets; applications to proof: contrapositive, converse and contradiction.

Naive Set Theory: sets; set operations including union and intersection; laws of set arithmetic including De Morgan's laws, Venn diagrams and applications to counting problems; introduction to probability, binomial distribution.

Relations and mappings: Cartesian product of sets; relations and their properties: symmetry, reflexivity and transitivity; equivalence relations and partially ordered sets; mappings and their properties; injectivity, surjectivity and bijectivity; functions and inverse functions.

Graph Theory: graphs; connectivity, cycles and trees.

Learning Outcomes

By the end of the module students should:

- Appreciate that arithmetic and the laws of arithmetic for integers and rational numbers have counterparts in the arithmetic of polynomials, propositions and sets.
- Be able to carry out simple calculations for all the above.
- Be able to construct and analyse simple relations using set operations
- Define functions in terms of mappings between sets, and analyse their properties, including invertibility.
- Construct, represent and analyse graphs and appreciate their role in modelling problems of connectivity and partitioning.
- Understand how prepositional logic extends propositional logic and be able to recognise and construct simple logical arguments expressed using prepositional logic.

Assessment Details and Completion Requirements

The coursework is made up of two in-term tests. The final examination is of 3-hour duration.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 3-hour examination.

Recommended Textbooks

Discrete Mathematics by S. Lipschutz & M. Lipson (Schaum's Outline Series; published by McGraw-Hill, 1997)

Note that this book contains much more material than is required for this course. For example, it also covers much of the material taught in the MTH4104 *Introduction to Algebra* module of the Mathematics BSc degree programme. You may well be able to complete this module without the aid of a textbook, but this book will enable you to read further in the subject if you are coping well with the course or will give you further explanation, discussion and examples if you are struggling with it.

SEF024 Introduction to Engineering

Module Organiser / Lecturer(s): Dr Raza Shah

Scheduled Classes: Semester 2

2 lectures per week.

Assessment: Examination: 50%

Coursework: 50%

Expected Background: Students must have taken the SEF005 *Physics: Mechanics and Materials* module in Semester 1, or have studied Physics to at least to AS-level.

Module Description & Aims

This module aims to introduce students to the application of scientific principles to solve practical engineering problems. It includes discussion of the development of the engineering field and standards, as well as basic engineering principles, mechanical applications and stress analysis

Module Synopsis

Engineering Principles and Applications: An introduction to engineering principles combining theory and calculation methods with practical applications to solve for engineering design problems. The module provides knowledge and an understanding of the fundamental engineering principles and their applications e.g., systems in equilibrium and forces, stress-strain behaviour of materials under loads, structural design shear forces, bending stresses, power transmission systems and internal combustion engines (I.C.).

Mechanical Modelling: Simplifying mechanical systems using free-body diagrams and understanding the use of assumptions when solving mechanical problems for systems in disequilibrium and when maintained in equilibrium e.g., frictionless and zero mass conditions.

Mechanical Applications: Beam design and structural design (joints and members). Linear and rotational motion for simple mechanical transmission systems (e.g., pulleys and gears) and for reciprocating internal combustion engines (RICE). An understanding of static equilibrium laws with example of supported beams in static equilibrium.

Stress Analysis: Determine shearing forces and bending moments for beams under load. Understanding how to construct shearing force and bending moment diagrams for simple beam systems under different load conditions (e.g., simply supported beams and cantilevers). Calculating the 2nd moments of area for simple beam sections and applying the Parallel Axis Theorem to composite beam sections. An awareness of different beam section profiles used in practical engineering design applications with an understanding of the implications of 2nd moments of area and bending moments for internal beam stresses, beam deflections and internal beam compression and tension.

Mechanics of Materials: Knowledge of fundamental mechanical properties of engineering materials, e.g., stress *versus* strain characteristics and the modulus of elasticity. An understanding of the implications of stress, strain, strength and stiffness for material selection in engineering design and factors of safety in design.

Reciprocating I.C. Engines: The 4-stroke *versus* 2-stroke cycles and design and performance considerations in construction, assembly, operation and developed power. Understanding simplified indicated power diagrams, compression ratios and pressure *versus* volume cycle diagrams and indicated power calculations.

Learning Outcomes

By the end of the course students should be able to:

- Understand fundamental engineering principles and the importance of standardisation and the consistent use of engineering units in the profession.
- Solve simple problems relating to mechanical applications for static systems and systems involving simple linear and rotational motion.
- Solve basic problems relating to forces, stresses and strains in materials, beams and simple structures.
- Solve basic internal combustion engine problems for determining power, engine capacity, compression ratios, swept volumes and clearance volumes.
- Develop a greater understanding of problem solving in engineering design and the distinctive characteristics of applied engineering and design through the interrelationship between mathematics, materials and physics.

Assessment Details and Completion Requirements

Coursework will consist of two in-course tests. The final examination is of 4-hour duration.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 4-hourexamination.

Recommended Textbooks

Mechanical Engineering Science, by J. Hannah and M.J. Hillier (1st edition, published by Prentice Hall, 1999).

SEF026 Essential Foundation Mathematical Skills (EFM)

Module Organiser / Lecturer(s): Argyro Mainou

Scheduled Classes: Semester 1

1 lecture and 1 tutorial per week

Assessment: Coursework: 50%

Examination: 50%

Expected Background: GCSE Mathematics, or equivalent.

Module Description & Aims

This module aims to provide students with the opportunity to develop verifiable fluency in elementary arithmetic and algebra, as is expected for a student taking a sciences course at a university. It will also enable students to become fluent, accurate and self-critical in basic arithmetic and algebra, and to develop a taste for computations of respectable complexity. The emphasis of the module is on skills training rather than theory and as such it is independent of other maths modules that students may or may not be taking.

Module Synopsis

This module is designed to strengthen manipulative skills in elementary arithmetic and algebra, including integers, fractions, decimal representations, estimation, polynomials, rational functions, square roots, inequalities, linear and quadratic equations.

Learning Outcomes

By the end of the course the student should be able to:

- Solve linear (simultaneous) equations.
- Make simple estimations (to the nearest integer, ten, hundred, thousand etc.).
- Sort decimals and fractions in order, convert numbers between different forms including scientific form.
- Rounding numbers to a given number of decimal places or significant figures.
- Carry out mixed arithmetical operations in the correct order.
- Calculate the GCD and LCM of pairs of rational numbers.
- Simplify expressions involving rational numbers and square roots.
- Manipulate simple algebraic expressions.
- Multiply and divide polynomials in one indeterminate.
- Simplify rational expressions in polynomials with one indeterminate.
- Use simple properties of inequalities.

Assessment Details and Completion Requirements

This module is assessed by means of two multiple-choice tests (held during the course, at times to be announced by the module organiser) and an examination of similar format during the January examination period. Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: Students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a multiple choice examination.

Recommended Textbooks

The course webbook (accessible from the SEF026 QMplus page)

SEF030 Communication in Science & Technology (CST)

Module Organiser: Sharon Turner (Language Centre, SLLF)

Scheduled Classes: 2 X 2-hour workshops per week with the Language Centre tutors in:

Assessment: Coursework: 100%

Expected Background: Students whose main language is English will normally take this

course in semester 1, Students with IELTS 6.0.

Module Description & Aims

This module addresses communication skills for scientists and engineers, and also seeks to reinforce other generic skills of a more technical nature. Topics covered include study skills, academic writing, data presentation and analysis, information retrieval, and oral communication skills.

Module Synopsis

Workshop Topics with the language Centre

- Basic study skills: time and project management; reading skills; group work.
- Academic writing: preparation and writing of short texts and longer reviews; elements of good style and grammar; critical thinking; structure and style of reports; plagiarism, referencing and bibliographies.
- Topics in contemporary science
- Oral communication: preparation and presentation of talks, effective speaking and debate.
- Data presentation, interpretation and analysis
- Electronic information sources, search techniques & data retrieval

Learning Outcomes

By the end of the module students should be able to:

- Manage their study time and group work effectively.
- Assimilate information from lectures, academic journals and other sources in an effective manner.
- Express themselves clearly in the language, discourse and vocabulary of their chosen scientific discipline.
- Give a well prepared and structured oral presentation to a non-specialist audience and to a group of specialist peers.
- Present data through a variety of genres in a readily assimilated fashion, and in accordance with scientific conventions.
- Undertake research in conjunction with the library and other resources and write assignments in a suitable style with a suitably referenced bibliography.

Assessment Details and Completion Requirements

This module is assessed by coursework, including assignments associated with the workshops, writing assignments (including scientific posters, a case study and a reflection) and exercises relating to discussion and presentation. There is no final examination. Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: Students who fail the module at the first attempt are required to submit a 1,000-word written assignment. The deadline for this assignment is to be confirmed.

Recommended Textbooks

Study Skills Handbook, Skills for Success and Critical Thinking Skills; all by Stella Cottrell

Additional Information

Students who are non-native English speakers and who do not have at least IELTS 6.0, or equivalent must register for SEF009 in Semester 1, and then take this course in Semester 2.

Some students who register for this module may be advised at the beginning of the semester that they would benefit from extra assistance with their English communication skills. Such students may be required to attend additional tutorials (over and above the scheduled classes mentioned above) as part of the completion requirements for this module.

SEF031 Form & Function in Biology

Module Organisers: Dr Angelika Stollewerk & Dr Gabriel Sutton

Scheduled Classes: Semester 1

One 2-hour lecture per week, plus a series of workshops, and Practical

labs throughout the semester.

Assessment: Examination: 50%

Coursework: 50%

Expected Background: Students are normally expected to have previously studied Biology

beyond GCSE level.

Module Description & Aims

This module is designed to introduce students to the basic biology of microbes, plants and animals. The module provides scientific knowledge for students interested in progressing onto various branches of biology (e.g. ecology, microbiology, molecular biology, and zoology), as well as equipping students with core knowledge for progressing to degrees in medicine and health (e.g. psychology, neuroscience, biomedical sciences).

Module Synopsis

- Microbes: The basic biology of viruses, bacteria, protists and fungi.
- Plants: Introduction to the organisation of the flowering plant body.
- Plant Cells, tissues and organs.
- Transport of water and minerals in the xylem; transpiration; translocation of substances in the phloem.
- Overview of plant hormones; sexual and asexual reproduction.
- Animals: Introduction to the organisation of the vertebrate body.
- Cells, tissues, organs and organ systems.
- Animal hormones with particular emphasis on blood glucose regulation.
- Brief overview of sexual reproduction and animal development.

Learning Outcomes

By the end of the module students should:

- 1. Be able to describe the structure, diversity and reproduction of selected plant and animal groups.
- Be able to describe basic organism structure and diversity.
- 3. Be able to describe mechanisms for the life processes.
- 4. Appreciate how the physiology of an organism adapts to its environment.
- 5. Understand a range of appropriate and relevant experimental techniques and how they are used.

Assessment Details and Completion Requirements

The coursework assessment is based on an essay plan (25%) and an essay (25%).

The final examination (50%) is of 60 min duration and consists of 25 single correct response multiple-choice questions. Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: Students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 60 min examination.

Recommended Textbooks

For students taking SEF031 and at least one other Biology module:

Life: The Science of Biology, Eighth Edition, by D. Sadava, H.C. Heller, G.H. Orians, W.K. Purves and D.M. Hillis (published by Sinauer Associates, Inc./ W.H. Freeman and Company, 2008; ISBN-13: 978-0-7167-7671-0) or, for students taking SEF031 only:

Life: The Science of Biology, Eighth Edition, Volume III: Plants and Animals, by D. Sadava, H.C. Heller, G.H. Orians, W.K. Purves and D.M. Hillis (published by Sinauer Associates, Inc./ W.H. Freeman and Company, 2008)

SEF032 Molecules to Cells

Module Organiser*/ Lecturer(s): Prof Viji Draviam* & Dr Jayne Dennis

Scheduled Classes: Semester 2

One 2-hour in-person seminar plus a series of workshops/practicals.

Assessment: Examination: 50%

Coursework: 50%

Expected Background: Students must have taken the SEF003 *Introductory Chemistry*

module in Semester 1 or have studied Biology or Chemistry at least

to AS-level.

Module Description & Aims

This module is designed to introduce students to the study of biology at the molecular level. It is particularly suitable for students who wish to study for degrees in biochemistry, molecular biology, genetics and biomedical sciences. It is also suitable for students wishing to study microbiology or more general biology degree programmes.

Module Synopsis

- Macromolecules: Lipids, carbohydrates, proteins and nucleic acids.
- Cell Biology: Prokaryotic and eukaryotic cellular structure, cellular organisation, cellular organelles and lipid membranes.
- Enzymes: Energetics, catalysis and regulation.
- Metabolism: Cellular respiration, energy generation and photosynthesis.
- Genetics: Mendel's laws of inheritance, alleles and dominance relationships.
- Chromosomes and genes.
- The cell cycle and cell division: Mitosis and Meiosis.
- DNA: Structure and function; DNA replication and DNA mutations.
- DNA makes RNA makes Protein: Molecular overview of transcription and translation.
- Regulation of gene transcription.

Learning Outcomes

By the end of the module students should:

- 1. Understand how the chemistry and structure of the major biological macromolecules, including proteins and nucleic acids, determines their biological properties.
- 2. Know and understand the structure and function of various types of cells in unicellular and multicellular organisms, and the structure and function of cell membranes.
- 3. Have knowledge of cell metabolism, including the main anabolic and catabolic pathways.
- 4. Have knowledge of enzyme structure and function, and of some of the most important mechanisms controlling the action of enzymes and other proteins.
- 5. Understand how the principles of genetics underlie much of the basis of modern molecular biology.
- 6. Understand a range of appropriate and relevant experimental techniques and how they are used; be able to perform some of them.

Assessment Details and Completion Requirements

The coursework assessment (50%) includes an essay and practical work. The final examination (50%) is of 60 min duration and consists of 25 single correct response multiple-choice questions and an essay.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 60 min examination.

Recommended Textbooks

For students taking SEF032 and at least one other Biology module:

Life: The Science of Biology, Eighth Edition, by D. Sadava, H.C. Heller, G.H. Orians, W.K. Purves and D.M. Hillis (published by Sinauer Associates, Inc./ W.H. Freeman and Company, 2008; ISBN-13: 978-0-7167-7671-0)

Or, for students taking SEF032 only:

Life: The Science of Biology, Eighth Edition, Volume I: The Cell and Heredity, by D. Sadava, H.C. Heller, G.H. Orians, W.K. Purves and D.M. Hillis (published by Sinauer Associates, Inc./ W.H. Freeman and Company, 2008; ISBN 978-0-7167-7673-4)

Reference will also be made to:

Molecular Cell Biology, Sixth Edition, by H. Lodish, A. Berk, C.A. Kaiser, M. Krieger, M.P. Scott, A. Bretscher, H. Ploegh and P. Matsudaira (published by W.H. Freeman and Company, 2008; ISBN-13: 978-0-7167-7601-7)

SEF033 Diversity and Ecology

Module Organiser* / Lecturer(s): Dr Sally Faulkner*

Scheduled Classes: Semester 2

2-hour in-person live sessions every week plus a series of

workshops/practicals.

Assessment: Examination: 50% (60-minute duration and consists of 25 single

correct response multiple-choice questions)

Coursework: 50%

Expected Background: Students must have taken the SEF031 Form & Function in Biology

module in Semester 1.

Module Description & Aims

This module is designed to introduce students to the basic principles of evolution and to develop an appreciation of the dynamic nature of ecological systems. It is particularly suitable for students who wish to study for degrees in ecology, genetics, marine and freshwater biology, psychology or zoology, as well as being suitable for those requiring a broad, general background in biology.

Module Synopsis

- Evolution: The Origins of Life.
- Variations in populations; Hardy-Weinberg rule. Natural Selection.
- Speciation. What are species? How do they arise? Reproductive isolation mechanisms.
- The construction and use of phylogenies.
- An introduction to classification as an example of phylogenetics in action.
- Ecosystems: Energy flow through ecosystems.
- Biogeochemical cycles: Water, Carbon and Nitrogen.
- Population Ecology: Population structure; Population dynamics.
- Population regulation.
- Ecological interactions: Niches, competition, and predator-prey interactions.
- Behavioural Ecology: Mating tactics and roles; social behaviour, categories of social acts; the evolution of animal societies.

Learning Outcomes

By the end of the module students should:

- 1. Show knowledge of the basic genetic principles relating to evolution of the organisms studied.
- 2. Be able to describe how organisms are classified and identified.
- 3. Appreciate the interactions of organisms with each other and the environment.
- 4. Appreciate the importance of the 'behaviour' of the organisms studied.
- 5. Demonstrate knowledge of biogeochemical cycles and pathways and be able to describe and exemplify nutrient and energy flow through individuals, populations and communities.
- 6. Demonstrate knowledge of population processes, dynamics and interactions, and associated theoretical models.
- 7. Understand a range of appropriate and relevant experimental techniques and how they are used; be able to perform some of them.

Assessment Details and Completion Requirements

The coursework assessment (50%) is based on a multiple-choice test (25%) and an essay (25%). The final examination (50%) is of 60 min duration and consists of 25 single correct response multiple-choice questions and an essay.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 60 min examination.

Recommended Textbooks

Life: The Science of Biology, Tenth Edition, by D. Sadava, H.C. Heller, G.H. Orians, W.K. Purves and D.M. Hillis (published by Sinauer Associates, Inc./ W.H. Freeman and Company, 2008; ISBN-13: 978-0-7167-7671-0) - please note any edition should be fine.

SEF034 Computing

Module Organiser / Lecturer(s): Dr Lin Wang

Scheduled Classes: Semester 1

Two-hour lecture, two-hour Python programming lab per week.

Assessment: Python coursework 50%; Exam 70%

Expected Background: None

Module Description & Aims

The Computing module will provide Foundation Year students with an understanding and practical experience of core areas of computer science: programming and algorithms; underlying theory; software development; computer systems; and networks. It will include hands-on programming experience during supervised lab sessions. The module is designed principally to prepare students for pursuing study in the areas of computer science or electronics; however, it will also provide a basic introduction for students not intending to pursue study in these areas.

The module aims to provide Foundation Year students with an understanding and practical experience of core areas of computer science: programming and algorithms; underlying theory; software development; computer systems; and networks.

More specifically, the module aims to:

- Convey and provide practical experience in basic programming and related concepts, including expressions; assignment; if and while statements; arrays; functions; simple input and output; sorting and searching algorithms.
- Give a basic understanding of underlying theoretical concepts, including language concepts and regular expressions.
- Give a basic understanding of key software development processes, including problem solving and specification; pseudo code and tracing a program; testing and error handling.
- Give a basic understanding of key computer systems concepts, including number bases (binary, octal and hexadecimal); data representation (numbers and characters); logic gates and Boolean algebra; computer architecture.
- Give a basic understanding of key networks concepts, including principles of communication and structure of the internet.

Learning Outcomes

- 1. Understanding and practical experience in basic programming and related concepts, including expressions; assignment; if and while statements; arrays; functions; simple input and output; sorting and searching algorithms.
- 2. Understanding of underlying theoretical concepts, including language concepts and regular expressions.
- 3. Understanding of key software development processes, including problem solving and specification; pseudo code and tracing a program; testing and error handling.
- 4. Understanding of key computer systems concepts, including number bases (binary, octal and hexadecimal); data representation (numbers and characters); logic gates and Boolean algebra; computer architecture.

- 5. Understanding of key networks concepts, including principles of communication and structure of the internet.
- 6. Apply understanding of basic programming and related concepts in practical lab work.
- 7. Synthesise knowledge and understanding from different technical information sources.
- 8. Evaluate the appropriateness of alternative solutions to practical technical problems.
- 9. Connect information and ideas within their field of study.
- 10. Acquire new knowledge in a range of ways, both individually and collaboratively.
- 11. Work individually and in collaboration with others.

Assessment Details and Completion Requirements

The coursework assessment (50%) is based on 3 Python programming assignments.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a4 -hour min examination.

SEF035 Digital Electronics and Computer Systems

Module Organiser / Lecturer(s): Dr Luk Arnaut

Scheduled Classes: Semester 2

1 lecture and 1 tutorial per week

Assessment: Examination: 50%

Coursework: 50%

Expected Background: At least one module in mathematics

Module Description & Aims

This module will introduce basic electronics, with a focus on digital and programmable systems. This module follows on from SEF034 Computing, which introduces basic programming skills and seeks to look below the abstract level at which most computers are programmed and ask, 'how are computers created?'.

- Present basic theory of electrical circuits using Ohm's law and develop the capability to analyse and design circuits. Introduce alternating current and the behaviour of capacitors.
- Introduce logic gates in combinatorial and simple sequential circuits, and specification techniques including truth tables, Boolean algebra, timing diagrams and state machines.
- Gain an understanding of a computer as an electronic circuit, with the elements of computer architecture.
- Develop practical skills in measurement of electrical properties using standard lab equipment such as multi-meter and oscilloscope.
- Be able to design and construct simple circuits, interpreting and creating simple circuit diagrams.

Learning Outcomes

- 1. Electrical circuits. Understand and apply Ohms law R = VI; calculate the combined resistance of series and parallel resistors; understand and apply formulae to calculate the power dissipated in a circuit.
- 2. Logic gates and Boolean algebra. Understand truth tables for simple combinations of NOT, AND, OR, NAND, NOR and EX-OR gates; be able to convert between Boolean expression, truth tables and logic diagrams and design a combinatorial logic circuit; simplify a logic circuit and convert circuits of mixed gates into either NOR or NAND gates only.
- 3. Alternating current: understand the concepts of frequency and wavelength and the relationship between them.
- 4. Capacitors: understand that a capacitor stores electrical charge and electrical energy, blocking direct current but not alternating current; recall that the unit of capacitance is the farad; calculate the combined capacitance of capacitors connected in series and parallel.
- 5. RC circuits: explain and calculate time constants for simple RC circuits; sketch graphs of voltage against time for a capacitor charging and discharging.
- 6. Sequential logic: understand how a bistable latch is crated from logic gates; describe the operation of a flip-flop and their combination into a shift register.
- 7. Counter circuits: design 4-bit up or down counters using flip-flops and draw timing diagrams for these counters; describe the use of a BCD or hexadecimal decoder with a seven-segment display.
- 8. Microprocessors: describe the architecture of a microprocessor consisting of CPU, clock, memory (ROM and RAM) and input/output ports, connected by a bus structure; the architecture of a single chip microcontroller; recognise and use a limited range of assembler language microcontroller instructions; draw and interpret flow charts, converting them into a generic microcontroller program; understand the role of simple digital and analogue I/O.

Suitable Textbooks

Fundamental Electrical and Electronic Principles by Christopher Robertson. Routledge; 3 edition (2008) ISBN-10: 0750687371

Success in Electronics by Tom Duncan. BPB Publications (2008) ISBN-10: 8170296722

Assessment Details and Completion Requirements

This module is assessed by both coursework and examination. The coursework consists of programming exercises. The final examination is of 4-hour duration.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 4-hour examination.

SEF040 Mathematics A

Module Organiser / Lecturer(s): Anum Khalid & Lubna Shaheen

Scheduled Classes: Semester 1 and Semester 2

One 2-hour exercise lecture per week, one 1-hour tutorial class per week, one 1-hour optional (support) Q&A class per week and one 1-

hour optional drop-in (office hours) per week.

Assessment: Examination: 50%

Coursework: 50%

Expected Background: Students should have at least GCSE Mathematics C or equivalent.

Module Description & Aims

This module, in semester 1, reviews mathematical notation, basic principles of arithmetic and algebra, coordinate geometry and trigonometry; and demonstrates how these principles may be applied to solve problems in science and mathematics. In semester 2, the knowledge on topics such as algebra, geometry and trigonometry will be extended and further complemented by knowledge on functions and graphs, and an introduction to the techniques of calculus.

The module aims to enable students to reinforce an extend their mathematical knowledge and in conjunction with the more advanced mathematical topics covered in semester 2, to provide students with the minimum level of mathematical knowledge and skills needed to successfully undertake a degree in the fields of science and engineering.

Module Synopsis *Algebra:* Mathematical symbols and notation. Essential arithmetic. Elementary algebra: factorisation, algebraic fractions, rearranging formulae and substitution. Theory of powers (indices). Linear and quadratic equations. Simultaneous equations. Logarithms and exponentials. Review of quadratic equations and quadratic functions, factorisation, logarithmic and exponential equations. The Sigma notation. Arithmetic and geometric progressions, the sum to infinity of a convergent geometric progression. Polynomials: the remainder and factor theorems, identical polynomials. Inequalities involving the modulus sign.

Plane and Coordinate Geometry: Properties of circles, triangles and regular polygons. Properties of straight lines. Tangents. Points in a plane, distance and mid-point between two points, coordinates of a point dividing a line in a given ratio, gradient, parallel and perpendicular lines. Equation of a straight line: various forms of equation of a line, including the general form; the angle between lines, conditions for lines to be parallel or perpendicular; points of intersection of straight lines. Properties of tangents to a circle and circular measure. Locus/Loci, standard and parametric equation of curves. The standard and general equation of a circle.

Trigonometry: The three trigonometric ratios. Solving triangles: sine and cosine rules, formulae for the area of a triangle. Definition of the functions for an acute angle and extension to any angle. Graphical representation of the functions. Basic relationships between trigonometric functions. Simple trigonometric equations. Applications of trigonometry: heights and distances. Angular measure: degrees, radians; length of an arc and area of a segment and a sector of a circle. Circle theorems. Inverse trigonometric functions. Compound angle, multiple and sub-multiple angle formulas. Trigonometric identities. The solution of trigonometric equations and equations involving factor formulae over a restricted domain of the angle. Graphical and general solution of trigonometric equations.

Functions: The set-theoretical definition of a function; composite functions; inverse functions. The modulus of a function. Determination of the range or image set of a function. Odd and even functions; periodic functions, rational functions. Limits and asymptotes of functions. The algebraically defined exponential and logarithmic functions.

Calculus: Fundamental elements of differential calculus; the derivative of a function, gradient at a point on a curve, the general gradient function, instantaneous rate of change. Second and higher order derivatives. Methods of differentiation: differentiation of powers, function of functions, products, quotients, trigonometric, logarithmic and exponential functions. Differentiation involving parameters. Application of differentiation: equations of the tangent and normal to a curve, maximum, minimum and turning points, simple rates of change. Elements of integral calculus: standard integrals; differentiation reversed. Definite integrals; area under the curve involving standard integrals.

Learning Outcomes

By the end of the course you should be able to:

- Apply the basic laws of arithmetic and algebra to a variety of problems.
- Solve a wide variety of logarithmic, exponential and trigonometric equations.
- Solve problems involving linear and quadratic equations.
- Apply the remainder theorem and factors to polynomials.
- Solve a variety of problems involving the geometry of lines, circles and plane figures.
- Solve problems relating to a circle, parabola, ellipse and hyperbola.
- Solve problems involving the six trigonometric ratios.
- Sketch the graphs of simple functions.
- Deal with inequalities involving the modulus sign.
- Determine functions of functions and find the inverse of a function.
- Solve problems involving sequences and series.
- Differentiate and integrate various types of functions.
- Apply differentiation to locate maxima and minima, and sketch simple polynomials.
- Evaluate definite integrals and calculate the area under a curve.

Assessment Details and Completion Requirements This module is assessed by coursework and a final examination. The coursework consists of three tests to be held during the two terms. The final examination is 3-hour duration.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 3-hour examination.

Recommended Textbooks

Maths: A Student's Survival Guide, A Self-Help Workbook for Science and Engineering Students, by Jenny Olive (Cambridge University Press, 2nd Edition February 2005) ISBN: 9780511074257. E-book is available. QMULLibrary link.

Core Maths for Advanced Level, by L. Bostock & S. Chandler (3rd ed., published by Nelson Thornes, 2000) ISBN 978-1-4085-2228-8. No e-book available. QMUL Library link.

These textbooks will be useful for the extra exercises and extra practice, but it is not mandatory that each student obtains their own copy.

SEF041 Mathematics B

Module Organiser / Lecturer(s): Anum Khalid & Lubna Shaheen

Scheduled Classes: Semester 1 and Semester 2

One 2-hour exercise lecture per week, one 1-hour tutorial class per week, one 1-hour optional (support) Q&A class per week and one 1-

hour optional drop-in (office hours) per week.

Assessment: Examination: 50%

Coursework: 50%

Expected Background: Students should have at least Mathematics A-level C or equivalent.

Module Description & Aims

This module, in the first semester, covers mathematical topics such as algebra, functions, geometry and trigonometry, calculus. And in the second semester, provides students with a more extensive knowledge of calculus (especially in techniques of integration) and an introduction to complex numbers, numerical methods, vector analysis and power series.

The module aims to reinforce and extend the existing mathematical skills of those students taking it in Semester 1 so that they are prepared for more advanced mathematical topics to be covered in Semester 2. This module is appropriate for those students progressing onto degree programmes in mathematical sciences, and those degree programmes in physical science and engineering which require a more thorough and comprehensive grounding in mathematics.

Module Synopsis

Algebra: Review of theory of indices, logarithms, quadratic equations and quadratic functions, factorisation, logarithmic and exponential equations. Polynomials: the remainder and factor theorems, identical polynomials. Inequalities and equations involving the modulus sign.

Functions: The set-theoretical definition of a function; composite functions; inverse functions. The modulus of a function. Determination of the range or image set of a function. Odd and even functions; periodic functions, rational functions. Limits and asymptotes of functions. The algebraically defined exponential and logarithmic functions.

Coordinate Geometry: Equation of a straight line: various forms of equation of a line. Gradients, mid-points, distances. Properties of tangents to a circle and circular measure. Locus/loci and standard and parametric equation of curves. The standard and general equation of a circle.

Trigonometry: Definition of the functions for an acute angle and extension to any angle. Graphical representation of the functions. Basic relationships between trigonometric functions. Inverse trigonometric functions. Compound angle, multiple- and half-angle formulas. Trigonometric identities. The solution of trigonometric equations and equations involving factor formulae over a restricted domain of the angle. Graphical and general solutions of trigonometric equations.

Calculus: Fundamental elements of differential calculus; the derivative of a function, gradient at a point on a curve, the general gradient function, instantaneous rate of change. Second and higher order derivatives. Methods of differentiation: differentiation of powers, function of functions, products, quotients and trigonometric functions. Application of differentiation: equations of the tangent and normal to a curve, maximum, minimum and turning points. Differentiation techniques for parametric and inverse trigonometric functions, implicit differentiation. Differentials: small increments and comparative rates of change. Elements of integral calculus: standard integrals; differentiation reversed. Definite integrals; area under the curve

involving standard integrals. Methods of integration: exponential and logarithmic functions, trigonometric functions, integration by recognition, product function, change of variable and change of form, definite integration by parts. Integration of rational functions; Integration using partial fractions. Integration of powers and products of trigonometric functions; integration of irrational functions; standard substitutions. Improper integrals, numerical methods of definite integration. Applications of integral calculus: determining plane area; approaches to determining the volume of solids; volumes of revolution.

Numerical Methods: locating roots of equations - change of sign method; interval bisection method; the Newton–Raphson method.

Complex Number Theory: the algebra of complex numbers: Cartesian form; the modulus and argument of a complex number; the modulus-argument form; polar form; conjugate complex numbers. Graphical representation of complex numbers; the Argand plane, the vector association. Representation of addition, subtraction, multiplication and division.

Sequences and Series: Binomial theorem and applications. Summation of finite series; the method of difference for polynomial terms; the natural number series; application of partial fractions. Infinite series and their convergence. The expansion of a function: Maclaurin's series; the expansions of the logarithmic, exponential and trigonometric functions. Other methods of expansion. Applications of power series expansions. Approximations.

Vector Analysis: vector quantities and their representation, Vector algebra: basic concepts; angle between two vectors; multiplication and division of a vector by a real number. Scalar product of vectors. Position vectors; position vector of a point; resolution of a vector in two and three dimensions. Equation of a line and a plane in three dimensions.

Learning Outcomes

By the end of the courses, you should be able to:

- Solve a wide variety of logarithmic, exponential, quadratic, polynomial and trigonometric equations.
- Solve problems relating to a circle and parabola.
- Solve simple problems in three-dimensional coordinate geometry.
- Apply the remainder and factor theorems to polynomials.
- Deal with inequalities and equations involving the modulus sign.
- Determine functions of functions and find the inverse of a function.
- Differentiate and integrate a wide range of functions.
- Apply differentiation to locate maxima and minima, and sketch simple polynomials.
- Solve problems involving simple rates of change.
- Evaluate definite integrals, calculate the area under a curve and the volume or surface of revolution.
- Represent and manipulate complex numbers in various forms.
- Solve problems involving comparative rates of change.
- Find roots of equations using numerical approximation.
- Solve problems involving finite, infinite and power series.

Assessment Details and Completion Requirements

This module is assessed by coursework and a final examination. The coursework will consist of 3 tests to be held during the two terms. The final examination is of 3-hour duration.

Students must achieve an overall mark of at least 40% in order to pass this module.

Resits: students who fail the module at the first attempt are required to undertake a synoptic reassessment consisting of a 3-hour examination.

Recommended Textbooks

Maths: A Student's Survival Guide, A Self-Help Workbook for Science and Engineering Students, by Jenny Olive (Cambridge University Press, 2nd Edition February 2005) ISBN: 9780511074257. E-book is available. QMUL Library link.

Core Maths for Advanced Level, by L. Bostock & S. Chandler (3rd ed., published by Nelson Thornes, 2000) ISBN 978-1-4085-2228-8. No e-book available. OMUL Library link.

These textbooks will be useful for the extra exercises and extra practice, but it is not mandatory that each student obtains their own copy.

11. Assessment of Modules & Examinations

11.1 Marks and grades for individual modules

In order to pass an individual module, you must achieve an overall mark of 40% or above, and meet any additional requirements specified in the module description.

How the overall mark for a module is calculated?

The module mark is normally calculated (to a precision of 1 decimal place) by taking a weighted average of the overall coursework mark and the mark achieved in the final examination. The relative contributions of coursework and examination to the aggregate mark depend on the module; these proportions are given in the module descriptions.

The overall coursework mark is itself calculated from the percentage marks obtained in the individual assessments completed as part of the coursework for the module. These assessments will typically have different weightings, as indicated in information provided at the beginning of the module.

Grading of your Final Marks

For each module, in addition to the percentage mark, you will receive a letter-grade. These are assigned as described below:

Mark	Grade		
70.0% or above		Α	Pass
60.0-69.9%		В	Pass
50.0-59.9%		С	Pass
45.0-49.9%		D	Pass
40.0-44.9%		Ε	Pass
39.9% or below		F	Fail

Thus, your final mark in a particular module might be given, for example, as 47.2 (D) or 81.8 (A).

Publication of Marks

Most items of marked coursework should be returned to you on an individual basis and your recorded marks will be available to you via QMplus with provisional and confirmed assessment marks published on MySIS after the Exam Board period.

11.2 Resits

The university's examination and assessment regulations pertaining to the Foundation Year permit students a maximum of two opportunities to pass any given module – the first attempt, and one resit opportunity.

If you do fail a module at the first attempt, and you need to pass additional modules in order to meet the conditions for progression, then you will generally be required to undertake a resit in the late summer (in August). When you resit a module, you are normally required to undertake a "synoptic" reassessment in which your mark in the rest is dependent entirely upon your performance in the reassessment, without any consideration of the first-sit marks.

The maximum overall mark achieved after a resit is capped at 40%, and you should be aware that the progression criteria for some degree programmes specify a requirement to obtain marks in individual modules in excess of 40%, thereby excluding resit candidates from consideration.

More detailed information on re-sit examinations and missing exams etc can be found here, http://www.arcs.qmul.ac.uk/students/exams/index.html, however you may want to include further information here.

<u>Date</u>	<u>Event</u>
4 th – 19 th January	Semester 1 Exam Period (for modules taught in Semester A with
	examinations)
Mid-March	Publication of university's Main Examination Timetable
Late March	Deadline for submission of applications for "special arrangements" for
	examinations (for students suffering from dyslexia etc).
2 nd May – 31 st May	Semester 2 Examination Period (for modules taught in Semester B or year-
	long modules with examinations)
Mid-June	Meetings of Subject Examination Boards
	(to approve marks in individual modules)
Late June	Meeting of Foundation Year Progression Board
	Module marks and provisional progression decisions released to Foundation
	students
Early July	Degree Examination Board Meeting (formal confirmation of results)
Late July	Formal transcripts issued by Queen Mary's Academic Registry
	(including, where appropriate, notification of eligibility for late summer resits)
	Publication of Late Summer Examination Timetable
Early to Mid-August	Late Summer Resit (LSR) Examinations – dates to be advised.
	(For students who have not met the progression conditions after the main
	examination period)
Early September	Results from LSR examinations released to Foundation Year students

11.3 Submission of coursework

As previously noted, the satisfactory completion of coursework is a very important part of the learning process and the marks that you obtain for items of coursework will also generally contribute to your end-of-year result.

In order to receive full credit for your coursework you must ensure that it is submitted by the deadline, and following the instructions provided. If work is submitted late then it may be marked, but this is at the discretion of the module organiser, and any mark that you are awarded will be reduced from that which you would otherwise have obtained. You may also be asked to submit an extenuating circumstances form, if you have valid ECs.

If the work involves use of a computer, then you must make sure that you keep backup copies of the work so that you do not lose your work due to a computer problem. If you fail to do this and do lose work then this would not be considered as a valid extenuating circumstance, and you would generally be penalised for any late submission.

Exam Access Arrangements

If you need Access Arrangements for sitting examinations (e.g. if you have dyslexia, dyspraxia or another recognised disability), or if you need special equipment, you must contact the **Disability and Dyslexia Service** (DDS), who can arrange an assessment of your needs. Applications for Exam Access Arrangements must be made by the **deadline** advertised by DDS (usually near the end of Semester B). Concessions may take the form of extra time for examinations or (exceptionally) special supervision in separate rooms.

11.4 Missed Submission of Coursework

In those cases where you have been issued with coursework and asked to submit it by a specified deadline then you should aim to ensure that you have completed and submitted the work sufficiently far in advance that your ability to submit the work is not affected by anything unexpected that happens near to the deadline. However, if you do miss a submission deadline you should still submit the work as soon as you are able to do so.

For every period of 24 hours or part thereof that an assignment is overdue there would be a deduction of five per cent of the total marks available (i.e. five marks for an assessment marked out of 100). After seven days the mark would be reduced to zero, and recorded as a failure (zero, fail, late).

If you are unable to meet the deadline due to unforeseen circumstances beyond your control, then you should contact the Foundation Team (fedu@qmul.ac.uk) and/or submit an Extenuating Circumstances claim via MySIS. Completion of this form does not necessarily mean that you will be granted compensation for the missed submission of the assessment – this will be decided after due consideration of the information and any supporting documentation that you have provided.

Late submission penalties

If an assignment is submitted after the specified deadline it shall be recorded as late and a penalty shall be applied, as detailed below. If there are valid extenuating circumstances then a penalty may be fully or partially waived.

- i. For every period of 24 hours, or part thereof, that an assignment is overdue there shall be a deduction of five per cent of the total marks available (i.e. five marks for an assessment marked out of 100). After seven calendar days (168 hours or more late) the mark shall be reduced to zero, and recorded as 0FL (zero, fail, late).
- ii. A student may submit work of passing standard but fail the module because of the late submission penalty. Where the student is eligible for a resit attempt in such a case, the student shall not be required to resubmit the assessment; instead, the pre-deduction mark from the first attempt shall be entered for the resit. Where a student is not eligible for a resit, this provision does not apply.
- iii. Certain assessments may cease to be a valid measure of a module's learning outcomes prior to the seven working day cut-off. For example, where feedback has been provided to the class, any submission made after that point would not be an accurate measure of attainment. In such cases, the late submission policy shall apply as normal up to the day on which feedback is given; at that point, a mark of zero (0FL) shall be applied, even if this is within seven calendar days of the deadline. Schools and Institutes must make clear to students in advance where this variant policy applies, or else the general policy shall be applied.
- iv. A late work penalty may be removed where a student provides good reason for the late submission under the extenuating circumstances policy. A student must submit a formal claim with supporting evidence in line with that policy in order for the circumstances to be considered.
- v. Schools and Institutes may award extensions to submission deadlines. This is at the discretion of the School/Institute. Where a School/Institute does consider the award of an extension, a student must apply before the submission date with an extenuating circumstances claim and supporting evidence. In no circumstances shall an extension set a new deadline beyond the next meeting of the relevant Subject Examination Board (though a first sit may be awarded).

Word count policies and penalties

- 1. Schools/Institutes may choose whether or not to apply penalties where students exceed a specified word count. This may include instances where the length of a submission is considered under the standard marking conventions rather than as a statutory penalty.
- 2. Where a School/Institute does apply a penalty, students must be made aware of the penalty in advance. The penalty for exceeding the word count must be published to students; this may be in the programme handbook and/or where a School/Institute does not use the same policy for all assessments in module handbooks.

There is no fixed penalty for submissions that are under the specified word length. In these cases, students will have displayed skill in covering the material concisely, or else have failed to fully address the material; in either situation the normal marking conventions should take this into account.

11.5 Absence from In-class Assessment

In those cases where coursework assessments are held in-class and you are prevented from attending the scheduled class by extenuating circumstances then you should consider submitting Extenuating Circumstances. This form is available to complete via MySIS.

If your claim for ECs is accepted, then allowance will be made for the missed assessment in the calculation of your final module mark. If your claim for ECs is not accepted, then a mark of zero will be recorded for the assessment concerned.

11.6 Absence from an Examination

If you miss an examination due to serious illness or other unavoidable circumstances, then you may apply for extenuating circumstances. To do this you must:

Obtain a medical certificate or another official document (e.g., a police report and crime number) that
clearly substantiates the reasons for your absence on the specific day of the examination. Details of the
types of documentation that are acceptable are given in the Extenuating Circumstances guidance, which
can be found at https://www.qmul.ac.uk/student-experience/student-wellbeing-hub/extenuating-circumstances-a-guide-for-students/.

You are entitled to self-certify on up to three occasions each academic year. This means completing and submitting the Queen Mary self-certification form in place of independent evidence. Please note that self-certification does not mean automatic approval of a claim – your school/institute will consider it in the normal way and will need to be satisfied of the validity of the claim and satisfied that it justifies the outcome.

Each self-certification can cover a period of up to seven calendar days - this is the maximum amount of time that each instance of self-certification can cover.

Students are not permitted to use consecutive self-certification applications, that is, you cannot claim for two back-to-back seven-day periods using self-certification. Also, you cannot use a self-certified application more than once for the same assessment.

• Complete the online EC Extenuating Circumstances claim form, which is available to complete via MySIS, attach the aforementioned supporting documentation to the printed hardcopy of the form, and submit it according to the instructions provided on the form.

Please note that **misreading a timetable or late arrival due to travel problems**, *etc.* would not normally be considered as valid extenuating circumstances.

If your claim for extenuating circumstances as explanation for a missed examination is accepted then you will be granted a deferred "first-sit" of the examination (which must be taken at the next scheduled opportunity, which is usually the August late summer examination period). If your claim is rejected, then you will simply be recorded as being absent from the examination.

11.7 Consideration of Extenuating Circumstances

Cases of extenuating circumstances are initially considered by a small subcommittee of the Foundation Year Progression Board. They will advise module organisers, the Subject Examination Boards and Foundation Year Progression Board on what action (if any) they recommend. All proceedings of the subcommittee are strictly confidential, and details of individual cases will not normally be discussed at the full Examination Board meetings or Foundation Year Progression Board meeting.

Important: it is your own responsibility to make a case for extenuating circumstances, not that of your Advisor, or any other member of staff. Please ensure that if you do have what you believe is a valid case, you complete the submission process in accordance with the guidelines and deadlines described in this handbook. It is not possible to make a retrospective claim for extenuating circumstances after you know your results.

12. Procedures, Rules and Regulations

It is your responsibility to read and understand the rules and regulations relating to your studies. Queen Mary's Academic Regulations are the definitive source of information. You are strongly recommended to read all of these pages which covered the following topics:

- teaching semesters and examination periods
- Queen Mary student guide and academic regulations
- module registration procedures
- attendance what we expect of you
- student academic engagement policy
- practicals and workshops
- late submission of coursework (including penalties)
- programme diets
- absence from assessed classes
- submission of coursework (including penalties for late submission)
- electronic submission of coursework
- extenuating circumstances
- general information about module assessment and examinations
- late summer examinations
- progression

12.1 Plagiarism and Referencing

Queen Mary defines plagiarism as:

"Presenting someone else's work as your own, whether you meant to or not. Close paraphrasing, copying from the work of another person, including another student, using the ideas of another person, without proper acknowledgement or repeating work you have previously submitted without properly referencing yourself (known as 'self-plagiarism') also constitute plagiarism."

The above Queen Mary definition is taken from the **Academic Misconduct Policy** https://arcs.qmul.ac.uk/students/student-appeals/academic-misconduct/

Plagiarism is a **serious offence** and all students suspected of plagiarism will be subject to an investigation, in the first instance. If found guilty, penalties can include failure of the module to suspension or permanent expulsion from Queen Mary.

It is **your responsibility** to ensure that you understand plagiarism and how to avoid it. The recommendations below can help you in avoiding plagiarism:

- Be sure to record your sources when taking notes, and to cite these if you use ideas or, especially, quotations from the original source. Be particularly careful if you are cutting and pasting information between two documents and ensure that references are not lost in the process.
- Be sensible in referencing ideas commonly held views that are generally accepted do not always require acknowledgment to particular sources. However, it is best to be safe to avoid plagiarism.
- Be particularly careful with quotations and paraphrasing.
- Be aware that technology, such as Turnitin, is now available at Queen Mary and elsewhere that can automatically detect plagiarism.
- Ensure that all works used are referenced appropriately in the text of your work and fully credited in your bibliography.
- If in doubt, ask for further guidance from your Advisor or the Module Organiser.

As previously noted, you must also avoid self-plagiarism by failing to reference your own work that you have already used in a previous essay or commit plagiarism by failing to credit the input of other students on collaborative work/group projects. If you are in any doubt, ask for further guidance from your Advisor or Module Organiser.

Turnitin

Turnitin is a web-based plagiarism prevention system used by most universities in the UK. This statement describes how Turnitin is used within the school and the data it creates about your work.

You should include your School's/Institute's statement on how Turnitin is used. You should already have received the template below, but it is replicated here for you to edit as appropriate.

Introduction

Turnitin is a web-based system used by most universities in the UK to identify possible instances of plagiarism. This statement describes how Turnitin is used within the School and the data it creates about your work.

1 How Turnitin works

- 1.1 A Turnitin assignment is set up by a member of staff, either on QMplus or directly on Turnitin's own website (https://www.turnitinuk.com). You then access this assignment online and upload your work before the due date. Turnitin will analyse the submitted work to identify text matches with other sources and will compare the work against:
 - o the current and archived web;
 - previously submitted work;
 - o books and journals.
- 1.2 For each piece of submitted work Turnitin provides two things:
 - o A **similarity index**, which indicates the percentage of the submitted paper that Turnitin has identified as matching other sources.

o An **originality report,** which shows each of these matches in more detail, including the source(s) that Turnitin has found.

2 How Turnitin is used

- 2.1 Turnitin is used on the majority of undergraduate and post-graduate assignments that contribute towards your final grade. Turnitin will not normally be used on the following assignments:
 - short assignments (under 500 words)
 - contributions to online discussions
 - exercises submitted on paper
 - exams
 - computer programs
- 2.2 For those assignments where Turnitin is used, all submissions to that assignment will be submitted to Turnitin.

2.3 How we use the information provided by Turnitin

- 2.3.1 Only academic staff will make a judgement on whether plagiarism has occurred in a piece of work. An academic may interpret the originality report to help but Turnitin itself does not make this judgement.
- 2.3.2 We do not use a threshold percentage to identify whether plagiarism has occurred and may review any originality report in detail.
- 2.3.3 Turnitin will highlight matching text such as references, quotations, common phrases and data tables within work that has no plagiarism issues at all. Those interpreting Turnitin reports will discount such matches and so initial percentages are often irrelevant.
- 2.3.4 Where it is suspected that plagiarism has occurred in a piece of work, the originality report may be submitted to the Head of School/Institute and possibly to an Academic Misconduct Panel for further investigation.

2.4 How you can use the information provided by Turnitin

- 2.4.1 There will be an opportunity for you to see a Turnitin report on your work before Turnitin is used on your assessed work.
- 2.4.2 No other student will be able to see an originality report on your work.
- 2.4.3 To help you understand what the report is telling you, please ensure you have followed the guidance on the E-Learning Unit's website (http://www.elearning.capd.qmul.ac.uk/guide/interpreting-your-originality-report/).
- 2.4.4 may find it helpful to resubmit your work after reviewing the originality report and you will generally be given one opportunity to do this. Where this is the case, the idea is to use the report to help you identify any potential issues you may not have spotted before, and not to change individual words to avoid a match.
- 2.4.5 If you have a question about your originality report that is not answered by the material linked to in 2.4.3 above, please direct these to your module convenor in the first instance.

2.5 Other things you should know

2.5.1 Turnitin stores a copy of most work submitted to it in its repository. This does not affect the ownership of or any copyright in the original work.

- 2.5.2 Staff may configure a Turnitin assignment such that copies of submissions are not stored in its database. This will be done for all test-runs or any 'dummy' assignments used for training or demonstration purposes.
- 2.5.3 Staff on your course will ensure that no commercially or otherwise sensitive documents are stored in Turnitin's repository.
- 2.5.4 You cannot opt out of having your work scanned by Turnitin, but if you believe that your work should be deleted after it is scanned you should contact your lecturer.

12.2 Behaviour in Lecture and Laboratories

At Queen Mary, we regard students as responsible adults. Students are expected to behave appropriately and show a high level of responsibility. We expect all students to respect the points mentioned below.

12.3 Punctuality

If attending sessions on campus, you are expected to arrive **punctually** both at lectures and for practical classes. For the former (and for tutorials), you are expected to be in your seat by **no later** than **5 min past the hour**. It is very disruptive for other students and the lecturer if you arrive after the lecture/tutorial has begun. In some cases, you may not be permitted to enter if you arrive late; staff have been advised that they are under no obligation to admit students arriving at or after 10 mins past the hour.

12.4 No Copying or Plagiarism

The satisfactory completion of coursework is a very important part of the learning process of the Foundation Year. The marks that you obtain for items of coursework will also generally contribute to your end-of-year result, together with your examination marks. Therefore, the coursework that you submit must be your own work.

If you copy work from another student and submit it as your own, then this is cheating. Furthermore, whilst it is reasonable to discuss how to approach a problem with fellow students, it is important that the work that you eventually submit for assessment is recognisably your own work and not a "collaborative effort". If two identical or near-identical pieces of coursework are received, both students will normally have their marks for this item of coursework reduced to zero. The lecturer will not normally attempt to discover whether the work was done jointly, or who copied from whom (so you must not copy yourself, but also you must not allow your own work to be copied).

When writing an essay or a report, then any quotation from the published or unpublished work of other people (including documents published on the internet) must be properly acknowledged by providing a reference to the original source. You must not construct an essay simply by "copying and pasting" sentences and paragraphs from other people's work. You must also avoid substantial paraphrasing of other people's work, without it being properly acknowledged. If you fail to follow these guidelines then you are committing "plagiarism", and this is a very serious offence.

Another form of cheating is the fabrication of data in laboratory experiments or making a claim to have done something that you have not actually achieved. This is a type of fraud and is just as serious an academic offence as plagiarism or the other forms of cheating mentioned above.

You should appreciate that lecturers and tutors are skilled in detecting when a piece of work has been copied. Additionally, Queen Mary makes use of a specialised electronic service for the detection of plagiarism in essays, to find out if any part of the submitted work has been copied from the internet or other sources.

In summary, it is essential for your successful completion of the programme that you do not submit any coursework that has been copied from (or obtained from) another person or other source. If you are found to

have cheated in a piece of work, then the minimum penalty that you can expect to receive is that your mark for that work will be reduced to zero.

Instances of plagiarism/copying/cheating will be noted in your student file and repeated offences of this nature, or a single serious offence on a major piece of coursework, will result in your case being referred to Queen Mary's Academic Misconduct Panel. This may result in you failing the whole module or being de-registered from the programme.

12.5 Respect for all Members of the University

The Queen Mary Values states that our work shall be carried out in a spirit of tolerance, freedom of opinion, mutual concern and community service, and undertakes to avoid discrimination against any person on the grounds of religion, race, sex, disability or politics.

The university's equal opportunities policy further guarantees the rights of all students and staff to attend the university free from harassment, discrimination or other form of abuse. Any person behaving in breach of this policy will be subject to the university's disciplinary procedures.

IMPORTANT: any student that is in serious breach of, or repeatedly disregards, any aspect of this code of behaviour will be reported to the Academic Secretary and may be suspended from the university.

A copy of Queen Mary's Code of Student Discipline is available from:

https://arcs.qmul.ac.uk/media/arcs/policyzone/academic/Code-of-Student-Discipline-(2021-22).pdf, while a copy of the Queen Mary Values in Action is available from:

http://connected.gmul.ac.uk/media/connected/staff-support-hub/Our-Values-in-action.pdf

13. Health, Safety and Security

13.1 Emergency Procedures

You should **familiarise yourself** with emergency procedures for all areas in which you work, noting the location of **emergency exits**, **assembly points** and **equipment**. On hearing a fire alarm in a QM building, you should immediately leave the building by the nearest emergency exit, unless redirected by a Fire Marshall. Do not go to any other part of the building for any reason. Proceed to the designated emergency assembly area and report to the Fire Marshal. Do not leave the assembly area or re-enter the building until instructed to do so. Failure to follow these procedures may lead to disciplinary action.

Tampering with fire alarms or fire-fighting equipment is a serious offence, and disciplinary action may be taken against any student responsible who breaks this rule.

What should you do in an emergency?

In an emergency, be it security-related or a serious incident/accident, dial **3333** from any internal phone and clearly state the nature and location of the problem, your name, and the number you are calling from (if known). If there is no internal phone available, call **999** and follow the normal procedure. You should ensure that corridors and doorways are not obstructed, and that firefighting equipment is not removed from its station.

First aid assistance for minor accidents can be obtained by dialling **3333** from an internal phone, or 020 7882 3333 from any other telephone.

Safety in Laboratory Classes (for Biology and Chemistry students only)

Scientific laboratories are **high-risk environments** in comparison to a normal workplace. It is therefore very important that you pay attention to **safety briefings**, and to the **risk assessments** associated with any laboratory work. You must never work unsupervised, and you must always **follow** the **instructions** of the staff

who are supervising laboratory classes.

13.2 Smoking on Campus

Only in designated areas, other than those areas which are clearly signed. QM is a smoke free campus. You cannot smoke in the QM halls of residence or any other QM building.

14. General Information

14.1 Reference requests

Advisors expect to be asked to provide references for their advisees. Other academic staff (such as your project supervisor) may also be asked to provide references on your behalf. However, they **all** expect you to notify them in advance of them receiving any request for a reference from a third-party, and they will not normally be willing to provide you with an "open reference".

If you do require a written reference from your Advisor, or another member of academic staff, you will normally need to give at least **two weeks' notice** for such a reference to be written.

When you request a member of staff to provide a reference, you are agreeing that they may disclose information about your attendance, your academic performance and any disciplinary matters, as well as being at liberty to express their opinions on matters such as your commitment and potential. A referee will not, however, disclose information of a personal nature, or relating to any disabilities, unless you authorise them to do so.

14.2 Harassment policy and procedures

Queen Mary has a strict policy on student harassment. Information on this policy and procedures to be followed can be found at http://www.arcs.qmul.ac.uk/policy/.

14.3 Comments, complaints and appeals

Minor issues and complaints concerning teaching should be raised **initially** with the **individual staff member concerned**, the relevant Module Organiser or your Advisor. However, if there is a problem which is affecting many students (rather than just yourself), then this can be relayed to the **course/year rep** so that it can also be raised via the Student-Staff Liaison Committee (SSLC), or with the relevant **Programme Director**.

If a problem about a teaching issue is not satisfactorily resolved by the above processes, then it should be referred to the Foundation Year administration team. The matter will then be investigated and, if appropriate, considered at the School's Teaching and Learning Committee and/or referred to the Head of School.

Complaints

Before submitting a Formal Complaint you are advised to speak to a member of staff in your School/Institute as most issues can be resolved informally without the need for a formal complaint.

If your issue is not resolved through the informal process then you will need to complete the Formal Complaint form and submit this to the relevant School/Institute/Professional Services Head for investigation under the Student Complaints Policy:

http://www.arcs.qmul.ac.uk/students/student-appeals/complaints/index.html

Most complaints are resolved at the Formal Complaint stage but if your matter is still not resolved then there is one review stage to the policy.

When the complaint process is finished you will be issued with a Completion of Procedures letter explaining the final decision and the reasons for it.

Office of the Independent Adjudicator (OIA)

If you are unhappy with the outcome of an appeal or complaint, then you may submit a complaint to the OIA within twelve months of receiving your Completion of Procedures letter. The OIA is the independent body set up to review student complaints and is free to students. For further information regarding the OIA please visit their website: http://www.oiahe.org.uk/

Appeals

A Formal Appeal is a request to review a decision about progression, assessment or award.

Before you submit a Formal Appeal, speak to your School/Institute about the decision you wish to appeal as many issues can be resolved without the need for a lengthy formal process.

Your School/Institute will be able to provide you with feedback on your marks, or degree classification, and to answer any queries. Please note that a Formal Appeal cannot provide feedback on academic work.

Appeals against academic judgment are not permitted, this means you cannot appeal simply because you think the mark you have received is too low.

There are two grounds for appeal:

- procedural error: Where the process leading to the decision being appealed against was not
 conducted in accordance with Queen Mary's procedure, such that there is reasonable doubt as to
 whether the outcome might have been different had the error not occurred. Procedural error shall
 include alleged administrative or clerical error, and bias in the operation of the procedure.
- that exceptional circumstances, illness, or other relevant factors were not made known at the time for good reason, or were not properly taken into account.

A Formal Appeal must be received within 21 calendar days of the notification of the decision you want to appeal and should be submitted from your Queen Mary email to appeals@qmul.ac.uk.

Further information about how to appeal and the appeal form can be found on the Queen Mary website: http://www.arcs.qmul.ac.uk/students/student-appeals/appeals/index.html

If you are not satisfied with the outcome of your appeal you may submit a Final Review for consideration by the Principal's nominee. Once a Final Review is complete you will be sent a Completion of Procedures letter which outlines the final decision of Queen Mary and the reasons for the decision.

Appendix 1: General Guidance

This list gives guidance as to who to see (or what to do) if you have queries about the indicated topic:

Accommodation	Co to the Decidential Services and Support office Queens' Building The
Accommodation	Go to the Residential Services and Support office, Queens' Building. The
	Housing Hub, Fielden House, Westfield Way, London, E1 4NP
	(tel. 020 7882 6474/6470), or see their website
	www.residences.qmul.ac.uk
Advice & counselling	Go to the Advice and Counselling Service reception, Geography G.7 (tel.
	020 7882 8717), or see their website <u>www.welfare.qmul.ac.uk</u>
Bursaries	Contact the Bursaries, Grants and Scholarships Office - tel. 020 7882
	7908/3086 or email bursaries@qmul.ac.uk . See "Advice & Counselling"
	for general advice on financial matters.
Complaints	You will find more information on the Queen Mary policies on student
_	complaints at www.arcs.qmul.ac.uk/students/student-
	appeals/complaints/
Change of module	If you wish to do this <u>after</u> you have selected your modules in MySIS, this
	can only be done within two weeks of the start of the appropriate
	semester. Please email the Foundation team at redu@gmul.ac.uk
Change of programme	These requests need to be approved by the school you are changing
	from and the school you are moving to. Contact the Foundation team at
	fedu@gmul.ac.uk for more information.
Disability & dyslexia	Go to the Disability & Dyslexia Service, Bancroft 3.06
	(www.dds.qmul.ac.uk) for advice and assistance, or to arrange an
	assessment.
Email & IT problems	Contact them via live chat at connected.gmul.ac.uk, (Tel. 020 7882
•	8888), Email <u>its-helpdesk@gmul.ac.uk</u>
Fees	Go to Fees Office, Ground Floor, iQ East Court (formerly known as Scape
	East), 450 Mile End Road, London, E1 4GG. (see "Bursaries" for
	information about financial support; or "Advice & Counselling" for
	general advice on financial matters)
Special arrangements	If you require special arrangements for examinations then you must
- F 22101 011 011 011 011 011 011 011 011 0	make an appointment for an assessment with the Disability & Dyslexia
	Service, Bancroft 2.06 (<u>www.dds.qmul.ac.uk</u>).
Timetables	You will find links to your timetable of classes on QMplus. Contact the
- inictables	Foundation Year Administrator if you have a timetabling problem.
	,
	Examination timetables are published via MySIS.