



We operate a matrix structure across five academic research divisions and five teaching disciplines.

Full information on our research activity is available on our <u>School research pages</u> along with details of our <u>undergraduate</u> and <u>postgraduate taught</u> portfolio.

The School is supported by Professional Services who are divided into two primary offices, the School Office, and the Teaching Office, along with Technical Services, and a Logistics and Facilities team. We receive support from a range of cross-university services such as Estates & Commercial Services, and from the College Research Support Team, College IT Services, a College Financial Transactions Team, and the Graduate School, including a team for the Centres for Doctoral Training.

All academic and research staff are encouraged to maintain an up-to-date web profile following the <u>Guidance on managing</u> your staff research profile in T4.

Staff meetings are typically held three times a year and are convened by the Head of School. All members of staff are encouraged to participate in these meetings. A number of executive committees have been set up to support the smooth running of the School and provide effective communication (see <a href="mailto:gla.ac.uk/schools/engineering/informationforstaff/committees/">gla.ac.uk/schools/engineering/informationforstaff/committees/</a> on the School intranet).

Information regarding key contacts and useful can be found on the School intranet <u>information for staff</u>.

Frequent informal discussion with colleagues is essential to academic life to support creativity, ideas, and new collaborations Technical Services, Facilities and Logistics staff are primarily based on campus and our Professional Services team operate on a hybrid working approach which ensures a normal service on campus.

We encourage participation in campus life across all staff categories in line with the expectations of your role.

You are encouraged to take the opportunity to meet colleagues by making use of the School's Common Rooms located in James Watt North, James Watt South, and Rankine.



#### **KITCHEN FACILITIES**

Rankine Building Level 2 (210), Level 5 (513A) and Level 7 (742)

James Watt Building South Level 5 (526) and Level 6 (649)

James Watt Building North Level 2

And in all Levels in the ARC

All members of staff should be fully aware of the Health and Safety Policies of the School.

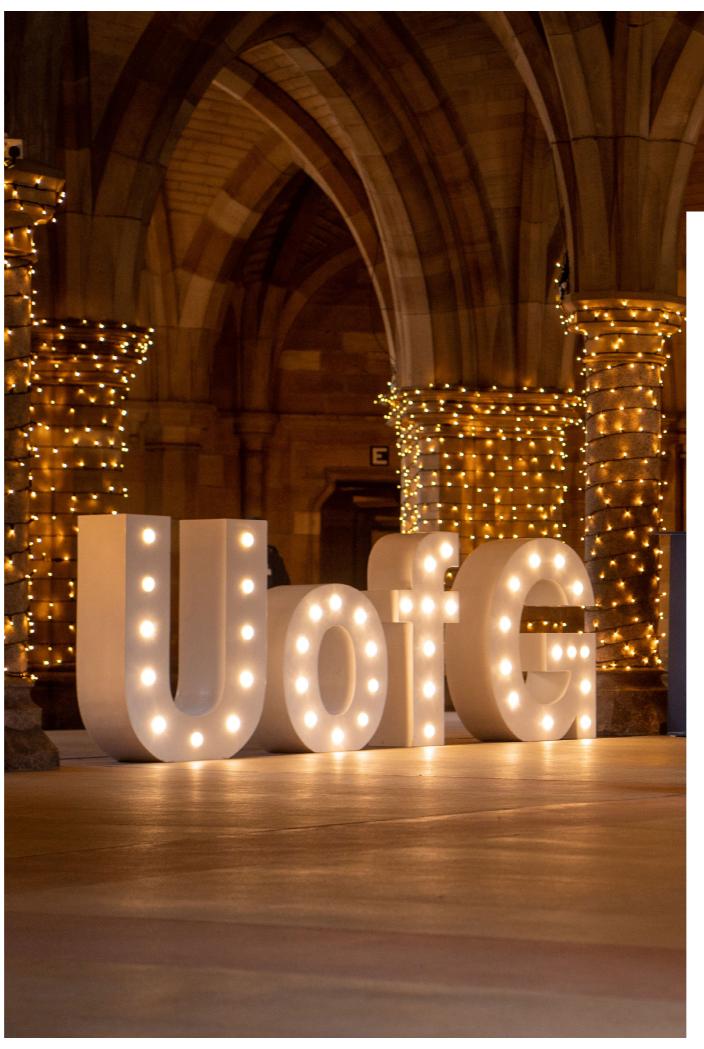
Please also note that should you be involved in an emergency and require an immediate response from the University Security staff, you should contact Security via the SafeZone app or 0141 330 4444 for support. Relevant details can be found here: <a href="mailto:emergencyandcrisissupport/">emergencyandcrisissupport/</a>

I would like to take this opportunity to wish you a successful year ahead.

Professor Manuel Salmeron-Sanchez Head of School

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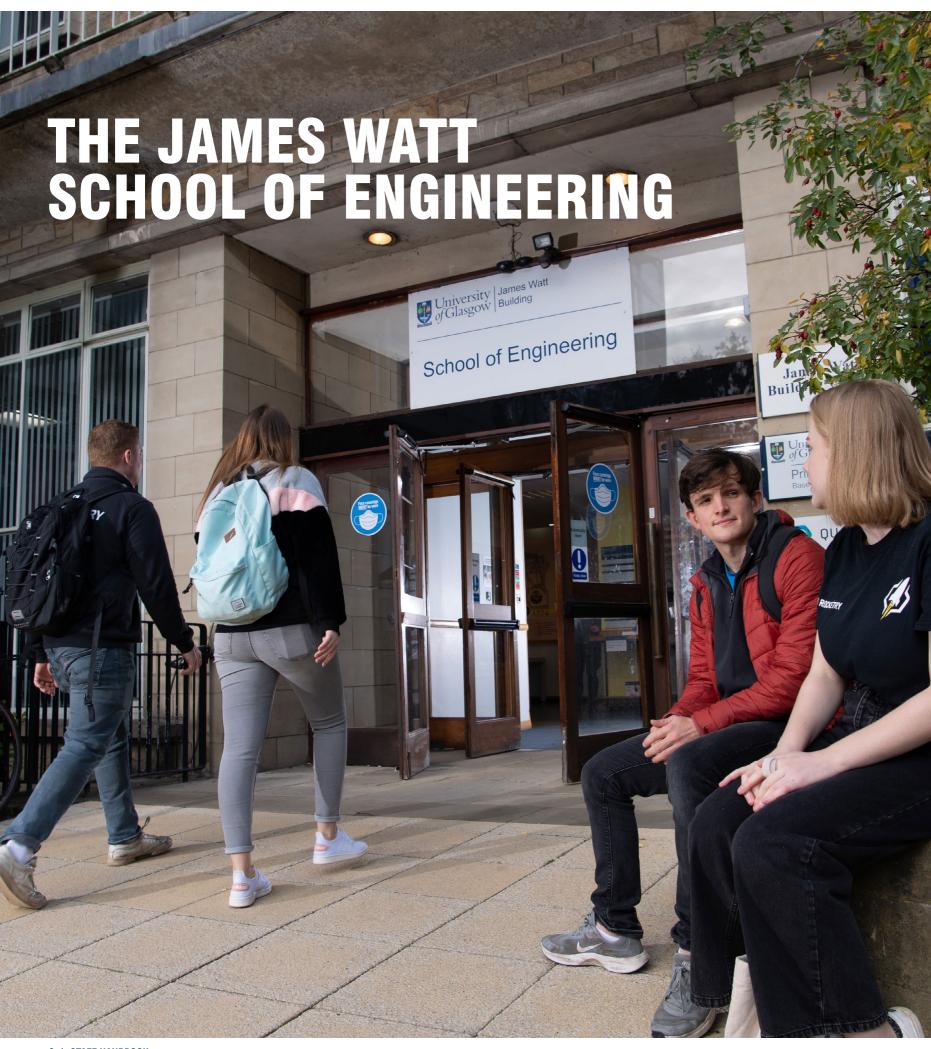


# **INTRODUCTION**

The University of Glasgow, founded in 1451, is the second oldest university in Scotland and the fourth oldest in the UK. With over 30,000 students, it is also one of the largest and offers study in a wide range of subjects at all levels in four Colleges (Science & Engineering; Arts; Medicine, Veterinary & Life Sciences; and Social Sciences).

The University is set in the West End of Glasgow, overlooking Kelvingrove Park and the River Kelvin, and close to the Botanic Gardens and some areas of delightful Victorian architecture. Glasgow itself is one of the world's outstanding Victorian cities. Although its growth was based on heavy industry and shipping, it now has a quite different cosmopolitan atmosphere and its status as a centre of culture has been confirmed by being European City of Culture in 1990, European City of Architecture and Design 1999 and the first UK UNESCO City of Music in 2008. Most of Scotland's national performing arts companies (Opera, Ballet, Theatre and Orchestra) are based here.

Glasgow hosted the 2014 Commonwealth Games and many venues throughout the city were developed or upgraded including the Sir Chris Hoy Velodrome, Emirates Arena, and The Hydro. Named the world's friendliest city by Time Out in 2022, Glasgow is also the European Capital of Sport 2023 and was host to the UCI Cycling World Championships in August 2023. It is only a short distance from Edinburgh, the Scottish capital, and the spectacular scenery and opportunities for outdoor recreation offered by the Western Highlands are within easy reach.



The University is structured into Colleges and Schools. Professor Manuel Salmeron-Sanchez is Head of the James Watt School of Engineering and Professor Andrew McBride is Associate Head of School. The School is part of the College of Science and Engineering, with Professor Dame Muffy Calder as Head of College.

JWSE has 172 academic staff and 190 researchers supported by approximately 40 professional services, 70 technicians and 12 logistics and facilities staff. A full list of staff in the School, including contact details, is available on the University website at <a href="mailto:glasgow.ac.uk/schools/engineering/staff">glasgow.ac.uk/schools/engineering/staff</a>. Note that the four digits after 0141 330 xxxx are the internal extension number for any member of staff.

Unlike many other Schools, Engineering has separate structures for research and teaching. Professor Nikolaj Gadegaard is Director of Research with responsibility for research strategy and Professor Massimo Vassalli is Director of Impact with a remit to embed impact at the heart of our School culture supported by strategies to transition our everyday research into activities that support society. All academic and research staff are line managed through our five Research Divisions, each with an associated Head of Research Division:

Research Division	Head of Research Division
Autonomous Systems & Connectivity	Professor David Flynn
Biomedical Engineering	Professor Huabing Yin
Infrastructure & Environment	Professor Sondipon Adhikari
Electronics & Nanoscale Engineering	Professor Hadi Heidari
Systems, Power & Energy	Professor Steven Neale

Professor Scott Roy is Director of Learning and Teaching and has overall responsibility for teaching within the School.

Teaching has been organised into five core disciplines, each with a Head of Discipline.

Teaching Discipline	Head of Discipline
Aerospace Engineering	Dr Ian Taylor
Biomedical Engineering	Dr Henrik Gollee
Civil Engineering	Professor Fiona Bradley
Electronics and Electrical Engineering	Dr Euan McGookin
Mechanical Engineering	Dr Phil Dobson

Dr Rami Ghannam is the Convenor for Postgraduate Taught Programmes and is responsible for the MSc programmes and Professor Marc Sorel is the Convenor for Postgraduate Research Students. Professor Sorel is supported by a deputy, Professor Alasdair Clark. Furthermore, there are two academic division representatives with full details available on the School intranet at <u>academic administrative roles</u>.

## **OUR PRINCIPLES**

The JWSE principles align with the University's <u>Code of Professional Conduct</u> and values on 'ambition and excellence', 'curiosity and discovery', 'integrity and truth' and 'an inclusive community'. We value diversity in all aspects of our activity and believe that School and individual success are elevated by integrity, equality, and respectful, collegiate, and inclusive behaviours across all job families.

To complement the Code of Conduct, we have developed a set of principles that reflect our expectations of all staff and are supported by the School's leadership, policy and practice.

- 1. We seek to create an environment of open and transparent communication to foster trust, engagement, and collaboration, and the profound impact this has on School success and staff wellbeing.
- 2. Across multiple sites, our work environment is a shared space and a collective responsibility. We expect everyone to play their part in making the School a welcoming, safe, friendly, and supportive place to work, learn and visit.
- 3. Collaboration and collegiality underpin our community and lead to innovative and resilient approaches across teaching, research and the delivery of professional and technical services within the School. We look to everyone to engage and contribute.
- 4. We work as a team, embracing agility and flexibility to support our colleagues. This includes being respectful of colleagues' deadlines and dependencies and helping each other to succeed. We drive continuous improvement, accept challenges and welcome ideas as to how ways of working can be bettered.
- 5. We are committed to both research excellence and teaching excellence and recognise that positive societal impact happens through our own research and through the work of our graduates who go out and change the world. Research-led teaching is a core function of the School and this is reflected in our expectation that all academic staff teach.
- 6. We value, recognise and approach research and teaching with equal importance. This is reflected in our approach to performance assessment and is a prerequisite for satisfying the collegiality criteria for promotion, including HoS support statements.

Our principles are a statement of intent. The culture we create at the JWSE is the collective outcome of our individual choices, behaviours, habits, and values. This means we need to work as a community to ensure that our principles are reflected in our lived experiences of working at the School. We look to everyone to engage and contribute, and we are committed to taking appropriate steps to draw attention to behaviours which conflict with our principles, including the broader UofG Code of Conduct.

## **STAFF ABSENCES**

If you are planning time away from the University during the semester (e.g., for a research trip or invited talk) this must be approved by your line manager, and it should not affect your teaching commitments. Staff typically ensure cover with academic colleagues on a reciprocal basis before seeking approval to miss a lecture slot. If, due to illness or any other reason, you are not available for your scheduled teaching, you must alert the School Teaching Office immediately so that the students are kept fully informed. All absences (business, annual leave, etc) must be recorded by the individual and then approved through CoreHR by your line manager. Any sickness absence should also be reported to your line manager. Academic absences may be reported to HR (eng-extendedworkforcehr@glasgow.ac.uk ac.uk) for capture on Core.'

## **ESSENTIAL TRAINING**

The University and School has several mandatory training courses that all staff must complete within the first 3 months of employment. The current mandatory courses are listed below, but you may wish to visit the mandatory training requirements to keep abreast of any changes.

#### Health, Safety and Wellbeing E-Induction

Access via Moodle, you will be asked for an enrolment key type in "safety" (all lower case). Expected duration 60 mins.

#### James Watt School of Engineering Health and Safety Induction Course

Access via Moodle link: Course: Staff and PGR Safety Induction (gla.ac.uk) Expected duration 30 mins.

#### **Equality & Diversity Essentials**

Access via Moodle. Expected duration 75 mins.

#### **Introductory Fire Safety Training**

Access via Moodle. Expected duration 30 mins.

#### Lets Talk about Race in the Workplace

Access via Moodle Expected duration 30 mins.

#### **The Effective Bystander**

Access via Moodle Expected duration 30 mins.

#### **Introduction to GDPR Training Course**

Access via Moodle. Expected duration 90 mins.

#### **Information Security Online Training**

Access via Moodle. Expected duration 90 mins.

#### Research Integrity Training (for all research staff)

Access via Moodle. Expected duration 90 mins.

#### Trusted Research (mandated by the School for all academic staff)

Access via Moodle Expected duration 15 mins.

#### Health, Safety & Wellbeing E Induction

Access via Moodle. Expected duration 60 mins.

## **SCHOOL OFFICE**

The School Office is located on Level 6 of the James Watt Complex (South) in Room 650.

Contact details for the School Office are:

Telephone: 0141 330 5858

Email: schoolofengineering@glasgow.ac.uk

See attached structure with roles (page 10)

#### **Examples of the support include:**

#### Executive support

- Administrative support to the Head of School, Associate Head of School and Heads of Research Division
- Honorary and Affiliate nominations
- Applications from visiting students (not on exchange agreements)
- Scholarships, prizes
- ECDP/Probation/P&DR
- Arrangements for inaugural and prestigious lectures
- Committee support across all School business, except learning and teaching

#### Resources

- Finance non-research budgets including TNE finances, collaborations, endowments.
- Extended workforce contracts of employment for Demonstrators and timesheets/payroll
- Non research staff contract maintenance

   extensions/changes/leavers
- Sickness absence reporting on Core.

#### Research, PGR and other

- Administrative support for the Director of Research, Director of Impact and IAB Chair.
- Administrative support for Convener of PGR
- PGR administration and support encompassing applications, progression, scholarships, financial support for conferences.
- EDI Support

## **TEACHING OFFICE**

Administrative support for UG and PGT teaching from registration and enrolment through to graduation is provided by the Teaching Office, located in Room 620 of the James Watt Complex (South). The Teaching Office core hours are 10am – 4pm Monday to Friday and the Help Desk is open for any general enquiries related to teaching during these times.

Details for staff contacting the School Teaching Office are:

Telephone: 0141 330 7558

Email: <a href="mailto:eng-teachingoffice@glasgow.ac.uk">eng-teachingoffice@glasgow.ac.uk</a>

If you are referring a student to the Teaching Office for assistance, please ask them to submit a Helpdesk request via "Science and Engineering Student Queries".

#### See attached structure with roles (page 11)

Teaching Office will disseminate deadlines for critical tasks such as exam paper setting and moderation; return of results for courses and projects; and timetabling. Deadlines should be strictly observed to ensure quality assurance and time-critical tasks can be properly executed. A failure to meet the deadlines may result in you being asked to attend a meeting with the Head of School and Head of Discipline.

In addition to delivering our engineering degree programmes in Glasgow, we have a significant transnational education portfolio with jointly taught and awarded degree programmes in Singapore (in partnership with Singapore Institute of Technology (SIT) and in China (in partnership with the University of Electronic Science and Technology of China (UESTC). The transnational teaching programmes with UESTC in China are headed by the Executive Deans of Glasgow College UESTC – David Young (Chengdu) and Robert Partridge (Hainan).

The TNE Secretariat is located in the Academic Policy & Governance (APG) Office in the Gilbert Scott Building and comprises an External Relations Manager and TNE Co-ordinator (Academic Collaborations and Partnerships).

There are also local administrative staff who are based in the School's Teaching Office who are responsible for supporting TNE as outlined in the structure below.

# Contact details for the Glasgow College UESTC are:

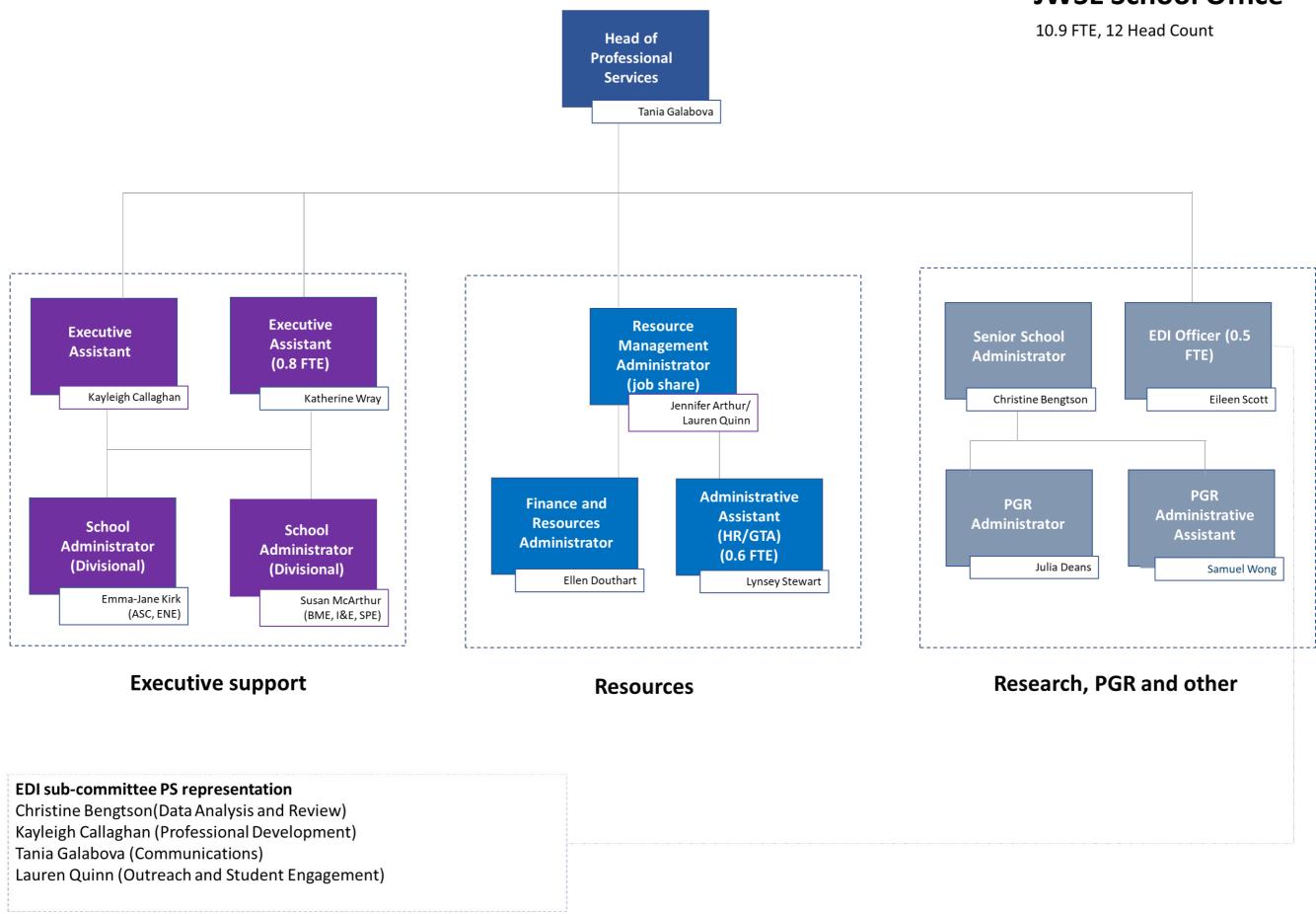
Email: eng-uestc-admin@glasgow.ac.uk

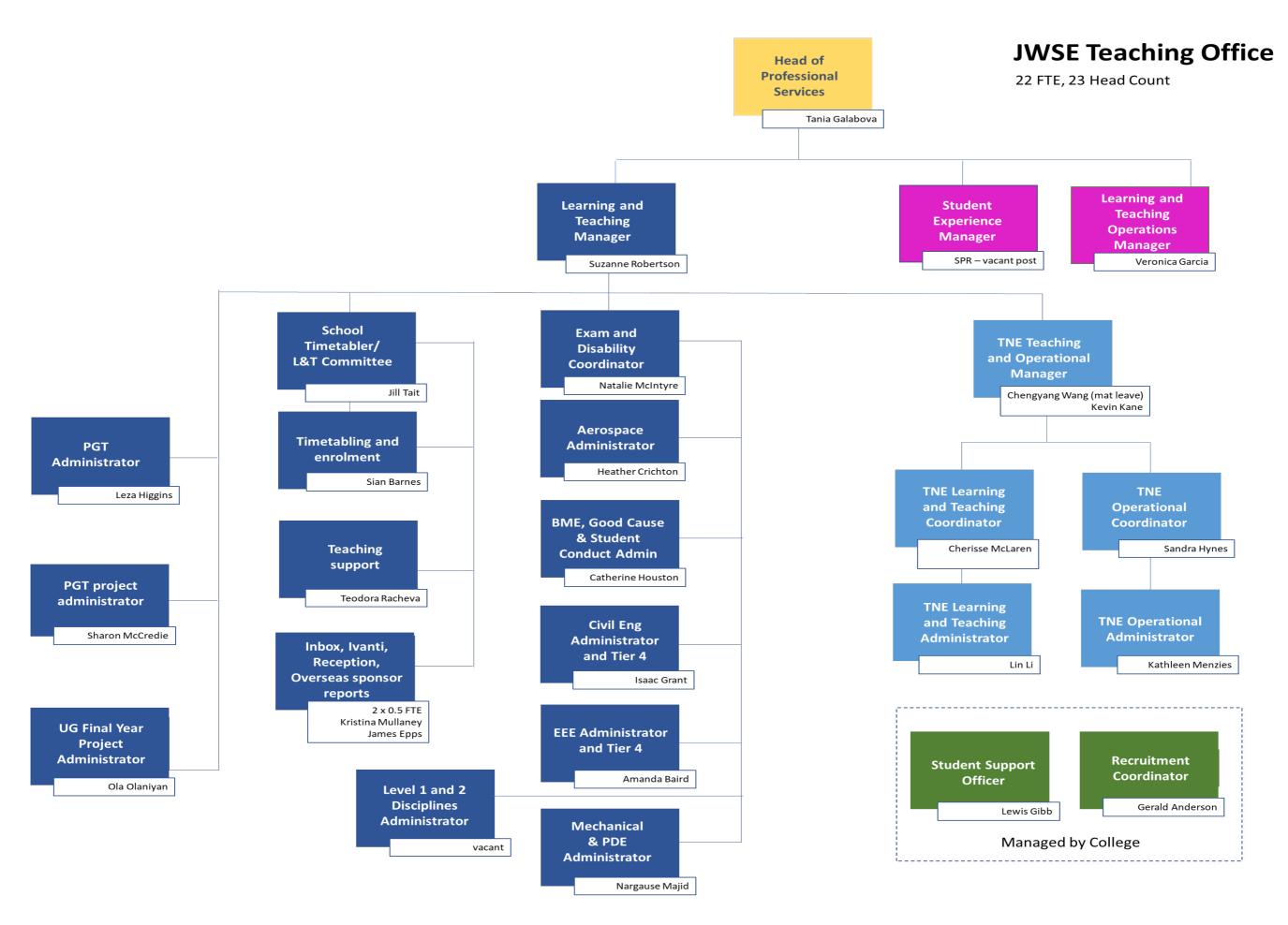
The University of Electronic Science and Technology of China (UESTC) and the University of Glasgow (UofG), UK, established the Glasgow College at UESTC in January 2013. Our joint degree programmes, delivered entirely in English, build on the strengths of the Chinese and British education systems. Taught equally by staff from both universities, most of the courses in years 1 and 2 are delivered by staff from UESTC, while the majority of the courses in years 3 and 4 are delivered by staff from UofG. Teaching led by UofG is delivered in 'blocks', with staff flying to China on a regular basis. There are more than 30 colleagues who are part of this fly-in team. The joint programmes integrate rigorous foundations in mathematics and electronic engineering with a stream of independent project work that runs throughout all four years, cultivating creative thinking skills and developing the students into exceptional engineers with a high sense of social responsibility.

# Three pathways are offered by the Glasgow College UESTC:

- Electronics and Electrical Engineering with Information Engineering
- Electronics and Electrical Engineering with Communications, and Electronics; and
- Electrical Engineering with Microelectronics These pathways comprise courses approved by the University of Glasgow Senate for the UofG BEng (Honours) degree in Electronics and Electrical Engineering.

# **JWSE School Office**





# **TECHNICAL SERVICES** The Technical Services team led by our Head of Technical Services, Cyril Pacot, provides technical support across the School for both research and teaching. Our Technical Services Managers Brian Robb (Research Laboratories), Denis Kearns (Research and Teaching Workshops) are leading our cohort of technicians delivering a wide range of services which includes: • design, build and commissioning of electronics, mechanical and civil engineering solutions; • Mechanical and Electronics workshops: • technical plant operation as well as

- decommissioning of plant and apparatus;
- material testing:
- lab management services as well as technical support for teaching labs;
- graphic design and printing services;
- CAD services and 3D printing;
- Health and Safety advice and management of biological, chemicals and waste electrical and electronic equipment (WEEE);
- stores management:
- repair, replacement, removal, transport and storage or plant, apparatus, and furniture;
- design development and delivery of technical space.

Our Technical Services also include facility and logistic services including transport of personnel, materials, and equipment, allocation of desk space and management of communal areas. Further details about facility support services are available on the next page.

More information can be found on our Technical Services website: schools/engineering/informationforstaff/technicalservices/

Requests for technical services must be raised electronically through the UofG helpdesk system (gla.ac.uk/helpdesk).

# **JWNC**

We also have a technical support team for the James Watt Nanofabrication Centre and Chris Bennett is the Director of Operations: Mark Dragsnes is the Technical Section Leader (Plasma Processing); the Technical Section Leader (Plant and Maintenance) is currently vacant; and Linda Pollock is the Technical Section leader (Lithography).

## **IT SUPPORT**

The IT Support Team provides a service across the School in support of staff and students. The School has an extensive suite of IT resources and a team of IT professionals to support research and teaching. Requests for IT support must be raised electronically through the UofG helpdesk system (https://www.gla.ac.uk/helpdesk).

In person support can be obtained by visiting the Tech Bar located on Level 4 of the James Watt North Building, and by using the QR codes on IT support posters in various IT and Meeting room spaces.

IT Support will assist in providing staff with essential IT equipment and with access to resources for them to carry out their duties. Typically, this includes a competent laptop and accessories used on campus and in support of agile working.

Staff wanting to purchase more powerful devices than the default provision should discuss their requirements with IT Support.

Any equipment provided to staff remains the property of the University and must be returned at the end of contract or upon resignation. The handling of returned equipment is part of the University's formal leaving procedure and should be discussed with your line manager and IT Support at the appropriate time.

Please note that there are links to much more information on the Engineering IT support pages.

## **FACILITY SUPPORT**

The facility coordinators are here to ensure the building occupants use the facilities effectively and that these facilities are fit for purpose. This can be a challenging task at times but a very critical service to everyone in the School.

#### Desk and locker allocation:

 Requests to be allocated a desk or to be allocated a locker must be raised through the UofG helpdesk (https://www.gla.ac.uk/helpdesk).

#### Meeting rooms:

• Meeting rooms can be booked via the UofG life app.

#### Access cards:

- Access cards for staff and PGRs can be programmed on request to: eng-buildingaccessrequests@glasgow.ac.uk
- Undergraduate and PGT students should contact the Teaching Office.

#### Other requests:

Please note that services such as cleaning, building maintenance, plumbing, heating, and cooling, and other issues related to the building fabric are managed by the Estates Services team. Such requests must be raised electronically through the dedicated ECS maintenance request page.

For other requests, our facility coordinators can be contacted via email: Eng-FacilityCoordinator@glasgow.ac.uk

# **SPACE REQUESTS** (other than single desk allocation)

Our vision is to adapt our ways of working and culture to societal, technological, and physical developments to further strengthen our international leadership position in Engineering research and education and underpin future success.

As part of this vision, and to ensure a coherent and sustainable estate footprint, JWSE advocates development of inclusive ways of working, access to shared facilities to enable coherent and efficient deployment and use of resources.

In line with this vision, please outline your facilities access and requirements after you have discussed this with your Head of Research Division and have his/her support in principle in the following form: https://forms.office.com/r/CLVy3z2Uni

For research laboratories, you are encouraged to consult with your Head of Research Division, Brian Robb - Technical Services Manager (Laboratories) and Dr Phillip Harrison in the first instance. Completed forms will be reviewed under the auspices of the Engineering Growth Estates Group.



## **COLLEGE SUPPORT**

The <u>College Research Support Office</u> has responsibility for research management and support. Their dedicated team of research support staff provides cradle to grave support for research grants and contracts. This includes support for researchers in the search for funding opportunities, the preparation, costing and submission of applications that comply with funder terms and university policy, the processing of awards, and post award financial administration through to completion.

Each academic is allocated to one of the three Project Coordinators below by rota. If you are unsure who you are allocated to, please check the <a href="Find\_your Project Coordinator">Find\_your Project Coordinator</a> list. New staff may email <a href="COSE-ResearchOffice@glasgow.ac.uk">COSE-ResearchOffice@glasgow.ac.uk</a> for confirmation of their allocated PC if not yet listed. This email must not, however, be used as a single point of contact.

Staff should contact their allocated Project Coordinator to discuss grant proposal submission well before funder deadlines. A costing form will be provided which will then form the basis of the final financial approval by the Head of School and the appropriate Head of Research Division. Proposals requiring a letter of support from the School should be discussed with the Head of School and/or Head of Research Division in advance, at least 5 working days before the submission deadline.

Contact details for the Engineering team within the College Research Support Office are:

Project Coordinator	Jacqueline Heuchan
Project Coordinator	Derek Motherwell
Project Coordinator	Anca Quinn
Project Coordinator	Tom Staves
Project Coordinator	TBC
Research Support Administrator	Sandra James
Research Support Administrator	Andrew Bruce
Research Support Administrator	TBC

#### **College Financial Transactions Hub**

The College Financial Transaction Hub supports the School with the processing of all purchasing and other financial transactions. The team be contacted on cose-fintranshub1@glasgow.ac.uk and are responsible for:

- Procurement
- Providing guidance to staff and students on University Finance policies and procedures and claiming expenses via CORE

## **SESSION DATES**

<u>Session dates</u> are published online by the Senate Office. In the 2023-24 academic year, the core teaching weeks of the autumn and spring semesters are:

w/c 18 Sep – 1 Dec	regular teaching on Glasgow campus
w/c 4 Dec – 15 Dec	revision and examination period
w/c 8 Jan - 22 Mar	regular teaching on Glasgow campus
w/c 8 Jan – 22 Mar w/c 22 Apr – 17 May	· ·

# TEACHING AND TEACHING AIDS

#### **MOODLE**

The University's online virtual learning environment for students is called Moodle. You log into this from or directly on Moodle to upload course materials. Each course has a Moodle page and students are automatically enrolled once they have registered for a course - usually this enrolment commences at the end of August each academic year.

Important course information should be posted on Moodle for any courses you are teaching: course notes, tutorial sheets, marking information and criteria, general feedback to students, and links to additional resources. The University's <a href="Accessible & Inclusive Learning Policy">Accessible & Inclusive Learning Policy</a> requires staff to make materials available to students at least one working day in advance, and most staff do this by posting material on Moodle, or revealing previously hidden material.

Moodle is also a good way to be innovative in your teaching in ways that benefit both you and the students you teach: for instance, by setting up online discussion groups topics, quizzes, or electronic submission of lab and project reports which can be automatically checked for plagiarism on your behalf. Make good use of its time saving options!

In addition to Moodle sites for courses, there are several other Moodle sites which are organised on a Discipline or Degree Programme basis to help support students. The University also tends to use Moodle for continuous professional development courses for staff.

Your username and password are the same as that used to access MyCampus, log in to computers on campus, and access your university email.

# **MYCAMPUS**

MyCampus is the University of Glasgow's student information and management system that is used by staff and students throughout the year.

#### MyCampus:

- shows the courses that make up a student's curriculum, including a description of each course and the teaching staff involved, and permits students to select optional courses.
- allows students to pick their own timetable for classes where a choice is available (typically laboratories or tutorials) and shows students and staff an overall timetable for their classes.
- compares student results with the progress regulations so that they can see whether they need to take resits.
- provides the system for reporting when their studies are affected by illness or personal difficulties.

You should visit MyCampus support development and infrastructure to gain access to the MyCampus system. Access will only be granted on completion of the mandatory MyCampus Fundamentals training.

In the unlikely event that a change has to be made to some aspect of your teaching during the term itself, make sure that you coordinate this through the Teaching Office, as well as notifying students in lectures and on Moodle. This will ensure that all the automated student helps, which are synchronised to MyCampus, match what you are telling them, avoiding student confusion and discontent.

If you are a course coordinator you may receive a notification via email if a student has submitted a Good Cause request for an extension on a coursework submission. You have access to the MyCampus Student Good Cause pages to view the detail of the claim and to update the outcome or you can ask the Teaching Office to update the outcome for you.

Please respond to these requests as quickly as possible (even if you have had separate correspondence with the student) and update the Moodle submission deadline for the individual student. Good Cause claims are an area of high anxiety for the students and should be given utmost priority.

**Key contact:** Suzanne Robertson, Learning & Teaching Manager

## **READING LISTS**

The University Library hosts a database of reading lists/recommended textbooks for each course, which is presented to students via MyCampus on course enrolment. Instructions are available online. A few minutes work uploading textbook data can significantly reduce the number of student questions on textbooks at the beginning of term. If you are hard pressed for time simply sending your reading list to the library headed with a note of your course title, ENGxxxx code, semester, and a rough estimate of student numbers, will allow Library staff to do the work for you.

# **LABORATORY DEMONSTRATORS AND TUTORS**

The James Watt School of Engineering funds a significant number of PhD student demonstrating and tutoring hours each year to support your lab sessions. Unfortunately, this resource is limited by the number of PhD students available. To ameliorate the situation:

- Think carefully when filling in the demonstrating needs request circulated by the Teaching Office at the beginning of August each year—make sure that your requests are well judged to optimise student learning.
- Ensure that you make the best use of your support.
- Demonstrators are paid to attend both generic University training and specific training that you are required to give before they start. They will be expecting such training and being proto-academics will of course leave their own revision of the lab material until just before your training session. However, this is far better than leaving their revision of the lab material until the lab itself, following you around picking up the concepts needed to appear like a professional in subsequent labs, whilst ignoring students in this one. Students will notice this as poor teaching practice, whereas well-trained lab demonstrators make you look good.
- Good lab demonstrators are a source of useful feedback to students, and you should explicitly flag to students that this is one source of feedback provided by the University
- Encourage your own PhD particularly 1st and 2nd year-students to
  work as demonstrators wherever possible. Teaching experience is always
  good on a student's CV and the rigour of explaining technical material is
  a benefit to new researchers (please note that RCUK have an expectation
  that the total hours spent should not exceed six hours in any week)
- Your Head of Discipline may allow exceptional undergraduate students to help in demonstrating if it can be shown that this work will have no effect on their own studies—if an undergraduate student contacts you, direct them to your Head of Discipline.

The online system for making demonstrator and teaching assistant requests and for reviewing and accepting applicants can be found here.

Please note: It is imperative to understand that all demonstrators must be employed by the School via the Teaching Office prior to undertaking any work for the School. Each demonstrator has to be in possession of a contract before they can undertake ANY demonstrating and the School has to ensure that they have the right to work in the UK. If a student does not have a contract in place before their teaching commitments begin, they will not be permitted to get involved with any demonstrating.



## **GLASGOW COLLEGE UESTC**

A Glasgow College UESTC supplement outlines detailed information on our teaching and teaching delivery in China.

# TECHNOLOGY ENHANCED LEARNING AND TEACHING

#### ATTENDANCE MONITORING

Monitoring of student attendance, especially in early years, is a useful way to help students learn better study habits. The School retains barcode scanning/ recording hardware, which can be used to record student attendance either as students arrive/leave or by passing around the hall during a lecture. They can be booked out from the Teaching Office.

#### **CLASSROOM RESPONSE SYSTEMS**

Since almost all students attend lectures with mobile phones or computing devices it is possible to use Classroom Response Systems to interact with a class through e-voting or polling. The University has developed the quick and easy to use YACRS (Yet Another Classroom Response System) which is flexible enough to create e-voting questions during a lecture itself to obtain immediate feedback on student understanding. One popular technique is simply to ask a single YACRS question at the start of the lecture session, which will be answered at some point during the lecture for a small summative mark bonus—helping with student attention during the lecture and as a side effect, taking an approximate attendance roll. YACRS is available via MyGlasgow.

#### **BLENDED AND ONLINE LEARNING**

Blended learning combines both face-to-face (f2f) and online study to enhance student learning and make more effective use of staff and student time. One example of this might be the "flipped" classroom, where students study web hosted video, audio and/or possibly other materials before attending a lecture, tutorial, or lab session where the course coordinator can interact with students, often in small groups, to focus on more difficult concepts. Often these sessions take the form of practical problem-based learning exercises.

Online learning frequently also relies on audio-visual resources and is more commonly used in distance learning courses where f2f learning or interaction is not easily achieved. Typically, online courses will also include online assessment methods such as quizzes or wiki submissions, etc. Tutorials and small group discussions can be held using facilities such as Zoom, Big Blue Button or Skype for Business.

Whilst lecture theatre with video recording facilities can be used to develop BOLD materials, it is often less demanding to video capture your teaching material being written to paper with a voice-over (VO).

To facilitate this the School has high quality audio recording and overhead video capture hardware and software available. This can be booked out from the School Graphics Technician, Peter McKenna (Ext 7576), and would normally be used in your own office. Additionally, MS PowerPoint includes the facility to record VO and access to screen capture/recording software is also available.

The School lead on BOLD is <u>Philip Harrison</u> (Ext 4318), and additional information can be found on the <u>University Learning Enhancement site</u>.

#### **FIELD TRIPS**

The School encourages staff to take students on appropriate field trips and industrial visits. Typically, these take place during scheduled laboratory sessions or on Wednesday afternoons (which are set aside by the University for sporting, cultural and other activities). Transport should be arranged through the Teaching Office, paid for by the School for trips with clear academic value. Half-day trips avoid the problem of supplying lunch, and experience suggests the need for clear commitment from prospective attendees on voluntary visits to avoid disappointing our industrial contacts. Note that an academic member of staff must attend such trips; it is not appropriate to give PhD students overall supervision of trips we arrange.

#### **ADVISERS OF STUDIES**

Each student is allocated an Adviser of Studies who provides advice throughout the year to students who experience any kind of difficulties, which might impinge on their studies. You will be expected to serve as Advisers of Studies unless you have other very significant management or administrative responsibilities. Whilst the MyCampus system reduces the workload of Advisers, you will be the human face of the University for students who are facing difficulties.

In practice, much of the work of Advisers is giving general degree advice in line with <u>University Regulations</u>, explaining rules on progression and graduation, and students in touch with the right <u>Student Services</u>.

There is a Chief Adviser of Studies, **Dr Douglas** Thomson. He will provide you with initial training, a useful Adviser's Handbook (under Documents/ School Information) and timely e-mails of advice at critical junctures during the academic year. As an Adviser you are expected to meet with your advisees at the start of Semester 1 and then to be available to them, if required, throughout the session. You will also receive a report from the Teaching Office at the start of Semester 2 showing your advisees' progress following the Semester 1 assessments. You should look out for any progress concerns and arrange a discussion with the student. Please respond promptly to requests for advice or meetings, and if you cannot see an advisee due to other activities or responsibilities. please refer the student to your Senior Adviser or the Chief Adviser. Senior Advisers for each Teaching Discipline are your best source of detailed advice: they will be expecting questions from new Advisers.

Chief Adviser	Dr Douglas Thomson <u>Douglas.Thomson@glasgow.ac.uk</u>
Senior Adviser PGT Programmes	Dr Euan McGookin Euan.Mcgookin@glasgow.ac.uk
Senior Adviser Aeronautical Engineering	Dr Richard Green Richard.Green@glasgow.ac.uk
Senior Advisor Biomedical Engineering	Dr Manlio Tassieri Manlio. Tassieri@glasgow.ac.uk
Senior Advisor Civil Engineering	Dr Linda Brown Linda.Brown@glasgow.ac.uk
Senior Adviser Electronics and Electrical Engineering	Professor Vihar Georgiev vihar.georgiev@glasgow.ac.uk
Senior Adviser Mechanical Engineering	Dr Paul Prentice Paul.Prentice@glasgow.ac.uk
Student Support Officer	Mr Lewis Gibb eng-studentsupport@glasgow.ac.uk

# STRUCTURE AND ASSESSMENT OF DEGREE PROGRAMMES

# TERMINOLOGY — PROGRAMMES, COURSES AND CREDITS

Common words such as 'course' can be used in different ways so here is a brief list of usage at Glasgow University.

**A degree programme** is the complete curriculum that leads to a degree, such as BEng in Aerospace Engineering or MEng in Mechanical Engineering.

**Each programme** is divided into **courses**, each of which is self-contained with its own instruction and assessment. Each course has a level, which is roughly the same as its year in the curriculum and is often shown by a number at the end of the name of the course. For example, Applied Mechanics 1 is a level 1 course and appears in the first year of the curriculum for undergraduates. Master's level courses may have an 'M' instead of a 5.

The size of courses is measured in credits. Most taught courses carry 10 or 20 credits, but projects may be larger. Students are awarded the credits for a course if they complete all the compulsory work and assessments; typically, this means that they must attend laboratories and tutorials, submit assignments, and attend examinations (the details are given in the specification for each course and will be explained by the lecturer or convener). Students do not have to 'pass' the course to be awarded the credits. In other words, credits are a measure of quantity, not quality. The usual academic year for undergraduates (September-June) carries 120 credits, and the usual academic year for MSc students (September-September) carries 120 credits of taught courses plus a 60 credit MSc project. Formally 1 credit = 10 learning hours, the total time that a typical student is expected to spend on a course. Thus a 10-credit

course demands 100 learning hours. In many cases the timetabled classes (lectures, laboratories, tutorials) come to about 30 hours, so students are expected to spend more than double that time working on the material in their own time — reviewing lecture notes, going over difficult points with the aid of a textbook, working through tutorial sheets, writing laboratory reports, and revising for the examination.

A number of qualifications are available from the University of Glasgow, depending upon the level achieved and the number of credits studied. Table 1 indicates the minimum number of credits required for each qualification and the number of years typically required to achieve this qualification. It also details the Scottish Credit and Qualifications Framework (SCQF) level. In practice, the CertHE, DipHE, BSc (Ord), PgDip and PgCert are normally 'exit awards', obtained by the minority of students who cannot progress to obtain full BEng, MEng, or MSc degrees.

#### **PGR** applications

New staff should arrange a Teams call with the PGR Admin Team to receive training on the PGR referral system for approving PGR Applications and they will also receive a copy of the Staff Guidance Notes.

#### **PGR** scholarships

There are typically two calls each for funded PhD studentships, with application deadlines in January and May. Staff will be notified in advance of the relevant deadlines and are asked to encourage excellent students to apply. Candidates must submit a PhD application via the on-line admissions system as well as a separate Scholarship Application via the Scholarship Portal. The supervisor will be asked to upload a supporting statement to the Scholarship portal; therefore, applications must be submitted well in advance of the deadline.

#### PhD study duration

Regardless of funding the PhD is a 3-year programme. There is an expectation that by month 42 (i.e., 3.5 years after the start date) the thesis is submitted for examination. The University absolute maximum timescale is 4 years and there is no automatic right for an extension after this timescale.

Academic supervisors are asked to be cognisant on the definition of 'on time' completion and ensure proper planning, early interventions (e.g., leave of absence request) and support of our research students to ensure adherence. Our PGR team will guide you on any issues or challenges that may arise.

**Table 1: Qualifications** 

Qualification	Abbreviation	Total credits required	Years of Study	SCQF Level
Certificate of Higher Education	CertHE	120	1	7
Diploma of Higher Education	DipHE	240	2	8
Bachelor of Science in Engineering (Ordinary)	BSc (Ord)	360	3	9
Bachelor of Engineering	BEng	480	4	10
Master of Engineering	MEng	600	5	11
Postgraduate Certificate	PgCert	90	1	11
Postgraduate Diploma	PgDip	120	1	11
Master of Science	MSc	180	1	11

# **GUIDE TO THE GRADING SCHEME**

Students are awarded a grade at the end of each course, following a meeting of the School Board of Examiners (ACM) to approve the results. If a student asks you for their course or final examination results (as opposed to the continuous assessment grades given out for work during the course), you must not provide this information and should point them to their student record on MyCampus.

Assessment is governed by the University's Code of Assessment, which is part of the University Regulations www.gla.ac.uk/myglasgow/senateoffice/ policies/calendar (the formal regulations). This specifies a set of grades from A1 (highest) to H (lowest) with descriptions of each grade shown in Table 2. Whilst projects, lab reports and essays are assessed using these grades directly, most final examination results in Engineering are returned to the Teaching Office as percentages. The School converts these to grades using the mapping in Table 2 as a guide but this mapping is local to the School's Glasgow campus and may be varied. Each grade also has a number of Grade Points (0–22) associated with it. These are used to calculate a student's average performance, which is needed to check their progress and for graduation.



Table 2: Mapping of percentage marks to grades and verbal descriptors of grades from Code of Assessment

Gra	de	Grade Points	%	Gloss	Primary verbal descriptors for attainment of Intended Learning Outcomes
	1	22	90–100		Exemplary range and depth of attainment of intended
	2	21	80–89		learning outcomes, secured by discriminating command of a comprehensive range of relevant materials and
Α	3	20	77–79	Excellent	analyses, and by deployment of considered judgement
	4	19	74–76		relating to key issues, concepts and procedures
	5	18	70–73		
	1	17	67–69		Conclusive attainment of virtually all intended learning
В	2	16	64–66	Very Good	outcomes, clearly grounded on a close familiarity with
	3	15	60–63	·	a wide range of supporting evidence, constructively utilised to reveal appreciable depth of understanding
	1	14	57–59		Clear attainment of most of the intended learning outcomes, some
С	2	13	54–56	Good	more securely grasped than others, resting on a circumscribed
	3	12	50–53		range of evidence and displaying a variable depth of understanding
	1	11	47–49		Acceptable attainment of intended learning outcomes,
D	2	10	44–46	Satisfactory	displaying a qualified familiarity with a minimally sufficient range of relevant materials, and a grasp of the analytical issues and
	3	9	40–43		concepts which is generally reasonable, albeit insecure
	1	8	37–39		Attainment deficient in respect of specific intended learning
Ε	2	7	34–36	Weak	outcomes, with mixed evidence as to the depth of knowledge and weak deployment of arguments or deficient manipulations
	3	6	30–33		and weak deployment of arguments of deficient manipulations
	1	5	27–29		Attainment of intended learning outcomes appreciably
F	2	4	24–26	Poor	deficient in critical respects, lacking secure basis in relevant factual and analytical dimensions
	3	3	20–23		in relevant ractual and analytical dimensions
	1	2	15–19		Attainment of intended learning outcomes markedly deficient in
G	2	1	10–14	Very Poor	respect of nearly all intended learning outcomes, with irrelevant use of materials and incomplete and flawed explanation
		0	0–9		No convincing evidence of attainment of intended
H 					learning outcomes, such treatment of the subject as is in evidence being directionless and fragmentary

In order to be awarded the credits and to gain one of the grades in Table 2, students must have completed a course satisfactorily. If they have not been awarded the credits for a variety of reasons other results are used. For example:

CW — Credit Withheld. This means that a student has not completed some required part of the course assessment (exam, laboratory report etc.) but can still do so before the end of the academic year. Students will contact the lecturer to find out what they still need to submit and should be given a deadline, during the summer and before the resit diet of exams. The submitted material is marked without any late penalty, but because it is technically a resubmission of material (the 'first' non-submission which caused the CW being graded at 'H') the student's overall course grade is then capped to no more than a grazing pass, D3, no matter how good the grades for each individual component of assessment. Note that the deadline for resubmission must be set to before (and usually well before) the start of the resit examinations in the first week of August, to give time for marking. No resubmissions are allowed after the resit exam period starts.

CR — Credit Refused. This means that a student has not completed some compulsory element of the course (attended laboratories etc.) and it is not possible to remedy this in the current academic year. It is not possible to change CR by taking a resit exam; a student would need to repeat the course and the progress committee may not permit this. Students may contact you if they are in doubt as to why they were refused credit for a course.

University policy is to allow a one resubmission of any and all pieces of assessment unless stipulated in advance in the Course Specification, and so it is unusual for lecturers to give CR.

MV — Approved Absence (historically 'Medical Voucher'). This means that a student had medical or personal circumstances which prevented them from taking the exam at first sitting and they can take the resit without penalty. The decision to award MV's is taken by a Mitigating Circumstances Board consisting of all Snr Advisers which meets before each Exam Board, and, as with the two results below, is not given by you as a course lecturer.

07 — Deferred Result. This means the School has not been able to give a student a grade at the usual time. The reasons range from study abroad to plagiarism/conduct.

CA — Credit Awarded. This means that it has not been possible to award a grade for the course, but a student is credited with having completed the course.



# SHOULD I GIVE A CW, CR OR A GRADE IF WORK IS NOT HANDED IN?

Note that if a student fails to hand in required assignments or does not attend the final exam, then give CW for that component of assessment. A student with a CW (or any grade below D) can resit/resubmit each component of assessment within an academic year, so even if a student fails to return an assignment during term, they should be given a chance to resubmit this assignment by the end of July (before the resit exams begin) to 'raise' the CW to a useful grade.

As noted above, academic staff often have students resubmit coursework over the summer, with a deadline before the start of the resit examinations at the beginning of August. In very rare circumstances, a piece of work cannot be resubmitted (e.g., a group report with a mix of contributors, a semiconductor fabrication exercise with time limited cleanroom availability, etc.). Such a lack of resit opportunity must be noted in the course specification / documentation available to the student at the start of the course, and students who fail to submit such work are given CR as a grade. In summary, CW is 'fixable' within the academic year, CR is not.

In addition, most course specifications use the sentence "Students must attend the degree examination and submit at least 75% by weight of the other components of the course's summative assessment". So, if a student defaults on up to, but not including, 25% of the continuous assessment work, and hands in all explicitly required continuous assessment work, you should award an overall course grade. (Of course, each piece of non-submitted work gets an 'H'=0 grade in that calculation.)



**EXAMINATION CREATION & MODERATION** 

Whilst continuous assessment (lab reports, tutorials, etc.) worth ≤30% of a course do not have to be moderated by anyone outside of your course team, final exams and significant items of continuous assessment must be moderated internally and by External Examiners. This requirement means that exam creation, like targeted mode grant applications, has very strict deadlines—your main and resit examinations must be prepared and submitted before the end of week 5 in the autumn semester and before the end of week 7 in the spring semester. Around that time, you will also be asked to do internal moderation on a small number of exams that others have created (including moderating exams set for University of Glasgow Singapore and Glasgow College UESTC), and the maximum time available to do this is five working days—although staff normally attempt to turn moderation around in hours. Ensure that you start working on exams early to give yourself time. A month before deadline at minimum. Many colleagues delivering stable courses find it beneficial to write exams directly after marking August resits whilst the material is fresh in their minds.

document for School of Engineering examinations, obtain one from the Teaching Office. Its automatic styles ('Question', Subquestion', Subsubguestion', Equation', Figure') will make your life considerably easier.

Some other hints in creating good exam papers follow:

- All questions contain a 'bookwork' element allowing students of modest ability to obtain some marks relatively easily, and this element should be early in a question to calm students in an exam situation.
- Each exam should contain a mix of derivation. analysis, and design style questions. For exams with optional questions students must not be able to choose a set of questions to avoid analysis
- All questions should contain an element of problem-solving which test both understanding and application of that understanding. There should be a mix of problems/derivations already seen in tutorials/lectures as well as novel problems.
- All questions should contain a more advanced component often for about 20% of the question marks which either require particular insight, or apply material in a novel context (especially where not all parameters are given, and the student must make engineering judgments)
- Limit yourself to no more than five questions (which of course will be broken into more sub questions). Students taking exams online upload by question and are never asked to upload more than five files. In-person exams with no more than five questions benefit from being able to use Teleforms rather than script books
- Moderators will bounce back exam scripts inconsistent in font between questions or between questions and figures.
- Formulae sheets/lists are good but resist questions which merely require a student to choose from given formulae.
- Textbooks are a good source of exam ideas (but do not copy!)
- Putting an idea or old tutorial question in an industrial/research context can breathe life into an old idea or can spark off new question ideas.

- Detailed worked answers (solutions) must be supplied with any exam paper and are not only important if you are ill - working through detailed answers is often a new source of question ideas.
- Questions normally should be 'chunked' into units of less than 10 marks, and worked answers should have significantly finer granularity.
- If your paper requires a datasheet remember to append it to the question paper.

You are required to create both a main and resit examination for every diet, with both examination papers submitted by the deadline date for the main diet. However, since resit examinations are almost always subject to grade point capping, resits can be a mix of old exam ideas and are thus easier to write (and often limber you up for writing of the main examination).

Typically, examinations for core courses contain compulsory questions covering the broad range of the course curriculum. Examinations for honours years contain a mix of compulsory questions assessing core material, and optional questions. Do not hesitate to obtain previous examinations electronically from the University Library or Teaching Office to confirm the structure of your examination.

Note that if that structure is altered or the course is new, a dummy examination and worked solution sheets must be uploaded to Moodle for the benefit of students.

Once your paper has gone through moderation and you upload the final "Paper for Registry" please visit the Teaching Office and ask to see a printed version of the paper. This final scrutiny will ensure that any errors with formatting are flushed out before the paper is printed and delivered to the exam hall.

# **EXAM MODERATION**

Moderation is the peer review of assessment setting. A paper should not arrive on the desk of an External Examiner with infelicities in formatting and spelling, but more importantly, should be well judged in the level and mix of questions. When you moderate, you:

- Check that the questions have a mix of bookwork, analysis, design and 'sting-in-the-tail' components.
- For a paper with options, check that students cannot avoid challenge.
- Check that the English is unambiguous, clear, and succinct, and that there is nothing in the formatting of the paper that would confuse students.
- Ensure appropriate level of difficulty and coverage of the course material.
- Check the mathematical calculations.
- Check allocated marks are appropriate and total correctly.
- Check that there are no ambiguous phrases, that units are correct, fonts in question matches the fonts in the diagrams, check the datasheet for consistency, doing this on a printed copy, checking that the paper conforms to a standard format.
- checking that the paper isn't the same as last year.
- check how demanding each question and the whole paper is.
- checking chunking in questions and in solutions, evidence of solubility of the questions, check in the solutions that the equations should be memorised or are in the in the datasheet (so in the solutions, setters should flag "this equation is in the datasheet").

The 'review' tab of MS-Word is often very helpful in making minor changes and comments on a paper— which may then be directly uploaded to the Exam Paper database for confirmation for the Exam Setter. For major changes, a direct conversation is usually much more helpful. You must complete the checklist as part of the review process, with signature and date in order for the automated workflow processes to be fulfilled.

# FINAL EXAM SCRIPT MARKING AND SUBMISSION OF GRADES

# (The marking of projects is considered below under the heading 'Final year projects')

Traditional final examinations at the University are supervised by professional invigilators. It is your responsibility to attend 15-30 minutes in advance of the examination to check that the correct question sheet (and if necessary, data sheets) have been provided and that the question sheet is legible. If there are problems, contact the Teaching Office. This is especially important as students with additional needs may be taking exams in other rooms and may need to be contacted. Leave a telephone number in case invigilators have a query during the examination.

Normally final examinations result in a multipage script book for each student, or a set of A3 'Teleform' sheets (for large classes with multiple lecturers). You will collect, count, and sign for script books at the end of the exam. If you are unable to collect the scripts, you may ask another contracted member of staff to do this for you or ask the Teaching Office for assistance. Do not ask GTA's to collect scripts. If Teleforms are used the Teaching Office staff will collect the scripts and separate out your own questions for collection. To preserve student anonymity, you should deposit white attendance slips in the Teaching Office whilst marking and should never tear off the strips on the script books that conceal student names unless the student registration number is inconsistent with those recorded in your class list. Remember to collect any script books for additional needs students from the Teaching Office.

All honours courses (3rd year and above) and the majority of 1st and 2nd year course are marked exclusively by academic members of staff. It is policy that PhD students should not mark honours exams, and exceptions for 1st and 2nd common curriculum courses involve closely supervised marking teams, with detailed academic moderation.

Scripts should be marked using a coloured pen (best practice is red for markers and green for check/double markers) which cannot be confused with the candidate's writing. All writing in the script must be tagged to show that it has been read by the marker, e.g., with a line in the margin if there are no marks or comments nearby. Tag each blank page (or indicate that you have checked blank pages through to the end of the script book).

Each part of each question should be marked, and the marks shown with an 'out of' mark (e.g., 3/6) in the script adjacent to the appropriate part of the question. Avoid giving fractional marks (e.g., 0.5/4, or worse ½/4) which are a recipe for confusion, and usually indicate that more marks should have been offered when setting the question. Where a student has not answered one or more parts of a question, you should indicate that an answer has been sought in the script by writing a 0, e.g., '(c): 0/6'. Total the marks for each question and write the total distinctively (perhaps by circling the total) near the solution, and on the front of the script. Comments added to justify the mark awarded should avoid emotional or potentially offensive language the script books are read by External Examiners, and often by students looking for feedback.

#### Write the overall total on the front of the script.

It is the responsibility of each course coordinator to ensure that final exam scripts are checked by another academic (your fellow academic if the course is a 'two-hander', or a colleague assigned directly by the Head of Discipline). The checker should use a different coloured pen to the marker (normally green). Check that all writing on the script has been read and tagged, the total mark for each question is accurately recorded on the front of the script, and the total mark for the exam paper has been correctly recorded, and that the total grade for the course, including coursework has been recorded on a mark's spreadsheet.

It is now common practice in the UK for the checker to make a green mark on every page to indicate that the script has been fully checked. At the very least, the checker must indicate clearly on the front of each script that it has been fully checked.

# This practice is under current review - updated details will follow.

Students who forgot registration cards during the examination should take them to the Teaching Office for verification. This should be confirmed by the examiners before the marks are returned. Marks are returned to the School before the marking deadlines, 10 working days from the exam date. Course coordinators are sent template spreadsheets listing the students enrolled in their courses, and then return those spreadsheets with the results of each component of assessment. You can used Code of Assessment grades 'A1'-'H', or Code of Assessment numerical grades '22'-'0', or percentages—of course flagging which types are being returned. If a student makes no submission, then submit the component grade 'NS' (no submission) rather than a zero, CW or 'H' grade. The Teaching Office then prepares the results for the Exam Board. University rules require each element of assessment to be translated to the 22-point scale before a weighted final calculation is done. This may give results which are slightly different to the ones that you might expect. One final version of the results spreadsheet should be returned to eng-results@glasgow.ac.uk.

This ensures version control.

Note the importance of returning each component of assessment in your submission, rather than only a final grade. Students with CW or an overall grade below D may resubmit each component of assessment within the academic year. Where students are ill, or in other exceptional cases the Progress Board may allow components of assessment to be resubmitted outside of the academic year. Because of data protection laws, you will erase any local spreadsheets of grades after the Exam Board which ratified them.

Therefore, the only source of previous component grades available to perform resit course calculations are the ones which you submit to the School Teaching Office for secure archival.

After submission of course results, the Teaching office will check with the Mitigating Circumstances Board, who may authorise a change to MV (approved absence) for some students in the final published results. In some instances, the Mitigating Circumstances Board may give Good Cause for a particular submission of

assessed work, and if this is worth less than 25% of the course, you may be asked to recalculate the student's grade ignoring this work.

# RULES FOR PROGRESSION AND GRADUATION

An undergraduate student's results at the end of each academic year must meet certain requirements for them to progress in their degree programme. There are similar requirements for graduation. These are set out in the University Regulations; Before 2019/20 the University Regulations were known as the University Calendar.

Here is a brief, unofficial summary.

#### **UNDERGRADUATE PROGRESSION**

For most undergraduate degrees a student's results in each academic year must satisfy these conditions for progression to the next year in BEng:

- minimum grade of E3 in every course
- minimum grade of D3 in the best 110 credits
- average GPA of at least 9.0

Some degrees taught jointly with other schools (Civil Engineering with Architecture and Electronics with Music) require D3 in all courses because 10 credits at E in one of the subjects could be a serious problem.

The same rules apply for progression in MEng, but a student's GPA must be at least 14.0; this rule is advisory at the end of years 1 and 2 but is enforced thereafter. This means that entry to MEng is effectively determined at the end of year 3.

Undergraduate students may resit courses in years 1–3 to meet the progression rules (i.e., if their overall course grade was below D3). Often students only resit the final exam, but unless the course specification and documentation specifically disallow it, they should be given the opportunity to resit each component of the course. As noted earlier, a retake of coursework must be completed by 31st July. The best results for each component are then combined (this may require you to seek previous component results from the Teaching Office), and the overall course result returned to the Teaching Office. This best overall result will appear on the student transcript, but for the purposes of progression, it is capped at 9, corresponding to D3. In addition, only results from a student's first attempt on any course are carried forward to calculate their honours degree classification and thus it should be noted that if they have a CW recorded in third year at the first attempt then this course will contribute CW=0 to their overall degree classification—the resit, and raising the CW are useful for progression only.

The School Mitigating Circumstances Committee (convened by the Chief Adviser with the Senior Advisers) meets after each tranche of examinations (second week of Jan, last week of May, and first week Sept after final resits) to consider whether students should be exempted from any examinations due to personal circumstances, and therefore have the subsequent resit counted as their first attempt. If you know of students with difficulties, it is important to encourage them to upload information to the MyCampus system before these meetings. Advisers are then informed of the outcomes for their Advisees.

In September, after the Mitigating Circumstances meeting, the Progress Committee (again staffed by Snr Advisers) meets to decide whether a student:

- Can make normal progress to the next year of study.
- May transfer to another qualification (e.g., MEng to BEng)
- Is offered the opportunity to repeat some courses in order to progress—although there is no automatic right to any further reassessment beyond the first resit.
- Should be excluded from further study, in which case they will be considered for the awards of BSc Ordinary (Engineering Studies), Diploma of Higher Education (Engineering Studies) or Certificate of Higher Education (Engineering Studies)

Again, if you have Advisees who cannot progress normally, both you and they will be informed. Students have the right of formal appeal to the College against the decisions of the Progress Committee. The Code of Procedure for Appeals is laid out in the <u>University Regulations</u>.

If you take over a course from another academic, make sure that you liaise with the Teaching Office to obtain any previous results needed so that you deal correctly with any resitting students.

# UNDERGRADUATE GRADUATION

(For students who first registered before the 2021–22 session)

The University has general requirements for graduation, and BEng or MEng have extra rules that are similar to those for progression:

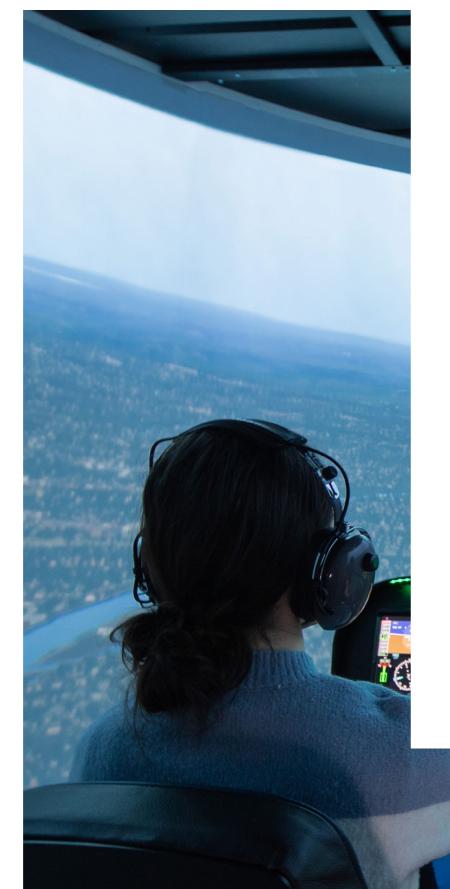
- Minimum grade of E3 in every course in the final year
- Minimum grade of D3 in the best 100 credits in the final year
- Minimum grade of D3 in your major individual project at the first attempt

Graduation (for students who first registered in or after the 2021–22 session)

The University has general requirements for graduation, and BEng or MEng have extra rules that are similar to those for progression, again, augmented by requirements from the Engineering Council:

- Minimum grade of E3 in every course in the final year
- Obtain a maximum of 30 credits at E in all courses taken from year 2 onwards.

These rules are set by the University and the Engineering Council for accredited degrees. Students will be considered for the non-accredited degree of BSc (Honours) in Engineering if they meet the university's standard requirements but not the extra rules. Note that students require a minimum grade of D3 in the major individual project for any honour's degree.



# **CLASSIFICATION OF HONOURS DEGREES**

The honours degree classification is calculated from a weighted average of the student's first results from year 3 and beyond:

- For BEng degrees the weighting is 30:70 from years 3 and 4 except for Electronic and Software Engineering, for which the weighting is 35:65.
- For all MEng degrees the weighting is 20:40:40 from years 3, 4 and 5.

Table 3 gives the bands for classifications bases upon the weighted GPA as detailed above.

Table 3: Mapping of Weighted GPA to Honours Degree Classification

Honours Weighted GPA	Honours Degree Classification
17.5–22.0	First class
17.1–17.4	either First or Upper Second class
14.5–17.0	upper second class
14.1–14.4	either Upper Second class or Lower Second class
11.5–14.0	Lower second class
11.1–11.4	either Lower Second or Third class
8.5–11.0	Third class
8.1–8.4	either Third class or fail
0.0–8.0	fail

In exercising discretion the Exam Board is guided by the criteria set out in Section 2.7 of the Code of Assessment.



# **TAUGHT POSTGRADUATE** (MSC) PROGRESSION

As taught postgraduate MSc degrees only last a single year, 'progression' means whether a student is permitted to progress to complete an Individual Project (ENG5059P) or Management Dissertation during the summer. These progression rules are summarised as follows:

- Minimum grade of E3 in every taught course
- Minimum grade of D3 in the best 100 credits of taught courses
- Grade point average (GPA) of D3 in 120 credits of taught courses

However, some degrees can commence in January, meaning students will only have taken 60 credits of taught courses, and some students may be so close to the borderline that it is almost certain that after resits they will qualify for an MSc. So, students are typically allowed to progress if there is a reasonable prospect that they can reach the standard required following any outstanding assessment opportunities (including resits). The PGT Progress Committee, staffed by the Advising team, meets during the second week of June, and decides whether a student:

- Can make normal progress to the individual project.
- Can make progress to the individual project, whilst noting that graduation with an MSc requires success in a small number of resits.
- Is debarred from the individual project until they successfully improve course grades at resit (consequently requiring a September to December project and delayed graduation)
- considered for the awards of Postgraduate Certificate or Postgraduate Diploma

## APPEALS AND COMPLAINTS

The purpose of the regulations it to avoid students wasting time and money studying for a degree that they have little chance of obtaining. The decisions of the PGT Progress Committee are designed to be for the long-term benefit of students. However, students have the right of appeal to the College against the decisions of the Progress Committee. The Code of Procedure for Appeals is laid out in the University Regulations:

gla.ac.uk/myglasgow/senateoffice/policies/uniregs/



# **TAUGHT POSTGRADUATE (MSC) GRADUATION**

The University has general requirements for graduation with a taught postgraduate qualification:

#### PG Certificate:

- Average aggregation score of D3 (9) or better in 60 credits
- At least 40 of these credits above D3 (9)

#### **PG Diploma:**

- Average aggregation score of D3 (9) or better in 120 credits
- At least 80 of these credits above D3 (9)

- Average aggregation score (GPA) of D3 (9) or better for taught courses
- 100 credits at Grade D3 or better (≥9)
- All credits at Grade E3 or above (≥6)
- D3 or better (>9) in dissertation (individual project)

#### **MSc with Merit**

• Average aggregation score (GPA) of at least C1 (14) in the taught courses, and at least a C1 (14) in the dissertation (individual project), both at first attempt

 Average aggregation score (GPA) of B3 (15) in all 180 credits, at first attempt. In this latter requirement, the Board of Examiners has discretion between 14.1 and 14.9.

#### **MSc with Distinction**

- Average aggregation score (GPA) of at least B1 (17) in the taught courses, and at least a B1 (17) in the dissertation (individual project), both at first attempt
- Average aggregation score (GPA) of A5 (18) in all 180 credits, at first attempt. In this latter requirement, the Board of Examiners has discretion between 17.1 and 17.9.

Subject	A	В	С	D	E	F	GPA (Taught Subjects)	
Credits	20	20	20	20	20	20	120	60
Grade	СЗ	СЗ	СЗ	СЗ	СЗ	СЗ		D3
Score	12	12	12	12	12	12	12	9

In the above example:

- Grade Point Average, over 120 taught subject credits:
- (GPA) =  $(20 \times 12)6 = 1440/120 = 12$
- Student also receives a project grade of D3 = 9
- In this case, the student would qualify for the MSc degree.

Should be excluded from further study, and

# DISCRETION (MERIT AND DISTINCTION)

When a candidate's overall GPA for the taught courses falls within one of the permitted discretion zones, School of Engineering policy is that the board check the course grade profile of the candidate (details of course grade profile can be found in Chapter 2 of the Code of Assessment). If there are more credits, achieved at the first attempt, at or above the threshold then the candidate should be promoted. So, for MSc with Merit, if 90 or more taught credits are at 15 or above then a Merit classification should be awarded.

# PGR ANNUAL PROGRESSION REVIEWS

PhD students require an Annual Progression Review (APR) in years 1 to 3 to determine that they are progressing satisfactorily. The process also allows students and supervisors to plan training needs and milestones for the year. There are two APR Schedules each year that take place in Spring and Autumn and students will undertake their APR at the same schedule each year depending on their commencement date.

The student submits an APR form and uploads a Technical Report in years 1 and 2, and a thesis plan in year 3. Their supervisor then completes an assessment of their student's progress. Thereafter, an APR meeting takes place with an examining committee, comprising an internal examiner and a convenor. The convenor is asked to arrange the review meeting, which should last from around 45 minutes to 1 hour, and both the examiner and convenor participate in the review meeting asking questions based on the content of the review form and Report. Following the meeting the Convenor submits an outcome of the meeting on the Mycampus system. https://www. gla.ac.uk/research/ourresearchenvironment/ prs/pgrcodeofpractice/annualprogressreview/

## **ACCESS TO EXAM SCRIPTS**

Students will be given access to their marked Exam Scripts after marks are published. This will take place in the Teaching Office, under controlled conditions, if the exam has been taken in person. If exam was taken online the students will be given access via Moodle or MyGlasgow Anywhere. Students will be notified in advance when scripts viewing sessions will be, but a rough guide is:

- December Exam diet: for two weeks mid-February
- April/May Exam diet: for one week following the publication of the results in June, and then again just prior to the August resits.
- Resit Exam diet: for one week following the publication of the results in late August/early September.

Exact dates each session is advertised to students and staff by the Teaching Office. Students are not allowed to access to their scripts out with these times, and it is not possible to have the scripts scanned for transfer outside the campus.

# This practice is under current review - updated details will follow.

Occasionally students may ask for specific feedback on their own examination answers, to better revise for a resit, or to better prepare them for the next year of studies. University policy is that staff should be available to give feedback to resitting students. Staff may give feedback to other students if they wish (although for large classes this can turn into a significant drain on lecturer time, for what has been found in practice to be very little benefit). If at any point during a feedback session there is an indication that the student is using the meeting to exert pressure on an academic to change a given mark, the academic should politely but clearly make it plain to the student that marks are a matter for academic judgement and that no such change will be countenanced.

# FEEDBACK AND ANNUAL COURSE MONITORING

The quality of our degrees and the quality of the student experience is driven by feedback: feedback we give to our students, how we respond to feedback from students and others (directly and in Annual Course Monitoring), and the feedback we give to the University.



### FEEDBACK TO STUDENTS

Final year undergraduate students fill in a questionnaire on their degrees before they graduate. This is called the National Student Survey (there is an equivalent for MSc students) and is a marker by which we are judged. Historically all Universities have scored poorly in the questions regarding feedback:

- "Feedback on my work has been prompt."
- "I have received detailed comments on my work."
- "Feedback on my work has helped me clarify things I did not understand."

However, several Universities' Engineering Schools score significantly better in these areas, enhancing both student satisfaction, and league table placings (which tend to lead directly to a higher quality intake). In addition, students who understand clearly where they can improve are also more likely to produce better work and are more fun to teach. We wish to be part of this group of high achieving Schools in the area of feedback to students.

There are several recognised ways to give good feedback to students:

- always fill in comments in the 'feedback' box on the cover page submitted with lab reports - even if this is simply "detailed feedback given inside" and notes scribbled in the lab book itself.
- feedback doesn't need to be voluminous, but does need to be specific and positive (i.e. focus on how a student could improve rather than on how badly they did ("referencing was done well", "you will improve by making the abstract a summary of introduction, work done, results and conclusions, written for someone who will not read the full report", "X could be improved, see suggestions at www.Y")

- use the School hand-in-and-feedbackreturned calendar to help you get feedback responses back to students promptly.
- rename tutorials as feedback sessions (with the +ve spin-off of reminding students that tutorials are supposed to be where they get feedback on revision work, they've already done, not just a chance to copy answers from the board)
- when going over class tests or giving any other general feedback in lectures, explicitly flag that this is feedback, and make it obvious ("if you got this one right, you are part of 60% of the class")
- explicitly tell students that lab sessions are a way to get feedback on their understanding from lab demonstrators, and it is their responsibility to use them as such.
- volunteer to give students comments on a single draft of their project reports, and schedule this so that you can do it promptly (otherwise they will get the draft to you so close to hand-in deadline that you won't have time to help)

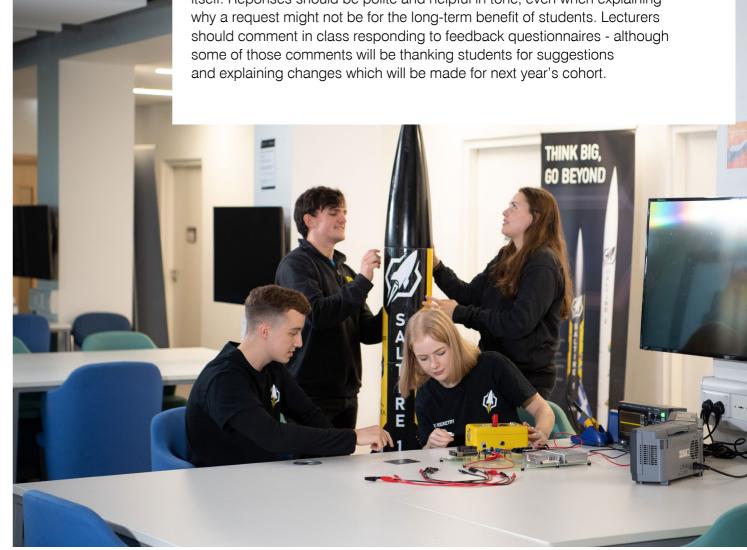
It is University policy to post general feedback on degree examination results - to be helpful a template for such feedback will be e-mailed to you after the exam boards as a reminder. It should of course be titled 'feedback on final exam' and posted on Moodle.

# FEEDBACK FROM STUDENTS, EXTERNAL EXAMINERS, AND ACADEMICS

There are several ways in which we get feedback on our own teaching, including:

- Volume and type of questions from students after lectures
- Comments made in the Staff Student Liaison Committees (roughly in the middle of each teaching semester)
- Comments on the questionnaires handed out via Moodle 2/3 of the way through each teaching block.
- Comments of external examiners on our exams

Some of this feedback should be acted upon immediately. Comments made by students in preparation for Staff Student Liaison Committee are e-mailed directly to staff for their response to be tabled at the Committee itself. Reponses should be polite and helpful in tone, even when explaining some of those comments will be thanking students for suggestions and explaining changes which will be made for next year's cohort.



JAMES WATT SCHOOL OF ENGINEERING | 47 46 | STAFF HANDBOOK

# EXAM BOARDS AND ACM BOARDS

Twice a year (second week Semester 2 and first week of June) staff have the opportunity to recommend sign-off of exam results at an Internal Exam Board and review how they have responded to feedback at an Annual Course Monitoring (ACM) review held in the same meeting.

The job of an ACM is to identify issues and good practice in courses within a Discipline and propose improvements. All staff who have taught in the Discipline during the previous semester attend and make a short oral report on their course, with the course coordinator taking the lead. It is rare for staff not to attend, but if so, they send a written report in advance of the meeting. The report flags areas of particular success, how previous initiatives fared, feedback from students, Staff Student Liaison, and External Examiners, course exam results, and proposed actions for next year. Specific justification and future actions need to be proposed if a course has average exam results outside of a normal bound (50%-70% or Code of Assessment '11.5'-'17.5'), a significant change in average exam results (±10% or Code of Assessment  $\pm 3$ ) a poor pass rate (<50%) or specific issues raised in student feedback.

As all teaching staff attend it, the ACM is an opportunity to broadcast successful initiatives across the Discipline, and for staff to suggest solutions to problems that might not have been considered by the course team. It is the job of the Head of Discipline to make sure that the ACM is always supportive in nature. The ACM is also an opportunity for academic staff to feed back to the central University issues and good practice. The Quality Officer for the School is in attendance at all Discipline ACM meetings and collates a report for the University flagging perceived weaknesses in regulations / the estate etc., and advertising good teaching ideas that can be tried across the whole University.

### **REVISING COURSES**

As part of the feedback process, you may wish to make alterations to your courses for future years. Minor refreshing and modernisation of course material can be done without reference to anyone else. If you wish to change the balance of assessment, types of assessment, or enough material to alter key Intended Learning Outcomes for a course, this needs to be communicated to prospective students and staff via the Course Specification. You can download the Course Specification currently published to the students from our webpages.

Review any proposed changes with your Head of Discipline, who will know the level of consultation required for any sort of change, which School or College committees are required for sign-off and can give general advice.

Changes, after consultation, need to be submitted to the Teaching Office by the first week of June to take effect in the next academic year. If the change involves any kind of update to the timetable e.g., change of Semester or change to number or type of learning event it may not be possible to accommodate if the timetable has been finalised. It is advised to think of such changes for the following academic year.

# HARMONISATION OF LEARNING & TEACHING ACROSS ENGINEERING

Current course and programme revision in the School of Engineering is informed by work on the Harmonisation of Learning & Teaching. Any Engineering graduate develops, and future employer seek attributes resulting from:

- General Engineering Learning. Skills, attributes, and abilities vital to all engineers. For instance, the ability to use computer programmes or to apply mathematics in creative ways to solve engineering problems, or to design systems.
- Discipline Specific Learning. Skills, attributes, and abilities vital to engineers in a smaller number of engineering disciplines. For instance, a Civil Engineer might develop skills in designing foundations, and an Aero Engineer in assessing wind tunnel results.

Each of our degree programmes is organised around a clearly defined set of learning themes, either common to all Engineering Disciplines general engineering learning or limited to a subset of Disciplines - discipline specific learning. Most of these learning themes take several years to fully develop. This is why we have classes like ENG1062 Dynamics 1, ENG2084 Dynamics 2, ENG3039 Dynamics 3 all of which might be capped in 4th year ENG4067 Flight Dynamics 4 for an Aero Engineer, and all of which are part of the Dynamics and Aeroelasticity theme which is at the core of Aeronautical Engineering.

An overview of the Learning themes across the School is given below. An interactive view of themes and how they relate to degree programmes is provided online. The presentation of the thematic structure of degree programmes is most important to students, as it makes clear the path they can follow to their chosen specialisation and the appropriate optional courses they can select – even outside of their traditional discipline. They can more easily see the point in material taught in early years. This clarity is also of benefit to employers and accrediting bodies.

However, understanding how your courses fit into the thematic structure of teaching will also make it easier to see where you might introduce new material, or prune obsolete material to strengthen overall School teaching, and where new course material would usefully fill gaps, and duplication be removed. In addition, the figure clearly indicates foundational themes across Engineering: underpinning science and mathematics; engineering skills such as programming, problem solving, teamwork, etc.; and the principles of engineering design. Many of these areas are taught in common across the whole School. As you get involved in commonly taught courses, improvements in teaching techniques you introduce can have a positive effect, not only on students in your own area of expertise, but on students across the whole School, both on the Glasgow campus, and in our international teaching collaborations.

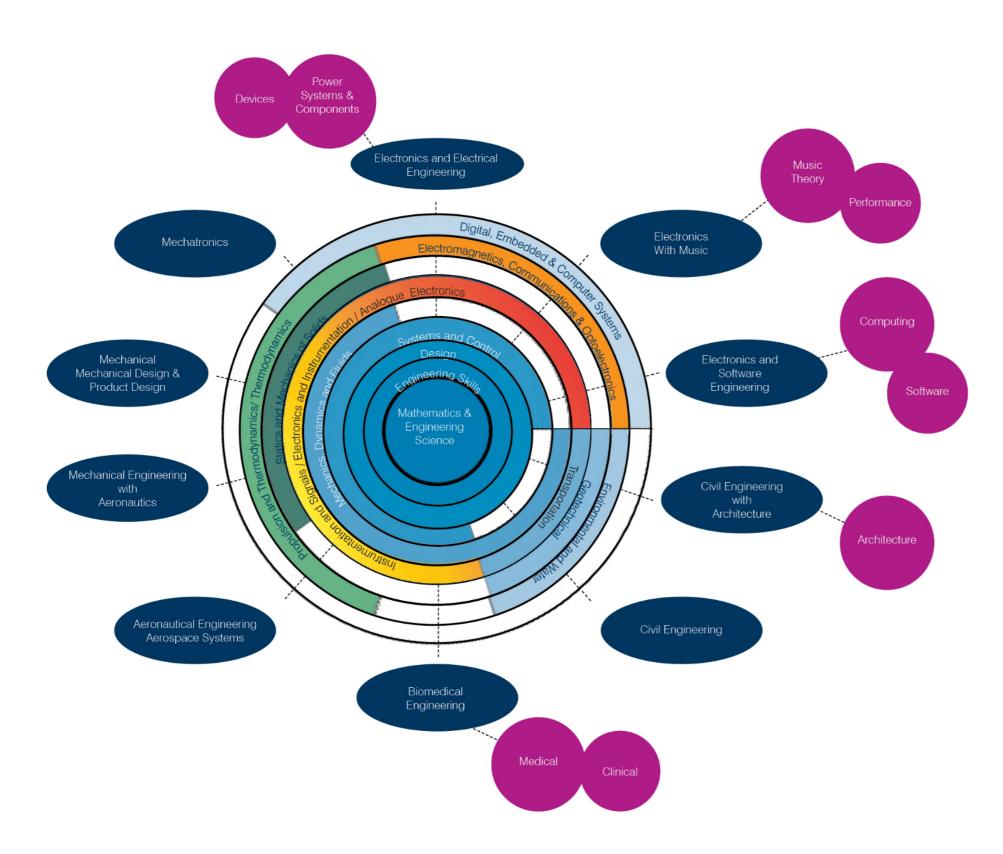
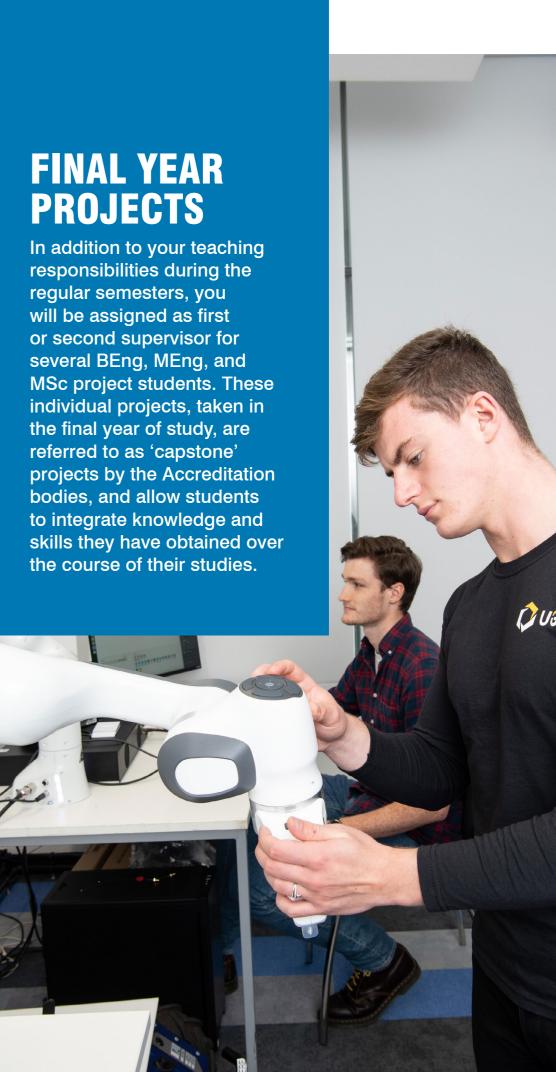


Figure 1: Key learning themes in undergraduate degree programmes



## **SUGGESTING PROJECT TOPICS**

Staff from the Teaching Office will prompt you to suggest or update possible project titles and descriptions <u>here</u>.

Typically, staff submit three or more topics for each type of project. The Teaching Office will detail the number of project titles and descriptions you are expected to submit in their calls project titles. Project topics are not limited to your current research and are an opportunity for creativity. You supply a title that will attract good students, and a  $\sim$ 100-word description that describes the project, flags its importance, and indicates the benefits to the student of carrying out the project.

A pre-requisite skills box is also available for a few words to deter unqualified students. Normally a project should be aimed at a single applicant. Staff with experience should suggest project areas for multiple students, as they will have the skill to make it unmistakably clear which topics within the area are 'owned' by each individual and reduce the temptation for student plagiarism (project reports must be written and submitted individually). Such themed projects can make supervision of students considerably more efficient. You should not limit applicable programmes to your own teaching area. For instance, a single project might quite reasonably be carried out by E&EE, or Mechatronics, or Sustainable Energy students, and should be flagged as open to all of these. Currently the number of Sustainable Energy MSc students outstrips the staff in that area, so 'Sustainable Energy Friendly' projects are always welcome.

In describing projects, note the difference between level 4 and level 5/M. A BEng undergraduate project at level 4 should be a 'substantial individual project which involves engineering analysis and design choices, integrating knowledge of a range of engineering disciplines.

An MEng / MSc project should push further. Such projects 'consider factors external to the specific engineering discipline including the effect of commercial constraints.' Often, they 'develop novel or innovative designs, deal with unfamiliar problems, or have a research component'. They typically 'involve understanding the limitations of current practice or analysis and consider how to circumvent those limitations.'

It is possible to write a project description that can apply to both BEng and MEng/MSc projects, but it is easier for the student to understand what is expected of them if different project descriptions are written for each level.

A semi-automatic multistage process managed by the Teaching Office matches supervisors to supervisees once project titles have been released to students. If your project titles did not attract much interest your 1st supervisor responsibilities may end up being light, and in compensation you will be assigned more 2nd supervisor responsibilities to ensure that the overall project load is fair for all academic staff.

Please Note: Product Design Engineering projects are administered by Glasgow School of Art and are not covered here.

# **PROJECT LOAD REDUCTIONS**

There are some circumstances where academic staff can reasonably expect a reduction in their project supervision load – typically those working part time, or with onerous School administrative burdens will have a load reduction automatically applied. However, if you believe that you should receive a project load reduction, you should discuss with your line manager or Head of Research Division whether you are eligible.

# **PROJECT FUNDING**

Typically, final year projects are related to either the research, or the curiosity, of each member of academic staff. There is School funding available for MSc and BEng projects, generally £200 per student project. An MSc pilot scheme was run in 2022-2023 for supervisors delivering a project to a minimum of 20 students, with an overall budget allocation of up to £7,000 per project. It is anticipated that a similar scheme will continue to run in subsequent years.

Orders for the projects should be placed using the Stores Service provided by the Technical Services team, using the link below.

<u>University of Glasgow - Schools - James</u>

<u>Watt School of Engineering - Information for Staff - Technical Services - About Technical</u>

Services - Our Team - Stores Services

Note that, in addition, the GU68 Trust welcomes applications from students who are in the final year of their undergraduate degree and would benefit from financial support for practical or experimental project work. This includes Biomedical Engineering, Electronics and Electrical Engineering, Mechanical Engineering, Aerospace Engineering and Civil Engineering and students on the PDE degree run in conjunction with the Glasgow School of Art. The Trust's website gives the application dates, and a reminder e-mail is circulated annually, with full details.

# CONFIDENTIALITY, ETHICS AND DATA PROTECTION

Some projects, either where students are placed in industry, or where local projects have a specific industrial sponsor, may require the signing of a Non-Disclosure Agreement (NDA). In such cases the University of Glasgow signs on behalf of all its employees (including supervisors and examiners), the company signs on its behalf, and the student is an independent signatory. Further details on NDAs are available to students on project Moodle sites, and the University contact for obtaining draft NDAs and for final signing is Diane Foster.

Some projects, particularly but not exclusively in Biomedical Engineering, may need ethical approval. Advice on this can be obtained from Henrik Gollee (Biomedical Engineering Head of Discipline).

It is common practice to share past student reports with new project students as background. After seeking guidance from the Data Protection and Freedom of Information Office, we are confident that academic supervisors are allowed to "process this data" (i.e. share previous reports with those students who will be carrying out future projects in the same area) because "the processing is necessary for you to perform a task in the public interest or for your official functions, and the task or function has a clear basis in law" (i.e. sharing this data is a necessary part of efficiently educating project students, and our work as an educational establishment is of public interest). Of course, students should be informed that they cannot pass on an old project report to anyone else, and copies of old project reports should have registration numbers and names redacted so that authors cannot be linked back to their student IDs.

### **BENG PROJECTS**

BEng Projects take place during the final teaching year (in practice from October to April) at Glasgow. Initial selection of five project choices by students is made in the last week of September, with the aim to complete project allocations by the end of the first week in October. Students who wish to suggest their own project title may do so, but they need to have agreement from a supervisor in advance; so, students may approach you to discuss this, and obtain your agreement to supervise. Do not hesitate to suggest changes and improvements to their project description so that they can start with a practical/feasible project, often such students over-promise.

A preliminary report, including project aims, a brief project description and a Gantt chart, is due one month into the project, mainly to ensure that the student is working, and that the student and supervisor are in concert. An interim report is made in the second week of the Spring term, which acts to refocus after the Christmas holidays. This is a brief report of work done, conclusions drawn, work still to do, and an outline of the contents of the final report. Neither of these reports is for marked, although both are compulsory, and so there is a temptation to let them slip. Avoid this, as they are a proven defence against projects going off track and may save you considerable effort and grief in the long run.

The final assessment of the project consists of three parts. The first is the continual assessment by the first supervisor throughout the project (20%). The second is an oral presentation close to the end of the project (15%, in late March) which is marked jointly by a team of two academics from the James Watt School of Engineering. The third assessment component is the written report (65%, in mid-April – limited to 40 pages) which is assessed by both First and Second supervisors.

As with any other capstone project, the report itself and the assessment comments made supervisors on the report and oral presentation are a prime source for External Examiners and Accreditors when auditing the quality of our degrees and the professionalism of academics in examining. Finding assessment comments on challenging projects makes Externals and Accreditors happy. This is not an area in which to take shortcuts.

# RESPONSIBILITIES OF BENG SUPERVISORS

# DUTIES & RESPONSIBILITIES OF THE FIRST GLASGOW SUPERVISOR OF A FINAL YEAR BENG PROJECT

The First Glasgow Supervisor is expected to:

- Take responsibility for the supervision of the research work done by the student.
- Arrange required safety training for the student (e.g., laser safety, handling of hazardous chemicals)
- Monitor that the student formulates aims & objectives that are feasible with the resources (time, equipment, software, ...) available within the James Watt School of Engineering
- Arrange appropriate access to resources for the student's project (e.g., support requests to Engineering IT support must be sent by the project supervisor) or give the student instructions on how to access the resources they need (e.g., interaction with workshops)
- Ensure that managers of facilities used for the project are briefed in a timely fashion (e.g., JWNC manager, wind tunnel manager)
- Ensure that appropriate risk assessments are in place.
- Hold regular feedback meetings with student during the Teaching Period, normally on a fortnightly basis. Such meetings include:
- Advice on formulating objectives, a workplan, and general methods applicable to the project
- Initial suggestions on background reading
- Discussion of current progress and future work, and support in overcoming difficulties
- Planning for gaps in face-to-face supervision (e.g., contact by Zoom/e-mail for business trips)
- Liaise with the relevant BEng final year project coordinator in a timely fashion if circumstances beyond the student's control (e.g., failure of essential equipment) could cause a substantial delay to the project. Any adverse circumstances directly relating to the student (e.g., absences due to illness and other good cause claims) need to be raised by the student themselves following the normal reporting procedures.

- Provide significant and meaningful written feedback on the Preliminary and the Interim Report
- Mark the Final Report and provide significant and meaningful written feedback.
- Mark the conduct of the student (Quality of Technical Work & Continuous Assessment of Student Performance) and provide significant and meaningful written feedback.

The student project handbook clearly indicates that students should take ownership of their project, prepare well for meetings (including sending a short informal progress report beforehand), and counsel's students to still meet regularly even if progress since the previous meeting has been slower than expected.

Part of the research supervision may be undertaken by an experienced PhD student or PDRA (supervision of lab experiments, advice on software usage, etc.). However, the First Supervisor has the final responsibility to ensure that the student is well supervised.

All marking and feedback on reports (preliminary, interim & final) and conduct must be completed by the First Glasgow Supervisor. Marking and feedback of formative and summative assessment cannot be delegated to a PhD student or PDRA. Supervisors cannot authorise project extensions (as with any other course, only the Course/Project Coordinator can authorise extensions up to 5 days, and the Chief Adviser of Studies longer extensions), but supervisors may request extensions of the project coordinator on behalf of students.

# DUTIES & RESPONSIBILITIES OF THE SECOND GLASGOW SUPERVISOR OF A FINAL YEAR BENG PROJECT

The Second Glasgow Supervisor contributes to the formative and summative assessment of the student's work. The Second Glasgow Supervisor is expected to:

- Provide significant and meaningful written feedback on the Preliminary and the Interim Report
- Mark the Final Report and provide significant and meaningful written feedback.

All students on the BEng Final Year Project are expected to give an oral presentation on their project. This presentation will be assessed by a team of two academics associated with the student's discipline or neighbouring disciplines.

In addition to your project supervision duties, you are expected to contribute to the marking of project presentations. The Teaching Office will allocate you one or two time slots for marking BEng Final Year Project presentations. Each slot will contain up to six presentations which you will mark jointly with another academic member of staff. Marks and feedback for each presentation must be agreed jointly by both academics on the marking team.

## FEEDBACK ON FORMATIVE AND SUMMATIVE ASSESSMENT

#### **PRELIMINARY & INTERIM REPORT**

Written feedback should be uploaded to Moodle. In case feedback is provided using alternative means, e.g., via e-mail or in the form of an annotated printout of the report, the supervisor is asked to leave a comment under Moodle that feedback on the assessment has been provided to the student.

#### FINAL REPORT & PRESENTATION & CONDUCT

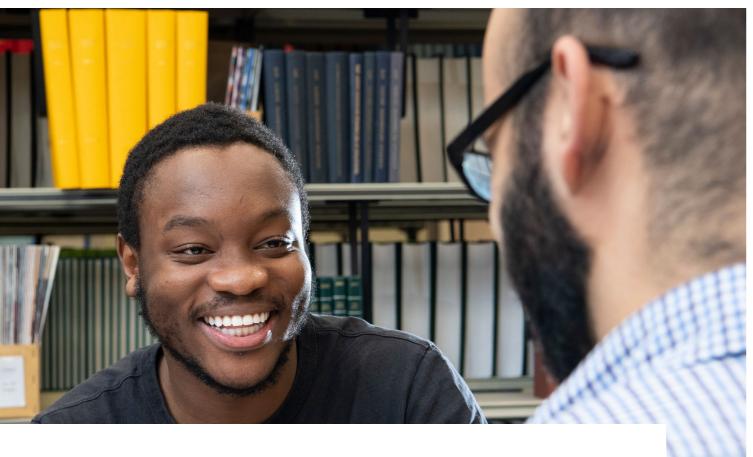
Feedback should be provided in the corresponding marking forms. This feedback will be made available to the student by the Teaching Office. Individual marks are released to the student by the Teaching Office after the publication of results in June.

### **MENG PROJECTS**

MEng projects are of two flavours; the first takes place at the James Watt School of Engineering (referred to as 'In Glasgow' project in the following), during the 1st semester of students' final year. Initial selection of five project choices by students are made in June with the aim to complete project allocations by July, so that preliminary reading for the literature review can take place over the summer months and that the whole teaching semester is spent working on the project. Students have academics as 1st and 2nd supervisors and are required to submit a preliminary report at the end of September and an interim report at the end of October. The structure and purpose of these reports are as for the BEng (noted above). For 'In Glasgow' MEng projects student-initiated projects are not permitted. All 'In Glasgow' MEng projects are allocated via the project database, and all MEng project descriptions offered via the database must be open to selection by all students on applicable degree programmes. A direct allocation of an 'In Glasgow' MEng project to a student is not permitted. These restrictions apply specifically to the MEng project and do not extend to BEng and MSc projects.

The second form of project consists of an extended (typically six months, July to December) placement in industry. Students are encouraged to find their own placements. The main supervisory responsibility is with a student's industrial supervisor, with the assigned academic acting as a safety net and source of advice during the main work of the project. Students are required to submit a preliminary report (to the academic supervisor, after being signed off by the industrial supervisor) one month into their placement and an interim report in the third week of September. As for BEng students, these reports are not marked but are compulsory, and it is important to provide students with feedback on them. Students on industrial placement may be more susceptible to feeling unsupported than those in Glasgow – even if the actual levels of support are objectively similar—and so whilst the workload for an academic supervisor of an industrial project is not great, it is especially important for the student experience that they have academic interaction with supervisors on Campus. Note that some degrees (E&EE, E&SE, EwM for example) require an industrial placement out with Glasgow, and even for those rare students who have to be accommodated in UoG spinout companies or UoG research groups, they are treated as if their project were out with the Glasgow campus.

The final assessment of either flavour project consists of three parts. The first is the continual assessment by the first or industrial supervisor throughout the project (20%). The second is the written report (65%, submitted end of first week of the Spring semester) which is marked by the First and Second Glasgow Supervisor. The third assessment is an oral presentation held in the Spring semester (15%) which is marked jointly by a team of two academics from the James Watt School of Engineering.



## RESPONSIBILITIES OF MENG SUPERVISORS

# DUTIES & RESPONSIBILITIES OF THE FIRST GLASGOW SUPERVISOR OF A FINAL YEAR MENG PROJECT

The duties of the First Glasgow Supervisor of a final year MEng project depend on whether the student is on a placement at a host organisation (company, research institute, university abroad, etc.) or conducts their MEng project at the University of Glasgow.

#### A) STUDENT ON PLACEMENT

The research work of the student will be supervised by the industrial supervisor at the host organisation. The industrial supervisor will mark at the end of the placement the conduct of the student (Quality of Technical Work & Continuous Assessment of Student Performance).

#### THE FIRST GLASGOW SUPERVISOR IS EXPECTED TO:

- Discuss the placement project with student during a 'Pre-placement' meeting and agree a progress reporting schedule with student. By default, progress reporting takes the form of progress update e-mails by the student that are sent every two weeks.
- Engage with the industrial supervisor if this is welcomed by host organisation.
- Give brief feedback on progress reports sent by student.
- Raise any concerns about the placement or the student's performance with the relevant MEng final year project coordinator in a timely fashion.
- Provide significant and meaningful written feedback on the Preliminary and the Interim Report
- Mark the Final Report and provide significant and meaningful written feedback.

# B) STUDENT ON PROJECT AT THE UNIVERSITY OF GLASGOW

The project is set by the First Glasgow Supervisor and allocated by the teaching office and project coordinators via the project database. The research work of the student will be supervised by the First Glasgow Supervisor and conducted at the University of Glasgow

# THE FIRST GLASGOW SUPERVISOR IS EXPECTED TO:

- Take responsibility for the supervision of the research work done by the student.
- Arrange required safety training for the student (e.g., laser safety, handling of hazardous chemicals)
- Monitor that the student formulates aims & objectives that are feasible with the resources (time, equipment, software, ...) available within the School of Engineering.
- Arrange appropriate access to resources for the student's project (e.g., support requests to Engineering IT support must be sent by the project supervisor) or give the student instructions on how to access the resources they need (e.g., interaction with workshops)
- Ensure that managers of facilities used for the project are briefed in a timely fashion (e.g., JWNC manager, wind tunnel manager)
- Ensure that appropriate risk assessments are in place.
- Hold regular feedback meetings with student during the Teaching Period, normally on a weekly basis. Such meetings include:
- Advice on formulating objectives, a workplan, and general methods applicable to the project
- Initial suggestions on background reading
- Discussion of current progress and future work, and support in overcoming difficulties
- Planning for gaps in face-to-face supervision (e.g., contact by Zoom/e-mail for business trips)

- Arrange feedback meetings with the student outside the Teaching Period (e.g., July, August, December) on an as needed basis.
- Liaise with the relevant MEng final year project coordinator in a timely fashion if circumstances beyond the student's control (e.g., failure of essential equipment) could cause a substantial delay to the project.
- Any adverse circumstances directly relating to the student (e.g., absences due to illness and other good cause claims) need to be raised by the student themselves following the normal reporting procedures.
- Provide significant and meaningful written feedback on the Preliminary and the Interim Report
- Mark the Final Report and provide significant and meaningful written feedback.
- Mark the conduct of the student (Quality of Technical Work & Continuous Assessment of Student Performance) and provide significant and meaningful written feedback.

The student project handbook clearly indicates that students should take ownership of their project, prepare well for meetings (including sending a short informal progress report beforehand), and counsel's students to still meet regularly even if progress since the previous meeting has been slower than expected.

Part of the research supervision may be undertaken by an experienced PhD student or PDRA (supervision of lab experiments, advice on software usage, etc.). However, the First Supervisor has the final responsibility to ensure that the student is well supervised. All marking and feedback on reports (preliminary, interim & final), presentation and conduct must be completed by the First Glasgow Supervisor. Marking and feedback of formative and summative assessment cannot be delegated to a PhD student or PDRA.

# **DUTIES & RESPONSIBILITIES** OF THE SECOND GLASGOW AND SUMMAT SUPERVISOR OF A FINAL YEAR ASSESSMENT **MENG PROJECT**

The Second Glasgow Supervisor contributes to the formative and summative assessment of the student's work. The Second Glasgow Supervisor is expected to:

- Provide significant and meaningful written feedback on the Preliminary and the Interim Report
- Mark the Final Report and provide significant and meaningful written feedback.

All students on the MEng Final Year Project are expected to give an oral presentation on their project. This presentation will be assessed by a team of two academics associated with the student's discipline or neighbouring disciplines. In addition to your project supervision duties, you are expected to contribute to the marking of project presentations. The Teaching Office will allocate you one or two time slots for marking MEng Final Year Project presentations. Each slot will contain up to six presentations which you will mark jointly with another academic member of staff. Marks and feedback for each presentation must be agreed jointly by both academics on the marking team.

# **FEEDBACK ON FORMATIVE AND SUMMATIVE**

#### PRELIMINARY & INTERIM REPORT

Written feedback should be uploaded to Moodle. In case feedback is provided using alternative means, e.g., via e-mail or in the form of an annotated printout of the report, the supervisor is asked to leave a comment under Moodle that feedback on the assessment has been provided to the student.

#### FINAL REPORT & PRESENTATION & CONDUCT

Feedback should be provided in the corresponding marking forms. This feedback will be made available to the student by the Teaching Office. Individual marks are released to the student by the Teaching Office after the publication of results in June.

## **MSC PROJECTS**

MSc Projects take place during the summer (May to September), normally at Glasgow. Selection and allocation are organised at the beginning of the Spring Semester (usually in January and February). This allows preparatory work and background reading to be undertaken prior to the May exam diet. Students submit a project outline document, including aims, objectives, resources needed and Gantt chart in the last week of May (directly after the Spring exams), after which the main activity of the project begins. Ensure that you arrange to meet your supervisees regularly; academics are busy, and students always assume that they will have 'more to report if they delay meeting for another week', which can lead to the project going off track – especially for students used to long summer vacations.

The final assessment of the project is in three parts. The first is the continual assessment by the first supervisor throughout the project (20%). The second is a poster which is assessed at the Poster Conference at the end of the project (20%, usually in September). The third assessment component is the report or dissertation (60%). The poster and report are assessed by both the 1st and 2nd Supervisors.

Students taking the Engineering and Management degree programmes are offered the opportunity of proposing a dissertation through the Adam Smith Business School. There are only a limited number of dissertations accepted by the Business School and selection depends on performance in the management courses studied in Semester 1. Students starting their studies in January are not considered for a management dissertation.

## **RESPONSIBILITIES OF MSC SUPERVISORS**

#### **DUTIES & RESPONSIBILITIES OF THE FIRST GLASGOW SUPERVISOR OF AN MSc PROJECT**

The First Glasgow Supervisor is expected to:

- Take responsibility for the supervision of the research work done by the student.
- Arrange required safety training for the student (e.g., laser safety, handling of hazardous chemicals)
- Monitor that the student formulates aims & objectives that are feasible with the resources (time, equipment, software, ...) available within the School of Engineering
- Arrange appropriate access to resources for the student's project (e.g., support requests to Engineering IT support must be sent by the project supervisor) or give the student instructions on how to access the resources they need (e.g., interaction with workshops)

- Ensure that managers of facilities used for the project are briefed in a timely fashion (e.g., JWNC manager, wind tunnel manager)
- Ensure that appropriate risk assessments are in place.
- Hold regular feedback meetings with student during the Teaching Period, normally on a fortnightly basis. Such meetings include:
- Advice on formulating objectives, a workplan, and general methods applicable to the project
- Initial suggestions on background reading
- Discussion of current progress and future work, and support in overcoming difficulties
- Planning for gaps in face-to-face supervision (e.g., contact by Skype/e-mail for business trips or through reciprocal arrangements with a colleague during any holiday periods)
- Liaise with the relevant MSc final year project coordinator in a timely fashion if circumstances beyond the student's control (e.g., failure of essential equipment) could cause a substantial delay to the project. Any adverse circumstances directly relating to the student (e.g., absences due to illness and other good cause claims) need to be raised by the student themselves following the normal reporting procedures.
- Mark the Final Report and provide written feedback.
- Mark the Project Poster Presentation and provide written feedback.
- Mark the conduct of the student (Quality of Technical Work & Continuous Assessment of Student Performance) and provide written feedback.

The student project handbook clearly indicates that students should take ownership of their project, prepare well for meetings (including sending a short informal progress report beforehand), and counsel's students to still meet regularly even if progress since the previous meeting has been slower than expected.

Part of the research supervision may be undertaken by an experienced PhD student or PDRA (supervision of lab experiments, advice on software usage, etc.). However, the First Supervisor has the final responsibility to ensure that the student is well supervised.

All marking and feedback on report, presentation and conduct must be completed by the First Glasgow Supervisor. Marking and feedback of formative and summative assessment cannot be delegated to a PhD student or PDRA. Supervisors cannot authorise project extensions (as with any other course, only the Course/Project Coordinator can authorise extensions up to 5 days, and the Chief Adviser of Studies longer extensions), but supervisors may request extensions of the MSc project coordinator on behalf of students.

# DUTIES & RESPONSIBILITIES OF THE SECOND GLASGOW SUPERVISOR OF A FINAL YEAR MSC PROJECT

The Second Glasgow Supervisor contributes to the formative and summative assessment of the student's work. The Second Glasgow Supervisor is expected to:

- Mark the Final Report and provide written feedback.
- Mark the Project Poster Presentation and provide written feedback.

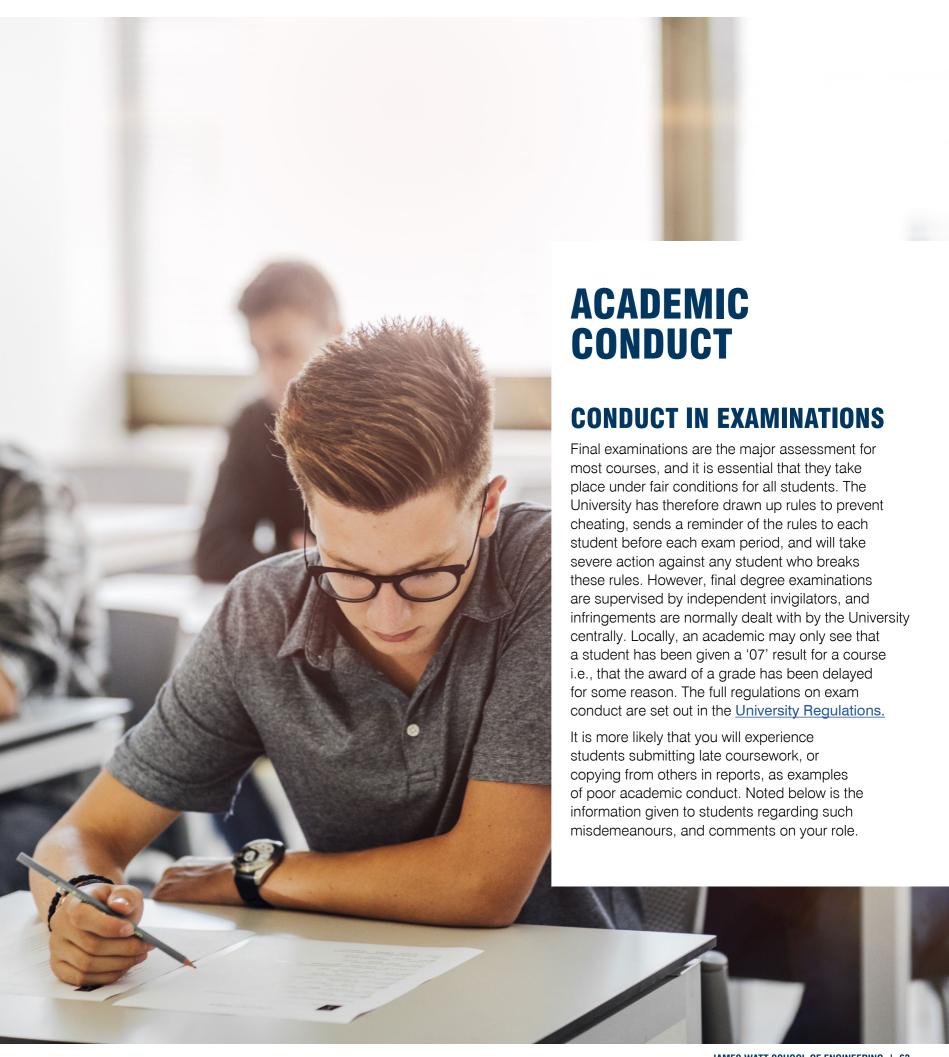
# FEEDBACK ON FORMATIVE AND SUMMATIVE ASSESSMENT

#### **PROJECT OUTLINE**

Written feedback should be sent to the student.

# FINAL REPORT & PRESENTATION & CONDUCT

Feedback should be provided on the back of the corresponding marking sheets. This feedback will be made available to the student by the Teaching Office. Individual marks are released to the student by the Teaching Office after the publication of results in September.



# **PENALTIES FOR LATE SUBMISSION OF COURSEWORK**

Section 16.25 to 16.28 of the University Fees and General Information for Students section of the **University Regulations** sets out the guidelines.

#### A key point to note is that:

"Except as modified by §16.27 - §16.28, the primary grade and secondary band awarded for coursework which is submitted after the published deadline will be calculated as follows:

- a) In respect of work submitted not more than five working days after the deadline:
- I. The work will be assessed in the usual way.
- II. The primary grade and secondary band so determined will then be reduced by two.
- III. Secondary bands for each working day (or part of a working day) the work was submitted late.
- b) work submitted more than five working days after the deadline will be awarded grade H."

For example, a report submitted 25 hours after the deadline, would be considered as 2 days late and if initially graded B3 would have the grade reduced to D1 (four secondary bands lower). It is good practice to include in your mark's spreadsheet the modified grade, and a note that the material was submitted late (a note which includes the original 'raw' grade). Typically, when continuous assessment work is returned to a student, you should clearly indicate the 'raw' grade and the final grade arrived at after the late submission penalty has been applied, so that the student understands the intrinsic quality of their submission, as well as knowing the final grade they obtained.

If a student notifies you in advance that they cannot submit work due to circumstances beyond their control, you are authorised to grant a deferral of up to five days. The student is not required to produce documentary evidence for extensions of up to 5 days. Our expectation is that staff should be charitable, but you should be careful if a maximum extension would impinge upon later submission deadlines, including the final exam diet, and thus be counterproductive to the student's interests. (If they notify you after the deadline, then they must convince you both that the deferral is justified, and that there were good reasons why they could not tell you in advance). If a student requires a referral of more than five days, they must upload reasons and evidence to the MyCampus Good Cause system, and the Chief Adviser must sign off on the deferral to ensure fairness across the School.

If a student requires a referral of more than five days, they must upload reasons and evidence to the MyCampus Good Cause system, and the Chief Adviser must sign off on the deferral to ensure fairness across the School.

## **PLAGIARISM**

In most courses students will be asked to submit work for assessment, sometimes individually and sometimes in prescribed groups. It is expected that this work has been undertaken by those who submitted it. Students are told the following:

- The submission of any other person's work is plagiarism, a form of cheating defined by the University below.
- A range of penalties may be applied when plagiarism is detected depending on the severity of the plagiarism. In all cases a student's Adviser will be informed. A severe view is taken of plagiarism in levels 3 and above, where marks contribute to the final degree classification. Cheating in examinations is also treated very seriously.
- The Introduction to the University's statement on plagiarism, part of the University Regulations is as follows.
- "31.1 The University's degrees and other academic awards are given in recognition of a student's personal achievement. All work submitted by students for assessment is accepted on the understanding that it is the student's own effort.
- 31.2 Plagiarism is defined as the submission or presentation of work, in any form, which is not one's own, without acknowledgement of the sources. Plagiarism includes inappropriate collaboration with others. Special cases of plagiarism can arise from a student using his or her own previous work (termed auto-plagiarism or self-plagiarism). Auto plagiarism includes using work that has already been submitted.
- For assessment at this University or for any other academic award.

- 31.3 The incorporation of material without formal and proper acknowledgement (even with no deliberate intent to cheat) can constitute plagiarism. Work may be considered to be plagiarised if it consists of:
- A direct quotation
- A close paraphrase
- An unacknowledged summary of a source
- Direct copying or transcription

With regard to essays, reports and dissertations. the rule is: if information or ideas are obtained from any source, that source must be acknowledged according to the appropriate convention in that discipline; and any direct quotation must be placed in quotation marks and the source cited immediately. Any failure to acknowledge adequately or to cite properly other sources in submitted work is plagiarism. Under examination conditions, material learnt by rote or close paraphrase will be expected to follow the usual rules of reference citation otherwise it will be considered as plagiarism. Schools should provide guidance on other appropriate use of references in examination conditions.

- 31.4 Plagiarism is considered to be an act of fraudulence and an offence against University discipline. Alleged plagiarism, at whatever stage of a student's studies, whether before or after graduation, will be investigated and dealt with appropriately by the University.
- 31.5 The University reserves the right to use plagiarism detection systems, which may be externally based, in the interests of improving academic standards when assessing student work."

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See the online guidance for additional information.

The first defence against student plagiarism is to develop assessments that are difficult to plagiarise3. One trick is to be specific in your assessment questions and find ways to change those specifics regularly. Much less chance of the student even being able to find a piece of work to steal—easier just to write their own.

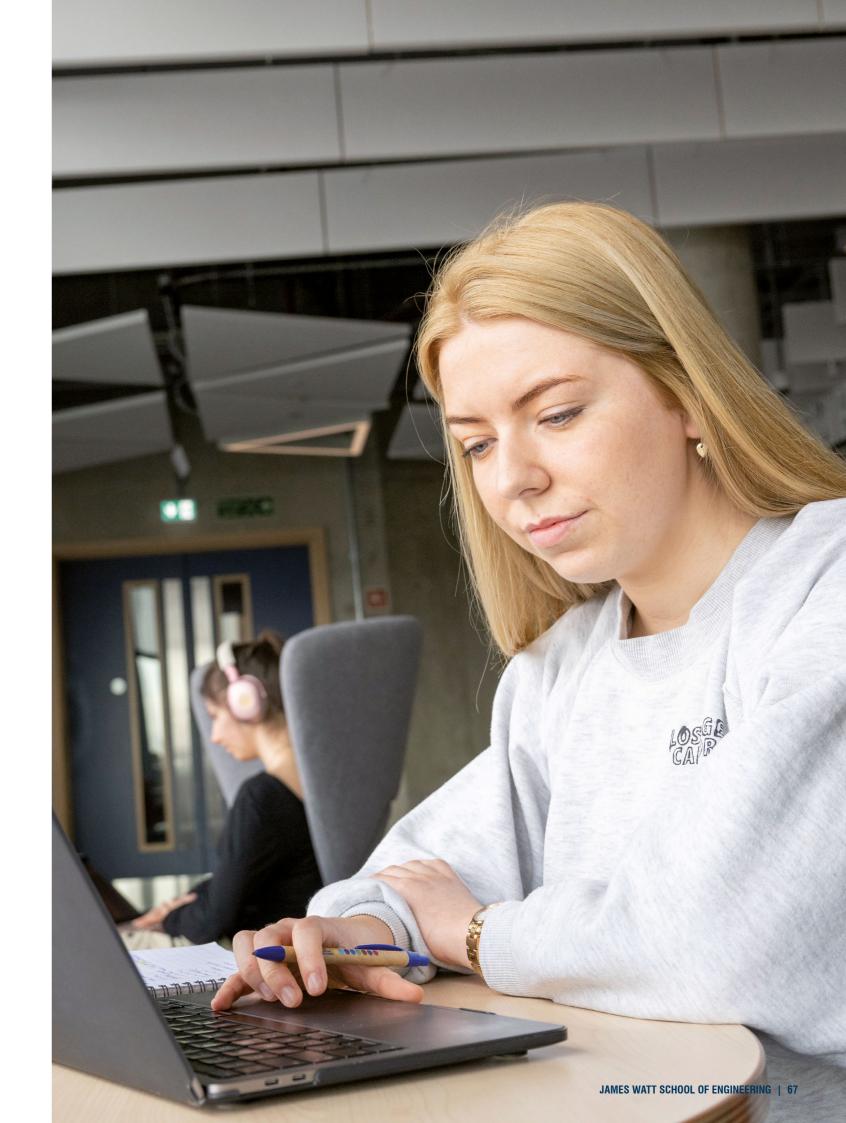
- Avoid 'explain' or 'describe', and use 'justify', 'rank', 'interpret', 'analyse' (e.g., rather than 'Write an essay describing the development of the steam engine', you could try 'Three technological advanced made by James Watt include the separate condenser, centrifugal governor, and parallel motion linkage. Write an essay ranking these in importance, justifying your view')
- Change the format. In year 1 you can ask for a report. In year 2 a report in IEEE Transactions format and style. In year 3 a report in Scientific American, style. In year 4 a presentation to the sales team charged with selling your product. In year 5 a poster. In year 6 a triple fold public flyer. et cetera
- Change the application of the work. Present a hypothetical scenario linked to a current news item and have the students solve a problem / perform a design exercise consistent with that scenario. If possible, you might try to create a scenario related to their birth date or birth town or favourite food item, to specify further the assessment. 'Design a 3-phase supply line from Kent to the town of your birth, which can carry 45 kW at typical UK maximum summer temperatures.

In addition, if you are accepting electronic versions of lab reports, project reports or essays, you should have students submit in Moodle using the URKUND/Turnltln plagiarism detection software. You create an Assignment activity in Moodle, and then in the submission settings for the activity set the Require students click submit button to No (which allows students an infinite number of drafts before the final submission deadline) and the Require that students accept the submission statement to Yes (which requires the student to 'sign off' that this is their own work). Then enable the plagiarism detection software plugin, leaving all its preferences to the default settings.

University policy is that students should be allowed to submit draft material to plagiarism detection software in order to help them learn good referencing practice. Academics may allow a more limited number of draft submissions if they desire, but there should always be at least one.

If you discover possible plagiarism, either in an electronically or physically submitted piece of work, it must be investigated at School level for level 1 & 2 students and reported to Senate for Honours and MSc students. Contact (School Plagiarism Officer) and let the Teaching Office know the situation. They will give you further detailed advice. You must complete a Student Conduct referral form within 20 working days of identifying the plagiarism/cheating so that cases can be dealt with in a timely manner.

Key contacts: Suzanne Robertson



# **FORMAL APPEALS**

A student has the right of appeal against:

- Exclusion from further study
- A decision of the Examination Board

The Code of Procedure for Appeals is laid out in the University Regulations. A student must intimate their intention to appeal within 10 working days of publication of the result or decision against which they are appealing.

# **EXCLUSION FROM FURTHER STUDY**

The progress of undergraduate students is reviewed annually by the School Progress Committee. If a student fails to meet the progress requirements this Committee may decide that he or she is not allowed to register for the following session or may be required to register for a different qualification. Students can formally appeal to the College against the decisions of the School Progress Committee, but they will not accept any evidence that could reasonably have been submitted to the School earlier.

# A DECISION OF THE EXAMINATION BOARD

Students may appeal against a grade awarded in an examination or the class of Honours awarded. In this case, the Regulations state clearly that an appeal will not be entertained against marks or decisions of examiners, or other matters of academic judgement, but only on the grounds of unfair procedure or medical evidence.

A student who feels that he or she has grounds for an appeal should first seek advice. The Students' Representative Council (SRC) Advice Centre has written an excellent leaflet on appeals, available on the web glasgowstudent.net/advice/academic/appeals.

Here is its introduction:

- "There are two grounds for appeal: Unfair or defective procedure.
- Failure to take into account medical or other adverse personal circumstances"

In other words, either the School has done something wrong in the way they have administered your course or exams, or else they haven't made reasonable allowances for a medical or other personal problem."

# JWSE RESEARCH STRUCTURE

- 5 research divisions
- 4 centres
- 4 cross-cutting themes





# **FUNDING GUIDANCE**

The College of Science & Engineering provides support resources on the primary funders (e.g., UK Research Councils, European Research Council), strategic funding calls, mobility funds and grant costings.

The University has an institutional subscription to Research Professional, an online database of research funding opportunities and a source of international research policy and practice news. By creating your own profile, you can tailor funding and news searches, as well as set-up weekly alerts based on your interests.

# **JAMES WATT NANOFABRICATION CENTRE** (JWNC)

The James Watt Nanofabrication Centre (JWNC) is a research beacon of the University of Glasgow. This 1400 m2 cleanroom facility, with 240 registered users is supporting 73 active research projects, with a value to Glasgow of £57.6m. 78 PhD students are currently undertaking research in the centre in a diversity of areas of electronics, photonics, imaging and sensing, bio-molecular and cellular engineering. Much of this activity is collaborative, and the JWNC is currently working with 100 national and international academic partners and 130 UK companies.

If you wish to use the resources of the JWNC for your research, then you need to cost the use of the Centre into your research grant proposal. In the first instance, you should contact jwnc-enquiries@glasgow.ac.uk

# SUPPORTING RESEARCH IMPACT

Impact is defined as 'an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia'.

The inclusion of research impact as an element in funding decisions and assessments of excellence at both institutional and individual levels means that we need to embed awareness and understanding, and best practice, into our research culture and activity across all disciplines. We do this in a number of ways:

- Training and Guidance
- Funding Opportunities

The school has a dedicated Impact Team compromising of Professor Massimo Vassalli (Director of Impact), Dr Sean McGinty (Lead for Impact Culture) and Dr Shuja Ansari (Lead for engagement of ECRs) that provides bespoke support and guidance. They can be contacted via the email inbox eng-impact@ glasgow.ac.uk. Additional information and resources are available at the SharePoint site: JWSE Impact - Home (sharepoint.com).

The Engineering and Physical Sciences
Research Council (EPSRC) has awarded the
University an Impact Acceleration Account (IAA)
to increase the global impact of the University's
research through greater levels of external
engagement and entrepreneurship. The IAA
supports a range of interventions with a focus on
investments that pump-prime wider knowledge
exchange activities and impact generation
of previously funded EPSRC research.

The IAA aims to deliver this by focusing on four core objectives:

- Enterprise and entrepreneurship
- Partnership development
- Researcher mobility
- Capacity building and culture change

Further information on the EPSRC IAA and the live competitions can be found on College webpages.

Key Contacts: eng-impact@glasgow.ac.uk

The College EPSRC Impact Acceleration Account Project Manager is Keith Dingwall

# RESEARCH STRATEGY & POLICY

The Research Strategy and Innovation Office (RSIO) is responsible for ensuring University policies and strategies promote a high-quality research environment. RSIO is also responsible for developing and implementing University strategy with respect to research and engagement, and good research practice.

The Research Strategy & Policy team is responsible for developing and implementing the University's research strategy and policies. By supporting the work of the Research Planning & Strategy Committee and working with College and University senior management, the team ensures the University's policy framework enables and supports the University's research objectives, whilst complying with the requirements of the University's funders. The team also ensures that researchers are provided with a supportive environment and are encouraged to meet the highest standards of research integrity.

The Strategy & Policy team also lead on the University's preparations for Research Excellence Framework (REF). These preparations include delivering plans and procedures to facilitate the final REF submission, ensuring that the University's reporting of its research-related activities fulfils its potential. Within this, the team also lead in the identification and development of Impact Case Studies, working closely with other University services, college senior management & research administration.

# RESEARCH EXCELLENCE FRAMEWORK (REF)

The REF is the system for assessing the quality of research in UK higher education institutions. The income currently received by the University based on its performance in REF2014 is around £45M per annum. Beyond this financial contribution, our performance in the REF exercise is one of the key measures by which our research is judged by our peers.

The UK's four funding bodies for Higher Education have confirmed that REF2021, has a threefold purpose:

- To provide accountability for public investment in research and produce evidence of the benefits of this investment.
- To provide benchmarking information and establish reputational yardsticks for use within the HE sectors and for public information.
- To inform the selective allocation of funding for research

More information can be found on RSIO's News & Updates page.

# DIRECTOR OF IMPACT PROFESSOR MASSIMO VASSALLI

The Impact Champion plays an integral role in facilitating the delivery of the School's Impact Strategy. The Impact Champion's role is to ensure that impact case studies are identified and that a pipeline of studies are developed and matured for REF 2021 and for future REF assessments. The Impact Champion works with other Impact Champions across the institution to ensure that Impact is embedded with their respective Schools.

## RESEARCH INTEGRITY

As a research-led institution, the University of Glasgow is committed to providing an environment that ensures our research is conducted to the highest quality standards. Central to this commitment is the development of an environment that recognises and supports research excellence. When embarking on a new research collaboration or taking on new staff or students (who may be lacking in experience in these areas) it is important to ensure that everyone has the same expectations for good research practice.

Face to face workshops on research integrity and data management are available through Employee and Organisational Development. These are appropriate for academic staff and research administrators as well as being highly recommended for new early career researchers.

The Research Integrity Adviser for the School is: Professor Manuel Salmeron-Sanchez.

## **OPEN ACCESS**

Open Access to research publications means making the full text freely available on the web. This is a requirement of REF, many funders, and good research practice. The library can provide support. All University of Glasgow academic and research staff who are acting as lead University of Glasgow authors should notify the library as soon as an article or conference proceeding is accepted. This can be achieved by forwarding the acceptance notification and a copy of the author final version (final agreed text before the publisher adds their logo) to research-openaccess@glasgow.ac.uk. The open access team will ensure its inclusion on Enlighten (see below). All papers should include acknowledgement of the funder name(s) and funder grant reference. This should be in the format: 'This work was supported by the ... [grant number XXX].



## **ENLIGHTEN**

Enlighten is the University's system for managing research publications. Details of all research publications must be recorded in Enlighten, as the data is used for a number of key purposes:

- Publicising worldwide the research carried out at the University of Glasgow
- Populating staff pages with publications details
- Providing publications details for the University's REF return
- Providing publications details for the Performance and Development Review process

The University's Publications Policy also requires staff to deposit the full text of journal articles and conference proceedings where this is permitted by publishers.

Full details of what you should deposit can be found here.

## RESEARCHER DEVELOPMENT

Researcher Development is a service that works in partnership with Colleges, Graduate Schools, and key services (such as HR, Careers, the library, and Employee & Organisational Development) to coordinate professional and career development opportunities for Postgraduate Researchers (PGRs) and early-career staff.

# EARLY CAREER DEVELOPMENT PROGRAMME

The Early Career Development Programme (ECDP) is the University of Glasgow's commitment to developing its early career academic staff. It aims to develop high achieving, high performing academics who will help the University to deliver its vision and ambitions supporting the strategic objective of being 'A globally connected globally influential university.'

The Programme will enable this by providing learning and development opportunities in all aspects of the academic role; allocating a mentor to provide support and advice; and setting annual objectives, which enable academics to develop their abilities and achievements with a view to meeting the criteria for promotion to Grade 9 within a defined timescale. All Early Career Researchers are allocated a mentor by their School and should speak with their line manager to ensure that this commitment is fulfilled. The College of Science and Engineering also provides significant support for its Early Career Researchers.

# **RESEARCH SEMINARS**

If you are hosting a visiting researcher or have an idea of who you would like to see speak, please contact your Division's Seminar Coordinator. Currently, the contacts are: -

- Dr Kiran Ramesh (ASC)
- Dr Julien Reboud (Biomedical Engineering)
- Dr Ankush Aggarwal/Dr Prashant Saxena (Infrastructure & Environment)
- Dr Chong Li (Electronics and Nanoscale Engineering)
- Dr Manish Jain Centre for Medical and Industrial Ultrasonics
- Dr Phil Harrison Materials and Manufacturing Research Group
- Dr Matteo Ceriotti Space and Exploration Technologies Research Group
- Dr Guanchen Energy and Sustainability Research Group

The University has a central events webapp, listing campus wide research seminars, allowing staff to see the goings on in Schools across campus. It is intended to replace existing department- or school-specific methods for advertising events which make it difficult for staff and students to discover what relevant research may be being presented elsewhere on the campus and provide a single central location where all such event information can be accessed using your GUID.

If you find a group that hosts many interesting talks, you can click the "Subscribe" button on any one of their talks (or on the group information page) to subscribe to that group.

You can also set up automated event reminder emails, which are sent out roughly 24 hours and 2 hours before upcoming events.

If you prefer to receive reminders through a calendar application such as iCal, Outlook or Google Calendar, the system can provide a calendar feed (compatible with most common calendar apps) that will contain all the events that you have marked.



# **PRIZE COMMITTEE**

The School is keen to ensure that its world-leading staff are recognised for their contributions to their respective field. The Prize Committee was established to provide dedicated support and guidance for those seeking to apply for awards / prizes, and to identify and highlight opportunities for members of staff across the School. Current membership:

- Professor Robert Hadfield (Chair)
- Professor Colin McInnes
- Professor Bill Sloan
- Professor Gioia Falcone

# **STAFF WEB PROFILES**

All research and teaching staff have an official staff profile that is automatically created for them when they join the School. We encourage you to establish and maintain your profile, which can be an excellent promotional tool to present your research and teaching activities.

Before you can manage and update your profile, there are a few simple steps to complete:

- Locate your profile to confirm that it has been created.
- Watch the video tutorials and download the PDF training resources.
- Download and complete the registration form 'Register to edit a research profile' and return it to: Web Team, Communications Office, 1 The Square, University of Glasgow, G12 8QQ.
- Receive your login details and password for accessing the University's content management system, Terminal 4 – Site Manager (t4)
- Use the training materials and your t4 login to edit and update your research profile.

# PUBLICISING YOUR RESEARCH AND TEACHING

#### IN THE NEWS

The School wants to hear about your work! Each Research Division has a dedicated Web Editor who are always looking for content for our 'In the News' webpage.

- Autonomous Systems & Connectivity - Wenjuan Song
- Biomedical Engineering Julien Reboud
- Electronics & Nanoscale Engineering Rair Macedo
- Infrastructure & Environment Ankush Aggarwal/Prashant Saxena
- Systems, Power & Energy Qingshen Jing

It is important to flag these opportunities early as the School can then help to maximise the impact of your publicity. It could also help liaise with University's Communications and Public Affairs Office to widen dissemination where appropriate (e.g., news on University main page, MyGlasgow news, contacts with the press).

## **SOCIAL MEDIA**

Social media provides a powerful means to improve the visibility of your research and to interact with peers, collaborators, and stakeholders. Platforms may include professional or personal blogs, X (formerly known as Twitter), Facebook, Google+, YouTube and a broad range of professional networking sites, including LinkedIn and ResearchGate.

The University actively encourages members of its research community to engage responsibly and professionally with social media. However, as the barriers between personal and professional use of social media can be poorly defined, it is important to consider how your activity reflects on both your professional research integrity and the reputation of the University of Glasgow.

The University is very active on Facebook, X (formerly known as Twitter), Instagram, Snapchat, You Tube and LinkedIn. The School has a X and Facebook account, @UofGEngineering, and we encourage you to follow and engage with us!

## **NEWS STORIES**

If you have any stories you would like to be included in the School Newsletter, please e-mail the EditorialBoard.

## **EMAIL SIGNATURE**

Your University email address is a professional communication from an accredited source and as such, you should not miss the opportunity to promote your affiliations, staff profile and School (or personal) social media.

We would like you to consider adding the School website on your e-mail signatures: glasgow. ac.uk/schools/engineering and promote our Athena Swan Silver Award (Logo).

You may want to consider including the Twitter site (which has a growing number of influential followers): Twitter: @UofGEngineering

Add any special interest group or event with which you are associated, or of course your personal website.

## **BUSINESS CARDS**

You may require business cards to take to meetings with collaborators or industrial partners. The CoSE Transactions Hub will organise these for core research and teaching staff – all you need to do is provide all the information you want printed on your cards. Contact email: cose-fintranshub1@glasgow.ac.uk

## **OTHER RESOURCES**

The University provides a variety of resources in its Brand Toolkit:

- Research Communications Toolkit.
- Word letter template.
- Powerpoint templates.

# **SCHOOL AND UNIVERSITY POLICIES**

#### **HEALTH AND SAFETY POLICY**

The James Watt School of Engineering oversees the health and safety of all staff and students while working or studying degree programmes within the School.

#### **ORGANISATION**

The Head of the James Watt School of Engineering is responsible for safety within the School. He has appointed a Safety Committee to take care of the day-to-day implementation of safety matters.

The maintenance of protection for hazardous equipment and the condition of the laboratory environment is the responsibility of designated School technicians. The provision of local safety instructions and anything particular to any laboratory exercise is the responsibility of the relevant research leader, course leader or supervisor as appropriate. Academic staff who are running laboratories or directly supervising postgraduate students are responsible for safety in the laboratory. The Safety Committee carries out a monitoring function to ensure that appropriate safety information and procedures are available.

#### **OBJECTIVES**

The School undertakes to provide or specify the following in so far as is reasonably practical:

- Provide safety instructions for staff and students.
- Provide protection for hazardous equipment.
- Provide local safety instructions.
- Provide instructions for labs.
- Specify safety clothing.
- Specify supervision required and provided.
- Inform students and staff of emergency services, e.g., first aid.
- Provide instruction on use of mains services.
- Provide instruction to staff about how to deal with problems which could arise during laboratory.

# **SAFETY INSTRUCTIONS**

#### **GENERAL**

Staff and students must read the <u>School</u> of Engineering Safety Handbook.

- Food must not be brought into laboratories.
- Clothing worn in laboratories must be appropriate, e.g., no trailing scarves.
- Everyone should behave in a calm manner while in the laboratories, e.g., no running.
- Students should not undertake any experiment without proper guidance and instruction from academic or technical staff.
- Local safety signs must be obeyed.

#### **FIRE DISCOVERY**

If you discover a fire:

- warn anybody in the immediate vicinity.
- use one of the "break glass" boxes to sound the alarm.
- only attempt to fight the fire if doing so does not threaten your chance of escape should the fire get out of control. There are fire extinguishers throughout the building.

#### **COMPLAINTS PROCEDURE**

The University has a Complaints Procedure.

If you receive a complaint, please contact <u>Tania Galabova</u> in the first instance for advice on how to proceed.

#### PERFORMANCE AND DEVELOPMENT REVIEW

Performance and Development Review provides the opportunity for all staff and their line manager to reflect upon performance and development in the last year and agree objectives and development plans for the forthcoming year. For more information on this process, please refer to the HR website.

# GENERAL DATA PROTECTION REGULATION (GDPR) – SCHOOL GUIDELINES

The legislation around Data Protection changed and was implemented on 25th May 2018. As a result, the School has been reviewing all the data we hold (both in physical and electronic files) and it was thought that it would be useful for all colleagues to have some guidelines/information and these are set out below.

#### **ENCRYPTION OF ALL MOBILE DEVICES**

In order to protect any confidential or personal data that you have stored on your mobile devices (phone; laptops; tablets, pen drives), it is important that you have all your devices encrypted. There is useful guidance at the following <a href="website">website</a>, however, Ken McColl and the IT Team (<a href="mailto:eng-itsupport@glasgow.ac.uk">eng-itsupport@glasgow.ac.uk</a>) will also provide help to anyone to ensure compliance with this requirement.

#### **DATA SECURITY RESPONSIBILITIES**

The most important question to ask is - do you need the data? If not, then dispose of the data either in confidential waste bags (if they are physical files) or delete them routinely from your electronic sources. Specifically, you may want to consult the Teaching Office if you have any examination/course assessment marks that you want to pass over to them to retain. Also, if you want help with removal of confidential waste bags, please contact Brian Robb. He will arrange for the removal of any confidential waste bags from your office and store them safely until we arrange for them to be removed for confidential shredding (please be aware this may take a couple of days to arrange an uplift).

There are some general rules to follow – this is not exhaustive:

- Ensure appropriate/secure storage for paper and e-records (either in your office or in an approved School filing system)
- Do not divulge any information on students to third parties (including their parents) unless you have the student's express consent to do so.
- Encrypt data on laptops, tablets, memory sticks, etc (see point 1 above)

- Do not share any system passwords find alternative means of sharing data (e.g., discuss with the IT support Team alternatives such as shared drives, approved cloud providers)
- Check that the School has data sharing agreements in place before sharing any personal data on students (for example, we have data sharing agreements with SIT/UGS/UESTC/GSA)
- · Destroy records appropriately and securely.
- Use approved cloud providers only (SharePoint; shared drives; OneDrive)
- One example is that academic colleagues receive from time-to-time speculative enquiries from prospective RAs/PhD students – if you do, either ask their permission before passing on their CV to another colleague or suggest that they contact a more appropriate potential supervisor directly.

Student References: Guidance can be found here.

#### **PERSONAL DATA**

Personal Data is any information relating to a natural person who can be identified, directly or indirectly, by that information. For example,

- Name
- Identification number
- Location data
- Online identifier
- Pseudonymised data
- Factors specific to physical, physiological, genetic, mental, economic, cultural, or social identity

There is a Frequently Asked Questions page concerning <u>GDPR</u>; however, if you have a specific question that is not covered on this page or in this email, please feel free to contact <u>Tania</u> <u>Galabova</u> There is mandatory online training.

The UofG online Introduction to GDPR training course is a requirement for all University of Glasgow staff and PGR students (login to Moodle required).

# VISITORS – ACADEMICS AND STUDENTS

The School routinely receives requests for visiting academics and students to come and spend short periods with academic colleagues.

#### **VISITING ACADEMICS**

All requests for visiting academic staff should be processed through the School Office. This tends to be for visits exceeding one month. You will be required to justify the visit academically to your Head of Research Division who must approve the visit. Once approved, if your visitor requires an invitation letter for a visa application, this must be issued by Head of School office via Hos-pa-eng@ glasgow.ac.uk. Please Note: Only the Head of School has the authority to write letters of invitation. Please provide a copy of the visiting academic's curriculum vitae, to be forwarded on to Hos-paeng@glasgow.ac.uk for processing. Hos-pa-eng@ glasgow.ac.uk can provide a sample visa/invite letter. Academic visitors who need a GUID (i.e., for visits longer than two weeks), must complete the new Affiliate form which includes "Trusted Research Risks", which is available from Hos-pa-eng@ glasgow.ac.uk. If required, Hos-pa-eng@glasgow. ac.uk can provide a copy of the "On-Campus Trusted Research Risk Assessment" form. Further information can be found at University of Glasgow - MyGlasgow - Research and Innovation Services - Research Governance - Trusted Research.

#### **VISITING STUDENTS**

There are various categories of visiting students and information on how these are processed is detailed below.

#### **UNDERGRADUATE**

If prospective students are interested in the Erasmus programmes (exchanges/placements) or if they wish to take advantage of University or School study abroad/exchange agreements, these students should be referred to Ola Olaniyan@glasgow.ac.uk in the Teaching Office.

For prospective visiting undergraduate students seeking a placement/internship, where there is no current Erasmus exchange/placement agreement or other exchange agreements, should be referred to the School Office (Kay Wray and Kayleigh Callaghan at <a href="mailto:hos-pa-eng@glasgow.ac.uk">hos-pa-eng@glasgow.ac.uk</a> for consideration by <a href="mailto:Tania Galabova">Tania Galabova</a>. Please note that the School limits the number of visiting undergraduate students and Kay or Kayleigh will be able to advise you whether there is an available space or not.

#### **POSTGRADUATE TAUGHT**

Some of our Erasmus exchange agreements allow for PGT student exchanges. If any enquires are regarding Erasmus exchange agreements, then these should be referred to Ola Olaniyan@glasgow.ac.uk.

#### POSTGRADUATE RESEARCH

Applications for PGR students to visit the University for a short time commonly arise out of academic collaborations. The College of Science and Engineering will allow such visits for up to 6 months without the charge of a tuition fee provided these students have the approval of the PGR Director. Any longer than 6 months will require a pro rata tuition fee payment. All Visiting PGR applications should be sent to eng-pgr-enquiries@glasgow.ac.uk

#### ATHENA SWAN SILVER

The School of Engineering was successful in its application for Athena Swan Silver in September 2021. This is a great achievement for the School and to our commitment to ensuring equality for all our staff and students. There is further information on the School's Athena Swan webpage.

#### **DIGNITY AT WORK AND STUDY POLICY**

The University is committed to protecting the dignity of students, staff, and visitors in their interactions with others. You will find the <u>Dignity at Work and Study Policy</u> on the HR website and there is information on the Full Stop Campaign on this link too.

#### **EQUALITY AND DIVERSITY TRAINING**

The University is committed to promoting equality in all its activities and aims to provide a work, learning, research, and teaching environment free from discrimination and unfair treatment. We all need to be aware of our individual and collective responsibility in relation to equality following the introduction of the Equality Act 2010 and the University has developed a wide range of training resources for staff and students to address this. This training is compulsory for all members of staff.

#### **EQUAL OPPORTUNITIES**

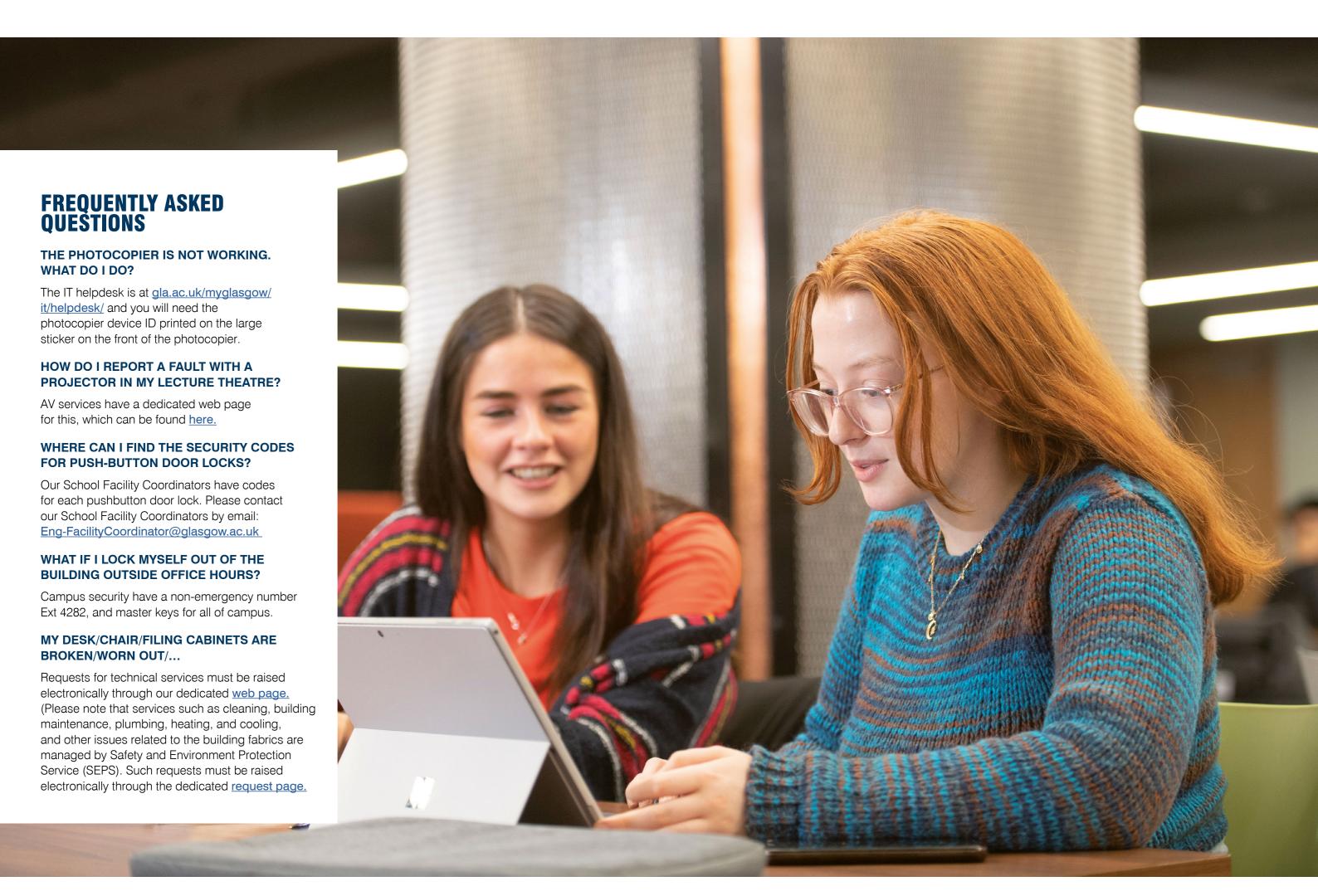
The University has adopted a code of practice on Equal Opportunities for students and staff. The University aims to ensure equality of opportunity for all its students in teaching, learning and assessment, and in the provision of services. The University aims to create conditions whereby students are treated solely on the basis of their merits, abilities and potential, regardless of age, socio-economic background, religious belief, ethnic origin, gender, marital or family status, sexual orientation, or disability.

#### **DISABILITY**

The University is committed to developing an environment in which students with additional needs can pursue their intellectual and personal development with appropriate support. If students have special needs, please contact the Student Disability Service glasgow.ac.uk/services/disability so that appropriate support can be arranged. The disability co-ordinator for the School is Natalie McIntyre.

#### **POLICY ON SMOKING**

In accordance with the law, smoking is not permitted in any University building or official vehicle. All areas in all buildings are non-smoking.



# CHECKLIST FOR MANAGERS EXPECTING NEW EMPLOYEES

This is a <u>checklist</u> of suggested preparations for welcoming new staff to the James Watt School of Engineering. The responsibility would be taken by the Line Manager with appropriate involvement of senior colleagues, such as the Head of Division and/or delegated assistant.

# CHECKLIST FOR TEACHING IN SEMESTER 1

- If you are teaching a new course in Semester 1,has it been through the appropriate approval process (Scott Roy/ Suzanne Robertson)
- Make sure your course Moodle site for your teaching is rolled over (Ken McColl – IT Manager)
- Make sure your course Moodle site for your teaching is updated (Ken McColl – IT Manager) Make sure if you require any demonstrators for your labs or tutorials that you have provided information of your requirements to the Teaching Office (Suzanne Robertson)
- Make sure you provide Suzanne Robertson with the information on your coursework/ hand-ins for the School's Assessment and Feedback Calendar
- Let the Teaching Office know of any hand-ins dates for Semester 1 courses so that this can be added to the School's Assessment and Feedback Calendar

# CHECKLIST FOR TEACHING IN SEMESTER 2

- If you are teaching a new course in Semester 2, has it been through the appropriate approval process.
- (Scott Roy/ Suzanne Robertson)
- Make sure your course Moodle site for your teaching is updated (Ken McColl – IT Manager)
- Make sure if you require any demonstrators for your labs or tutorials that you have provided information of your requirements to the Teaching Office (Suzanne Robertson)
- Make sure you provide Suzanne
   Robertson with the information on your coursework/hand ins for the School's Assessment and Feedback Calendar
- Let the Teaching Office know of any hand-ins dates for Semester 2 courses so that this can be added to the School's Assessment and Feedback Calendar

# **KEY CONTACTS**

Role	Name	Contact
Head of School	Professor Manuel Salmeron-Sanchez	Hos-eng@glasgow.ac.uk +44 (0)141 330 5858
Head of Professional Services	Mrs Tania Galabova	Tania.galabova@glasgow.ac.uk +44 (0)141 330 3146
Associate Head of School	Professor Andrew McBride	Andrew.McBride@glasgow.ac.uk +44 (0)141 330 3136
Director of Research	Professor Nikolaj Gadegaard	Nikolaj.Gadegaard@glasgow.ac.uk +44 (0)141 330 5243
Director of Learning & Teaching	Professor Scott Roy	Scott.Roy@glasgow.ac.uk +44 (0)141 330 4930
Director of Impact	Professor Massimo Vassalli	Massimo.Vassalli@glasgow.ac.uk +44 (0)141 330 2000
Head of Technical Services	Mr Cyril Pacot	<u>Cyril.pacot@glasgow.ac.uk</u> +44 (0)7779 543 797
Convener of Graduate Studies	Professor Marc Sorel	Marc.Sorel@glasgow.ac.uk +44 (0)141 330 5229
Convener of Postgraduate Taught Programmes	Dr Rami Ghannam	Rami.Ghannam@glasgow.ac.uk +44 (0)141 330 2411
Learning and Teaching Manager	Suzanne Robertson	Suzanne.Robertson@glasgow.ac.uk +44 (0)141 330 2867
Resource Management Administrator	Jennifer Arthur/ Lauren Quinn (currently on maternity leave)	eng-finance@glasgow.ac.uk
TNE Teaching and Operational Manager	Chengyang Wang (currently on maternity leave) Kevin Kane	Chengyang.Wang@glasgow.ac.uk Kevin.Kane@glasgow.ac.uk
TNE Secretariat	Laura Dickson Katy McGinty Emma O'Donnell	Laura.dickson@glasgow.ac.uk +44 (0)141 330 4437 Katy.mcginty@glasgow.ac.uk +44 (0)141 330 7124 Katy.mcginty@glasgow.ac.uk
Computer Manager	Ken McColl	Ken.mccoll@glasgow.ac.uk +44 (0)141 330 5238
Technical Services Manager  - Research Laboratories	Brian Robb	Brian.robb@glasgow.ac.uk
Technical Services Manager – Research and Teaching Workshops	Denis Kearns	Denis.kearns@glasgow.ac.uk
School Facility Coordinators	Augustine Onwuegbuzie and Nivetha Rajamanickam	Eng-FacilityCoordinator@glasgow.ac.uk
Chief Advisor	Douglas Thomson	Douglas.thomson@glasgow.ac.uk +44 (0)141 330 6145
School Office		schoolofengineering@glasgow.ac.uk +44 (0)141 330 2032
School Teaching Office		Eng-teachingoffice@glasgow.ac.uk (Only for staff enquiries) +44 (0)141 330 7558
PGR Administrators/ Graduate School Matters		Eng-pgr-enquiries@glasgow.ac.uk
PA to Head of School		hos-pa-eng@glasgow.ac.uk +44 (0)141 330 5858
Student Support Officer		eng-studentsupport@glasgow.ac.uk

# **HEADS OF RESEARCH DIVISION**

Role	Name	Contact
Autonomous Systems & Connectivity	Professor David Flynn	<u>David.Flynn@glasgow.ac.uk</u> +44 (0)141 330 3170
Biomedical Engineering	Professor Huabing Yin	Huabing.Yin@glasgow.ac.uk +44 (0)141 330 4109
Electronics and Nanoscale Engineering	Professor Hadi Heidari	Hadi.Heidari@glasgow.ac.uk +44 (0)141 330 4929
Infrastructure & Environment	Professor Sondipon Adhikari	Sondipon.Adhikari@glasgow.ac.uk +44 (0)141 330 3136
Systems, Power & Energy	Professor Steven Neale	<u>Steven.Neale@glasgow.ac.uk</u> +44 (0)141 330 3317

# **HEADS OF DISCIPLINE**

Role	Name	Contact
Aerospace Engineering	Dr Ian Taylor	<u>lan.taylor@glasgow.ac.uk</u> +44 (0)141 330 8646
Biomedical Engineering	Dr Henrik Gollee	Henrik.gollee@glasgow.ac.uk +44 (0)141 330 4406
Civil Engineering	Professor Fiona Bradley	Fiona.bradley@glasgow.ac.uk +44 (0)141 330 5211
Electronics & Electrical Engineering	Dr Euan McGookin	Euan.mcgookin@glasgow.ac.uk +44 (0)141 330 4798
Mechanical Engineering	Dr Phil Dobson	phil.dobson@glasgow.ac.uk +44 (0)141 330 4314

# **COLLEGE RESEARCH SUPPORT OFFICE**

Role	Name	Contact
Jacqueline Heuchan	Jacqueline.Heuchan@glasgow.ac.uk	+44 (0)141 330 3369
Derek Motherwell	Derek.Motherwell@glasgow.ac.uk	+44 (0)141 330 3283
Anca Quinn	Anca.Quinn@glasgow.ac.uk	+44 (0)141 330 3207
Tom Staves	Tom.Staves@glasgow.ac.uk	
Sandra James	Sandra.James@glasgow.ac.uk	
Andrew Bruce	Andrew.Bruce@glasgow.ac.uk	

Department	Contact	
Business cards	schoolofengineering@glasgow.ac.uk	
Purchasing	eng-porequests@glasgow.ac.uk	
IT Support & Pull Printing	https://www.gla.ac.uk/myglasgow/it/helpdesk/	
Couriers	schoolofengineering@glasgow.ac.uk	
Out of hours access (staff card activation)	eng-buildingaccessrequests@glasgow.ac.uk	
Security	security-main-campus@glasgow.ac.uk Tel: (0141) 330 4282/4444	

