University of Glasgow

James Watt School of Engineering

School Safety Handbook

Contents

Statement from Head of School

Executive Summary:

- **Health, Safety & Wellbeing are our Priority,** including mental wellbeing. We are committed to continuous improvement in safety management.
- **Responsibility & Accountability:** We all have a responsibility towards each other to create a safe and healthy environment, for which all management levels are accountable, including myself as Head of School, Heads of Research Divisions and Teaching Disciplines, Principal Investigators, and Supervisors.
- In response to the **Climate Emergency,:** environmental protection and sustainability are integrated into health and safety practices, including efforts to reduce carbon footprint.
- **Support:** We work closely with the University's Safety & Resilience service for support. Specific roles such as Lab Guardians, fire wardens, first aiders, and mental health first aiders are essential to building the best environment. I encourage staff and students to report hazards or seek guidance openly to generate improvements.
- **Culture:** All individuals must complete relevant safety training, understand procedures, and follow codes of practice. The School promotes exceeding minimum standards to foster a culture of safety and wellbeing.

The University of Glasgow and the James Watt School of Engineering are committed to providing a safe and healthy working environment. **Health and Safety always comes first** and the School strives towards continual improvement of the management structures and processes for health and safety of all our stakeholders, including **mental wellbeing** which is integral to overall Health and Safety.

Our commitment is supported by the University Safety & Resilience service (https://www.gla.ac.uk/myglasgow/safetyresilience), which is a key asset providing expert specialist advice across occupational health and safety, including a wide range of training.

The University has declared a **climate emergency** and protecting the environment is an integral part of the James Watt School of Engineering's broader ethical and societal commitments. This is consequently an important consideration of any Health and Safety measure, including in respect of our carbon footprint and sustainability.

It is important to emphasize that **every level of management is accountable** to their line manager and at the same time responsible for the health, safety and wellbeing of those reporting to them. The School's roles and structures aim to ensure that **individuals and teams feel trusted to manage safety responsibly** but are also adequately supported by supervisory structures. These include the Heads of Research Divisions, Heads of Teaching Disciplines as well as Principal Investigators and Supervisors, who have important roles and responsibilities to strengthen our commitments and delivery of a safe environment for all.

The **Lab Guardians are central to the School's channels for safety**. We are extremely grateful to these referents for a space or grouping, taking on added responsibilities to ensure that our laboratories are safe. We will continuously support them and call upon all to engage with them to maintain and enhance our safety.

Statement from Head of School

Other targeted roles underpin the safety of our community and again are gratefully acknowledged, including **fire safety coordinators, H&S coordinators, fire wardens, first aiders, and mental health first aiders.**

In addition to these specific roles and structures, the Supervisors/PIs should lead, motivate and encourage their staff and students **to report on hazards** and to discuss all matters relating to health and safety. In the James Watt School of Engineering, we aim to foster **an open attitude to health and safety issues**, in which people can seek help/guidance from suitably experienced persons, irrespective of the direct line management structure. **Our excellence in research and teaching cannot be achieved without first ensuring a safe and healthy working environment.**

In particular, whilst we have dedicated and broad rules, regulations and procedures (including for example our **risk assessment** database and **incident reporting**), it must be recognised that those working and studying in the School have a key responsibility to make sure that what they do is done safely, **not only in respect of their own safety, but also of others.** We should also be willing to take the right steps even if it implies delay in starting projects or scheduling tasks for example.

It is a condition of working in the School that everyone read and understand all safety information relevant to their intended activities before commencing the work, including having:

i. read and understood relevant information from the safety manual
ii. undergone relevant safety training
iii. completed and/or passed relevant safety questionnaires / competence assess ments / inductions
iv. completed or read and understood relevant Codes of Practices, COSHH, and/or risk assessment forms.

The School's Emergency Plan i.e. **what to do in the case of an Emergency** is also available in as many places as possible, and although it is likely that you could see an instance of this as you are reading this note in your immediate environment, please take a moment to read the details available at the end of this document, once again.

Finally, please remember the manual sets out minimum standards to what people need to know in order to work safely, and be aware of any surrounding risks. However, it does not replace the need to take expert advice, consult relevant literature or to design work in a way that minimises the risk of injury to yourself or others. Wherever possible, try to exceed these and make the School an environment that promotes the wellbeing of us all.

Professor Muhammad Imran	Professor Andrew McBride	Professor Scott Roy
Head of School of Engineering	Assistant Head of School	Assistant Head of School

Part A - Policy and Organisation

Introduction

The management and promotion of health and safety in the School is an essential duty incumbent upon all academic and supervisory staff, who are ultimately responsible to the Head of School. However, all staff and students working in the School must recognise that there is a clear duty on them to act responsibly in matters of health and safety and to cooperate with managers in this regard. It is therefore required that all members of staff shall acquaint themselves with relevant safety information before commencing any work. In this context, students and staff should note that there are extensive sets of guidelines and policies covering health, safety and well being on the University's website:

http://www.gla.ac.uk/myglasgow/seps/

To implement the above policy, the School will:

- Provide resources and employ means to ensure safe working.
- Provide and maintain an appropriate structure for the implementation and development of safe working to include training in safe working methods and assessment and monitoring of working practices to ensure safe working.

Part A - Policy and Organisation

Organisation and Arrangements

A diagrammatic description of the safety management structure is shown on the following page, to illustrate the delegated levels of responsibility.

Everyone is responsible for adhering to health and safety standards, following best practices, producing risk assessments and safe operating procedures (SOP) associated with the work they are undertaking or understanding and following risk assessments and codes of practice that have been prepared by others.

The Head of School is accountable to the Head of College and ultimately to the University Court for the health and safety management within their area of control, including both staff and student activities within their unit. They are not responsible for areas managed by other units (e.g., Estates).

Health and safety responsibilities are delegated through the normal line management chain. Anyone managing staff, organising work, or controlling resources must ensure safety in their area. Similarly, line managers and supervisors are only responsible for safety where they have control.

Heads of Research Division, Discipline, Technical Services and Professional Services are responsible for ensuring that all staff and students associated with their area of responsibilities are implementing the School safety policy.

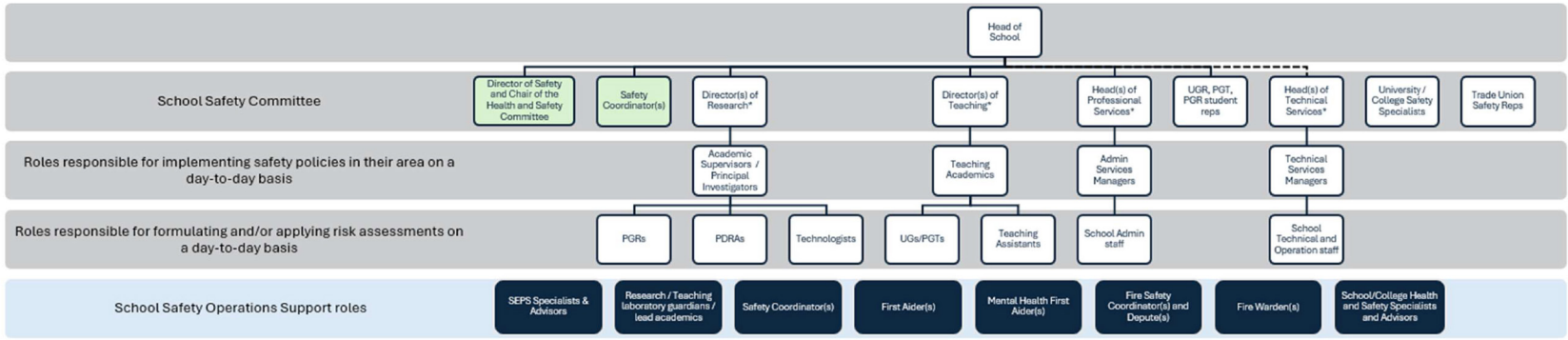
Academic Supervisors are responsible for ensuring that all students, staff and visitors working under their guidance implement the School safety policy, prepare and/or follow risk assessments and safe operating procedures associated with the work they are undertaking.

Technical and Professional Services managers are responsible for ensuring that all staff and visitors working in their areas follow and implement the School safety policy, prepare and/or follow risk assessments and codes of practice associated with the work they are undertaking.

The Director of Safety, supported by the Safety Coordinator, will be responsible to the Head of School for ensuring compliance with all current Health and Safety legislation applicable to the full range of activities carried out within the James Watt School of Engineering; developing and implementing an effective safety management structure that includes suitably knowledgeable, experienced and competent people; establishing and chairing an effective safety committee; and developing and implementing policies and procedures that promote a good safety culture by making a safe working environment the norm in the School.

The Safety Coordinator provides a channel for information exchange and distribution and a direct link to the safety committee. They also provide a link to the School Management Team and School Executive Board on matters that require urgent consideration and response.

JWSE Health & Safety Management Responsibility Structure



	Director of Safety	Safety Coordinator(s)	Academic Research	Academic Teaching	Technical Services	Professional Services	Student Reps	Safety Specialists	Trade Unions
Appointed Safety Committee Members	Julien Reboud	Cyril Pacot	Director of Research Andrew McBride Heads of Research Division: ENE: Hadi Heidari ASC: David Flynn BME: Huabing Yin I&E: Sondipon Adhijkari SPE: Steven Neale	Scott Roy	Julie Russell Wilson MacDougall Peter Miller Mark Dragsnes (JWNC)	Tania Galabova		CoSE H&S management: Nicholas Fatoye Biological Safety: Julie Russell Chemical Safety: Elizabeth Palmer	UCU Unite
Deputes		Tendai Makuwatsine		Heads of Teaching Discipline		Suzanne Robertson			

Part A - Policy and Organisation

Organisation and Arrangements

Laboratory Guardians are appointed by either the relevant Head of Research Division for research laboratories or the Head of Workshops and Teaching Services for Workshops and Teaching Laboratories, with the approval of the Head of School, to organise the development and monitoring of the safety arrangements within a designated laboratory to ensure that safe working practices are implemented within the laboratory.

Such responsibilities imply a proximity to the laboratory, its users and activities taking place within it with regular inspections and communication. Should a laboratory guardian be absent for a prolonged period, arrangements should be made to have someone else taking this role temporarily.

For research labs they will normally be a member of the academic staff, and will be responsible for safety matters in the laboratory or suite of laboratories which they oversee, as outlined below:

1. to promote safe working practices and maintain the Code of Practice (CoP);
2. to ensure the lab users keep their area in tidy and clean condition;
3. to ensure each activity (experimental rig/equipment) has a Risk Assessment before work commences;
4. to review risk assessments and highlight any concerns, paying particular attention to whether the proposed activities conflict (in a safety context) with other activities in the lab, particularly in multi-user, multi-supervisor labs.
5. to coordinate actions according to the School's Director of Safety or Safety Coordinator's report/instructions following regular or ad hoc laboratory inspections;

- A list of laboratory guardians can be found on the James Watt School of Engineering website, if you cannot find the person responsible for the area in which you wish to work, please contact the School's Director of Safety or the Safety Coordinator.

School Safety Committee

Chaired by the Director of Safety, **the Safety Committee** comprises students and staff from Technical Services, Professional Services and from each of the Research Divisions and Teaching Disciplines within the School. The function of the committee is to harness the knowledge and expertise of staff and students familiar with the health and safety arrangements in their areas of work and to apply that knowledge and assist in the development of workable and effective local policies, systems, and protocols. The committee also assists in the monitoring and review of these arrangements.

- Details of the current membership are on the School safety website.

Part A - Policy and Organisation

Organisation and Arrangements

Trained first aiders help cover on campus work and these may be essential where field trips are undertaken or where work is done away from the University. The nature and extent of the risks that arise on campus and elsewhere (e.g. on fieldtrips) must be considered when deciding what first-aid provision is needed within a research or teaching laboratory or a field trip based on a risk assessment. Our University Security Services team forms the basis of first aid provision for our main campuses as many team members are trained in first-aid, are easily recognisable and are on campus at all times. Security operates a **first aider paging system using the "SafeZone" app** and first aiders from across the University are encouraged to register and take part in this system. Below are some key factors to consider assessing first aid needs:

- The different work activities (e.g. office, laboratory or animal handling)
- The number of staff in the workplace at any one time (you may need to consider mandatory first-aid cover for some staff numbers and activities e.g. field trips)
- Geography, both on campus and for remote locations for fieldwork
- Lone or mobile working and shift work
- Multiple occupancy buildings or areas and arrangements in place at host organisations
- Students and visitors, if applicable

These factors must be integral to the activity risk assessments. Supervisors, line managers and laboratory guardians should ensure that sufficient first aid cover is in place when reviewing the safety measures in place.

Emergency contacts and name(s) of competent first aider(s) and/or trained emergency first aider(s) must be visible in the work area, especially research and teaching laboratory.

DO NOT WAIT FOR AN EMERGENCY TO FIND OUT WHETHER THERE IS SUFFICIENT FIRST AID COVER

Proportional numbers of first aiders in the following table are suggestions only - they are not definitive nor are they a legal requirement. They provide guidance on the number of first aiders beyond the generic provision from the UofG Security Services.

Category of risk	Numbers employed at any location	Suggested number of first aid personnel
Lower Risk (Offices)	<50	At least 1 person trained in Emergency First Aid at Work
	50-100	At least 1 first aider
	>100	1 additional first aider for every 100 people

Part A - Policy and Organisation

Organisation and Arrangements

Category of risk	Numbers employed at any location	Suggested number of first aid personnel
Medium Risk (Teaching Laboratories)	<20	At least 1 person trained in Emergency First Aid at Work
	20-100	At least 1 First aider for every 50 people at risk
	>100	1 additional first aider for every 100 people at risk
High Risk (Research Laboratories)	<5	At least 1 person trained in Emergency First Aid at Work
	5-50	At least one first aider
	>50	One additional first aider for every 50 people at risk

Mental Health First Aiders (MHFAs) at work are trained individuals who provide initial support to employees experiencing mental health issues or distress. They act as a point of contact, offering non-judgmental support, reassurance, and guidance towards appropriate help. Points of contact for initial assistance and guidance to professional help, for those staff and students seeking help for poor mental health can be found on the School Safety webpage.

Fire Safety Coordinators (FSC) and Deputes supports day-to-day fire safety management across JWSE buildings, including monitoring escape routes, coordinating staff training, and managing fire drills. While Estates Services handles alarm maintenance, FSCs focus on local safety practices. Each building should have an FSC and at least one Depute. Large buildings will typically have several deputes.

Buildings	Fire Safety Coordinators	Deputes
James Watt South	Cyril Pacot	James Blunn
James Watt North	Cyril Pacot	James Blunn
James Watt Nanofabrication Centre	Mark Dragsnes	
Pearce Lodge	Cyril Pacot	James Blunn
Rankine and Oakfield Avenue	Denis Kearns	Wilson MacDougall
ARC	Estates Zone 1 Manager	Carol-Anne Smith Aileen Gardner
Oakbank Water Engineering	TBC	
Acre Road Wind Tunnel	Richard Green	

Part A - Policy and Organisation

Organisation and Arrangements

Fire Wardens support to the FSCs and, where available assist in fire drills and unplanned evacuations. A list of trained Fire Wardens is available via the School Safety Coordinator.

FIRST AIDERS AND FIRE WARDEN ROLES ARE NOT EXCLUSIVE TO TECHNICAL SERVICES STAFF. EVERYONE MUST BE INVOLVED IN SUPPORTING HEALTH AND SAFETY.

Specialist Safety roles are required in high-risk or specialised areas, such as Chemical Safety advisors, Biological Safety advisors, Mechanical, Electrical, or Physical Risk advisors, Waste Management specialists, Radiation Safety advisors, etc...

Safety Area	School Advisors
Laser and Radiation	John Nelson Richard Green Marc Sorel (laser safety officer)
Chemical	Phil Dobson Elizabeth Palmer
Biological	Julie Russell Andrew Glidle Julien Reboud Jon Cooper
Machine / Mechanical	Wilson MacDougall
Electrical	Tendai Makuwatsine Peter Miller
Computing / Display Screen Equipment	Ken McColl

Safety and Environmental Protection Service (SEPS) role is to assist the University in integrating safe working practices into its activities. SEPS monitor these activities and provide advice on routes designed to ensure that the University complies with health and safety and environmental legislation. SEPS can also provide specialist advice on fire, biological and chemical safety as well as construction safety and waste and environmental issues.

- Contact for Safety and Environmental Services – safety@glasgow.ac.uk

The Radiation Protection Service (RPS) has been set up to provide information and advice to all departments, students and staff on safety issues arising from the use of ionising and non-ionising radiation.

- Contact for Radiation Protection Service - rps@glasgow.ac.uk

Part B - Working safely

Saftey Regulations and Risk Assessments

There are a wide variety of activities undertaken within the James Watt School of Engineering and each type of activity will be governed by a range of regulations, all of which are overseen by the UK-wide Health and Safety Executive (HSE) (http://www.hse.gov.uk/).

The regulations and guidance below cover general safety matters and people working with Chemicals, Materials, Biological species, Lasers, Electrical Equipment, Machine tools, Heavy objects and Gases should read and abide by the details in the appropriate supplements to these regulations.

Any work in a laboratory or any fieldwork must be covered by an approved risk assessment and a safe operating procedure or method statment.

Everyone must abide by the Code of Practice associated with the laboratory they are working in and the control measures prescribed in the assessment. If there is no existing and relevant Risk Assessment covering the planned activities you wish to do, then you must not proceed with the activity.

It is a general duty on supervisors and line managers to ensure that a suitable and sufficient risk assessment process is implemented to identify potential hazards and implement appropriate control measures.

All risk assessments must be prepared, reviewed, approved and recorded in our online risk assessment database, at the following URL: https://risks.eng.gla.ac.uk/login

The completed assessment forms must be approved by the student's supervisor or the staff's line manager, in consultation with the laboratory guardians who is responsible for the laboratory or area where the activity is being undertaken (in many cases this will be one in the same person).
Whilst it is preferred that individuals prepare their own Risk Assessment for the activities they are undertaking, where people follow a Risk Assessment prepared by others, they should acknowledge their reading and understanding of the assessment in the online database. Importantly, newly discovered hazards associated with a procedure should be brought to the attention of the supervisor and laboratory guardian.

If you find that the activity you are undertaking doesn't fall within the scope of one or other of these forms, contact your supervisor or the relevant safety specialist/advisor first. As well as your supervisor and/or other staff associated with providing safety advice, these people can also give guidance on how to complete the Risk Assessment form.

The School and the University can provide training in Risk Assessment. Assessing risk is a process we all carry out in our daily lives before any activity (sometimes even unconsciously) and the formal process in the School is to ensure it is done robustly and recorded.

Part B - Working safely

Reporting Incidents

The following items should be reported to SEPS as soon as possible:

a) Any injury - no matter how trivial.
b) Any dangerous occurrence - even if it does not result in injury to anyone.
c) Any existing or potential hazard - so that it can be dealt with before it causes an accident.

The incident reporting form can be found on
http://www.gla.ac.uk/myglasgow/seps/forms/

This is a legal requirement and helps with building a safer environment in a constructive and collegiate manner.

Fire Safety

Fire prevention

The following common sense precautions are based on real-life observations in our School and are all the more important to note.

- Do not smoke inside the building.
- Familiarise yourself with the escape route from the premises and the position and operation of Fire Alarm Call Points.
- Keep Fire Doorr shut. Do not wedge them open!
- Do not store combustible or flammable materials on or near heaters.
- Dispose empty cardboard boxes ASAP
- Do not leave electrical heaters switched on in unoccupied rooms.
- Switch off all electrical equipment when not in use.
- Close all windows at the end of the working day.
- Close all doors - including corridor fire doors.
- Restrict the use of flammable liquids to the absolute minimum, and ensure that they are stored safely.
- Know the location of fire extinguishers and Fire Blankets, and learn how to use them - Do not wait until a fire occurs before reading the fire blanket instructions!

Fire alarm testing

The fire alarm in the Rankine Building is tested on Thursday mornings and in the James Watt Building on Thursday afternoons. Information of timing is at the building's entrance.

Part B - Working safely

Fire Safety

Fire safety training

All new staff and post graduate students must complete the online fire safety training in Moodle.

On discovering a fire

Step 1 - Raise the alarm by operating a Fire Alarm Call Point.

Step 2 - An electronic sounder will sound continuously.

Step 3 - Evacuate the building.

Step 4 - Proceed to designated assembly point.

On hearing a warning of fire

- Walk toward the nearest fire exit route. In many cases, it won't be the standard route used to access the building.
- Do not delay your departure by collecting personal belongings.
- Where possible close room doors behind you.
- Encourage or help everyone to do the same.
- Evacuate the building quickly and calmly.
- Do not use lifts.
- Proceed to the designated assembly point. Do not hang remain in front of the building entrance.
- Do not re-enter the building until a stated that it is safe to do so.

The location of assembly points for the James Watt Building is on the grass across the Engineering Way and for the Rankine Building, on the grass in front of the houses in Oakfield Avenue.

Part B - Working safely

Fire Safety

Do not fight a fire if:

- It is dangerous to do so.
- You are on your own.
- There is a possibility of your escape route being cut off by fire or smoke.
- The fire continues to grow.
- The fire involves hazardous materials.

If in doubt get out.

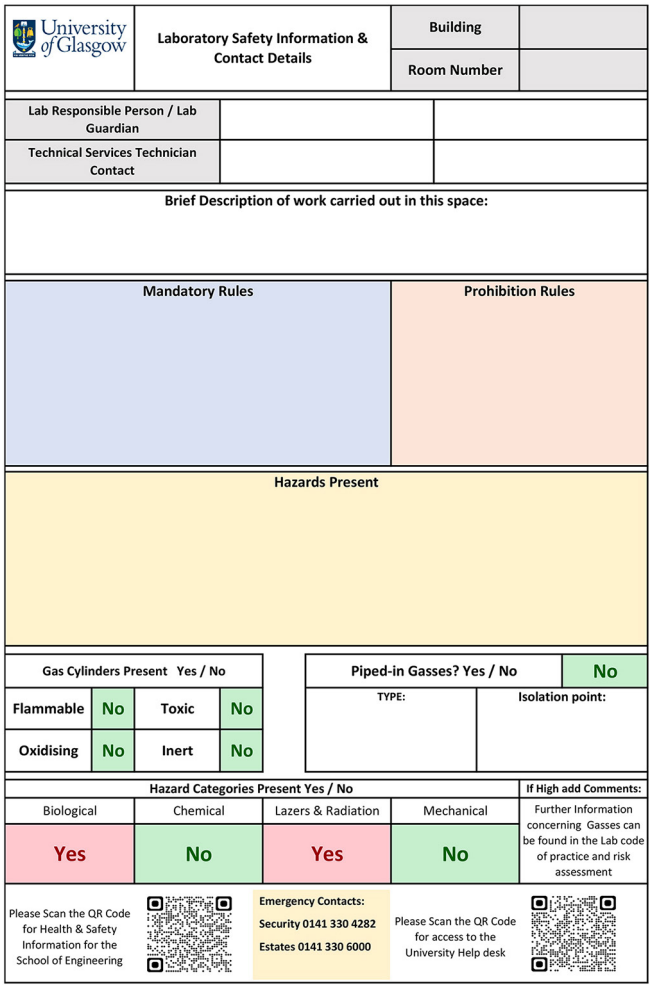
Part B - Working safely

Standard Safety Signage and Documentation in Laboratories

The following information must be accessible and visible in all Research and Teaching Laboratories in JWSE:

- **Lab Door Safety Sheet**
  - Room number and room name (if applicable)
  - Lab Guardian's name
  - Mandatory rules
  - Common Hazards
  - Technical Services contact
- **Emergency Contacts**
- **Code of Practice**
- **Estates Services – Maintenance request contact**
- **Relevant Safety Alerts**
- **Relevant Safety signage at point of work**

A standard template for the Lab Door Safety Sheet is available from the Safety Coordinator.



University of Glasgow

Laboratory Safety Information & Contact Details	Building	
	Room Number	

Lab Responsible Person / Lab Guardian		
Technical Services Technician Contact		

Brief Description of work carried out in this space:

Mandatory Rules	Prohibition Rules

Hazards Present

Gas Cylinders Present Yes / No			
Flammable	No	Toxic	No
Oxidising	No	Inert	No

Piped-in Gasses? Yes / No	No
TYPE:	Isolation point:

Hazard Categories Present Yes / No				If High add Comments:
Biological	Chemical	Lazers & Radiation	Mechanical	Further Information concerning Gasses can be found in the Lab code of practice and risk assessment
Yes	No	Yes	No	

Please Scan the QR Code for Health & Safety Information for the School of Engineering

Emergency Contacts:
Security 0141 330 4282
Estates 0141 330 6000

Please Scan the QR Code for access to the University Help desk

Emergency and First Aid Contact Information

University of Glasgow
James Watt School of Engineering

Emergency and First Aid Contact Information

First Aid

For access to a first aid box and support from a first aider in a non-emergency situation, please contact the local facility assistant.

The facility assistant office is located at the building main entrance.

First dial 999

Police Ambulance Fire brigade

From a UofG phone, 999 will put you through to Security who will call emergency services.

From any other phone or mobile, 999 will put you straight through to emergency services.

Then call Security

If you haven't already told Security what's happening, call immediately:

Gilmorehill:	4444 (0141 330 4444)
Garscube:	2222 (0141 330 2222)
Off campus:	+44 (0)141 330 4444

Security will monitor the situation and liaise with emergency services.

Remember

Don't try to deal with an emergency on your own.

Try to stay calm.

Make sure you have back-up.

Prioritise your own safety and that of others at the scene.

SafeZone

Puts you in contact with the UofG Security team instantly for an enquiry, first aid or an emergency on campus or worldwide.

Please use the QR code to download the SafeZone app

Part B - Working safely

General Guidance

This section provides guidance related to common tasks within the School, including manual handling, use of electrical and mechanical apparatus, handling of chemical and biological substances, and use of display screen equipment. These are based on learning from experiences in the School and should only inform the comprehensive risk assessment process that must carried out for all tasks.

Manual Handling

Is a leading cause of workplace injuries, often resulting in strains or physical harm. To reduce risks:

- **Eliminate or Reduce Manual Tasks:** First, assess if the task is necessary or if it can be reorganised or mechanised.
- **Prevent Common Hazards:** Avoid unsafe practices like climbing on furniture. Use proper equipment (e.g., ladders) and keep workspaces clear to prevent trips and falls.
- **Risk Assessments Are Essential:** Every manual handling task must be assessed. Low-risk tasks may use generic assessments; high-risk tasks require specific evaluations.
- **Assign Responsibility:** Designate trained staff to conduct risk assessments.
- **Training Is Mandatory:** Staff involved in regular manual handling must complete formal training and periodic refreshers.
- **Use Protective Equipment:** Provide appropriate PPE such as gloves and safety footwear when needed.

Further Guidance: https://www.gla.ac.uk/myglasgow/seps/az/manualhandling/

Use of Electrical and Mechanical Apparatus

Machine Tools & Equipment

- **Authorised Use Only:** Operate machine tools only with confirmed competence and permission from the Lab Guardian/equipment owner within laboratories or the Mechanical Services Manager or deputy, within shared facilities.
- **Safety Guards:** Must be in place before use.
- **Hair Safety:** Long hair must be secured with a safety hat and hair net.

Welding & Heat Sources

No Flames Near Flammables: Welding tools and gas burners must not be used near flammable materials.

Part B - Working safely

General Guidance

Electrical Safety

- **Personal Devices:** Must meet University safety standards. Testing available via the Electronics Services Manager.
- **No DIY Electrical Work:** Only Estates and Buildings staff may work on mains supplies and outlets.
- **Correct Wiring:** Brown = Live, Blue = Neutral, Yellow/Green = Earth. Use correct fuses.
- **Earthing:** All non-double-insulated equipment must be earthed.
- **Regular Testing:** Use Portable Appliance Testers where appropriate.
- **Avoid Overloading:** High-load devices (>1 kW) must be plugged directly into wall sockets. Avoid overheating plug boards.
- **Heater Safety:** Never leave electric heaters on in unoccupied rooms.
- **Cable Management:** Cover floor cables to prevent trips and damage.

Laboratory Equipment

- **Unattended Operation:** Equipment must not run overnight unless a competent staff member has completed a risk assessment.
- **Water Tubing:** Must be secured with proper clips (not wire) and regularly inspected. Replace aging or leaking tubing. Do not patch.

Handling of chemical and biological substances

Personal Protection

- **Avoid Contact Lenses:** Wear spectacles instead. Contact lenses can trap chemicals or absorb vapours, especially soft lenses.

Chemical & Biological Waste

- **No Drains:** Never dispose of solvents, toxic chemicals, or biological agents down the sink.
- **Use Proper Waste Facilities:** If waste solvent drums or biohazard bins are missing, request installation via your supervisor.

Prohibited Activities

- **No Eating or Drinking:** Do not eat, drink, smoke, or apply makeup in areas where chemicals or biological agents are used or stored.
- **No Sniff Testing:** Never smell unknown chemicals or gases—they may be toxic.

Part B - Working safely

General Guidance

Hazardous Materials

- **Mercury:** Must be stored in sealed containers. Report any spills immediately to the Lab Guardian.
- **Flammable Solvents:** Must not exceed 2.5L in open lab areas unless approved. Up to 50L may be stored in a certified flammable cabinet.

Labelling & Disposal

- **Label Everything:** All chemical containers—including waste—must be clearly and correctly labelled.
- **Sharp Objects:** Dispose of broken glass, blades, and scalpels in designated sharps or glass bins. If contaminated, use biohazard bins.
- **Safe Cleanup:** Sweep up broken glass—never pick it up by hand to avoid cuts or contamination.

Electrical Circuitry & Custom Installations: Safety Guidelines

Mains Electrical Supply

- **No Modifications:** Never alter or interfere with fixed mains electrical systems. Contact **Estates Commercial Services** for any required changes - they will handle or arrange qualified contractors.

Extension Leads & Power Boards

- **Use Approved Equipment:** Only use commercially supplied, pre-configured plug boards with appropriate power ratings.
- **Custom Setups:** If special electrical configurations are needed, Estates Commercial Services must install them. In rare cases, custom extensions may be created by electronics workshop staff, but only with prior approval and safety checks.

Working on Electrical Circuits

- **Qualified Personnel Only:** Any work on mains or high-current circuitry must be done by trained staff and inspected by qualified electronics workshop personnel.
- **Power Disconnection:** Work should be done with equipment disconnected from power sources (mains or batteries) whenever possible.

Part B - Working safely

General Guidance

Live Circuit Work

- **Strict Conditions Apply:** If work must be done on live circuits (voltage >50V or high current):
- A **risk assessment** must be completed and approved.
- At least **two competent observers** must be present for safety.
- Use **RCD-protected sockets** or **isolation transformers.**
- Ensure an **emergency power cut-off** is easily accessible.
- Apply **protective shielding** where necessary.

Training & Guidance

- **Get Trained:** Anyone unfamiliar with electrical safety requirements must seek guidance and training from the electronics workshop or another qualified person before starting work.

Display Screen Equipment (DSE) Safety: Key Guidelines

What It Covers

Applies to all screen-based devices such as PCs, Macs, workstations, and VDUs, as per the **Health and Safety (Display Screen Equipment) Regulations 1992.**

Ergonomic Setup

- **Chair:** Must be safe and adjustable to suit the user.
- **Screen:** Should be positioned to avoid glare and reflections. Use hoods, filters, or blinds if needed.
- **Keyboard:** Should be separate from the screen and easy to use.
- **Desk:** Must allow comfortable posture; accessories like footrests, screen stands, and document holders may help.

Work Environment

- **Lighting:** Avoid harsh contrasts between screen and background light (e.g. windows behind screens).
- **Comfort:** Ensure noise, temperature, and humidity are at comfortable levels.
- **Document Viewing:** Match lighting levels between screen and paper documents to reduce eye strain.

Part B - Working safely

General Guidance

Work Design & Training

- **Breaks:** Regular breaks from screen use are essential.
- **Software:** Must be suitable for the task and user-friendly.
- **Training:** Users must be trained in both software use and DSE health and safety.
- **Information Access:** Full guidance is available in the DSE Safety Booklet.

Eye Care

- **Eye Tests:** Staff can request an eye test by contacting the Head of Professional Services.

Training

Line managers and supervisors must make sure that members of staff and students have sufficient knowledge and skills to work or study safely.

University Mandatory Training

New members of staff should complete the courses below within their first 3 months at the University. The Safety Induction video is hosted within Moodle and consists of 14 short sections, each of which can be viewed independently. The total running time is approximately 25 minutes. All the courses below require Moodle log in.

- Safety Induction Video
- Introductory Fire Safety Awareness

Staff should also complete these additional courses where they are relevant to their working arrangements, discussed with their supervisor and/or line manager.

- Working Safely with Computers
- Homeworking Essentials

Please contact SEPS or the School Safety Coordinator if you need any additional help or advice.
More details are available on SEPS website https://www.gla.ac.uk/myglasgow/seps/training/

Part B - Working safely

Training

JWSE Mandatory Training

In addition to the University training, all staff in the James Watt School of Engineering must complete the School Safety Induction. Successful completion of the course is conditional to access to spaces in the School (labs, office, lockers).

https://moodle.gla.ac.uk/course/view.php?id=36307

Many laboratories will require completion of a local safety induction to operate in them, often including an introductory tour of the facilities. These will be arranged via the relevant lab guardian in consultation with the supervisor/line manager.

In addition, the School can provide specific training (e.g. risk assessment and COSSH). Some cohorts, including PhD students and post-doctoral research assistants, are invited to attend these when they start work.

SEPS offer a range of trainer-led courses which are available to University of Glasgow staff and postgraduate research students. We don't provide external training. Some of the potentially relevant training available through SEPS is listed below. Cost-recovery charges may apply to some of these courses. Please contact us if you need advice on what is available.

- First Aid provision and training.
- Manual handling training.
- Fire safety training.
- Chemical safety training.
- Biological safety training.
- Specialist wastes training.

Part B - Working safely

Working Outside Normal Working Hours

The greatest care must be taken to avoid starting a fire. Adopting the following safe working practice can minimize the risk:

- Ensure that all equipment is in good working order - especially electrical or high power devices.
- Assess the consequences of equipment malfunction, and consider what action is necessary to cope with such an occurrence.
- Ensure that fire-fighting equipment is close at hand, and that you know how to use it.
- If flammable substances must be used, restrict the quantity to the minimum necessary for the job.

Postgraduate research students who intend to work late must inform their supervisor, and give details of the work they intend to do.

The late working arrangements in the JWNC stipulate that two people must be present in the JWNC for all activities, no matter how minor, or experienced the persons involved – see the JWNC website for further details.

Undergraduate students and Postgraduate Taught students

Arrangements have been put in place for Year 4 and Year 5 undergraduate students, student society members and postgraduate taught students wishing to access the specific building areas and work out of hours (i.e. before 8.30 am and after 5 pm).

Following completion of the out of hours access training in Moodle, students willing to access the buildings can request Salto access via the Helpdesk.

The buildings must never be used for anything other than study and computer work unless an explicit arrangement has been made with a supervisor and an appropriate risk assessment has been carried out.