

# Health and Safety Handbook 2017-18

# Department of Electronic Engineering

For Emergency Information See Page 2

# **EMERGENCIES**

# FIRE

If you discover a fire at any time:

- Activate the call point closest to where you are working;
- **Dia**l 444 to notify Security, who will attend and then call the Fire Brigade if necessary. Dial 01784 443888 from a mobile;
- Leave the building by the nearest exit;
- **Report** to your designated assembly point Assembly point 15 if in John Bowyer building.

#### Report to a Fire Marshal and inform them why you activated the fire alarm.

# FIRST AID

If you discover a person in need of medical aid during normal working hours, locate your nearest departmental first aider. Lists of these can be found around the building and next to each first aid box.

## EMERGENCIES OUTSIDE NORMAL WORKING HOURS

- **Identify** if this is a minor accident or an emergency, does this require an ambulance;
- **Dial 9-999** from a college phone if an ambulance is required;
- **Call** the College Security **444** or **01784-443888** from a mobile and state where the accident or emergency is (building, level and room) so they can direct the ambulance crew to the location.

Should you require the **Police** to attend an incident:

- **Dial 9-999** from a college phone
- Call Security on 444 or 01784-443888 from a mobile
- **State** the nature of the incident and where it has occurred (building, level and room) so that Security can direct the Police to your location.

Normal working hours are defined as 9am to 5pm, Monday to Friday, excluding Bank Holidays and College discretionary days.

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# **1** Policy Statement

#### Royal Holloway University of London

#### **Department of Electronic Engineering**

#### Health & Safety Document & ORGANISATION & ARRANGEMENTS FOR EXECUTING COLLEGE POLICY

- 1 In this document the Department of Electronic Engineering details its commitment for the provision of a safe and healthy working environment and conditions for its staff and students. This includes, cleaners, contractors and visitors working within the Department or in connection with Department activities.
- 2 The Department is committed to ensuring that risk assessments are carried out as required by the Management of Health and Safety at Work Regulations 1999 and other regulations<sup>1</sup>. These risk assessments will be carried out by the staff responsible for the work, set out in writing and signed by the relevant research leader, manager or supervisor. No work is permitted to start unless it is covered by a suitable and sufficient assessment of the risks involved in the work. The Departmental Health and Safety Co-ordinator will be available to assist in the Risk assessment process.
- 3 The Department will arrange for all work activities to be performed by persons competent to perform those activities<sup>2</sup>. To this end, the Department is committed to ensuring that all members of the Department receive such training as required for them to be able to discharge their tasks and duties in a competent manner. ALL training must be recorded.
- 4 The Department will arrange for all activities to be supervised by competent people. Supervisors and Line managers may delegate training and safety issues to a competent person but must remember that they cannot relinquish their responsibilities
- 5 It is a legal duty<sup>3</sup> for <u>all</u> staff, students and visitors in the Department to cooperate with the arrangements for health & safety set out in this document.
- 6 In order to ensure that the Department is complying with all the policies as laid down by the College Health & Safety Office it will undergo a periodical audit. The findings of the audit will be reported back to the College Health & Safety Consultative Committee.

<sup>&</sup>lt;sup>1</sup> A full list of health and safety regulations requiring risk assessments is provided in Appendix 1 and 2.

<sup>&</sup>lt;sup>2</sup> i.e. people who have the skills, knowledge and experience required to safely discharge a particular duty and who know the limits of their competence and seek advice when reaching those limits.

<sup>&</sup>lt;sup>3</sup> The Health and Safety at Work etc. Act 1974, Section 7.

# 2 Health and Safety Personnel

#### Chain of command for safety matters in the Department of Electronic Engineering

If you have any health and safety concerns in the Department you should address these to the first person in the 'chain of command'. If you are not satisfied with the response you should consult the next person in the command structure.

Supervisor or Laboratory Manager

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Departmental Health and Safety Co-ordinator (Lisa Fell)

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Head of Department (Professor David Howard)

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College Safety Advisor (Matt Purcell)

#### Departmental Staff responsible for safety matters

Safety Co-ordinator	Lisa Fell	Tel. 4004		
Technical & Administrative Manager	Lisa Fell	Tel. 4004		
First Aid	Susan Waud – Clinical Psychology			
VDU Co-ordinator	TBA			
Fire Marshall	Susan Waud	– Clinical Psychology		

#### College Staff responsible for safety matters

College Director of Health and Safety	Matt Purcell	Tel. 3828 (Huntersdale)
College Fire Safety Officer	Alan Oakes	Tel. 4641 (Huntersdale)
College Laser Safety Officer	Andy Alway	Tel. 3483 (Physics)
College Health Centre	FE171	Tel. 3130 (Founders)

# 3 General Safety in the Department

#### 3.1 Working hours

The teaching laboratories are open to students from 9am – 5pm each weekday when classes are not in progress. Should a student wish to access labs outside of these hours they must arrange to do this with the Technical and Administrative Manager.

#### 3.2 Out of hours working

If you have been given permission to use the departmental space out of hours for example for revision, you should come in pairs ('buddy-system'). This is so you are able to respond better should an emergency occur. Lone working is not advised at any time of day. You must leave by 22:00 at the latest and carry a mobile phone with you that has Security's emergency number stored in it 01784 – 443888.

#### 3.3 Conduct

As the labs and departmental buildings are workspaces for both students and staff it is expected that everyone behaves in a responsible and professional manner. Running in corridors or on stairs, or engaging in horseplay indoors could cause an accident or injury. You may also disturb other classes and those working in nearby offices.

#### 3.4 Belongings

Please do not leave your belongings:

- In corridors or stairwells;
- Near exits, particularly fire exits;
- Near to emergency equipment such as fire extinguishers;
- Near to electrical equipment or sources of heat.

Ideally your belongings should not be left unattended.

#### 3.5 Litter

Please dispose of litter responsibly. There are litter bins around campus and in all buildings. Where you can recycle please do. Most departments have separate bins for recycling materials, electrical waste and batteries. Never place matches or cigarettes into waste bin, even when extinguished. There are dedicated cigarette bins located outside of buildings. You will also see pink gum bins around the campus, please make use of these and keep the campus tidy.

#### 3.6 Personal Health Conditions

If you have a medical condition such as Asthma, Diabetes, Epilepsy, etc. that could render you unconscious then you are strongly advised to report this in confidence to your personal adviser or the Department Safety Co-ordinator. Working in labs whilst relatively safe can be hazardous and it is wise to let someone know if your condition could impact on yours and others safety.

The College Medical Centre due to its ethical considerations is not permitted to pass on to the department relevant health information about an individual. So it is important you let someone in the department know.

#### 3.7 Smoking

The College has a no smoking policy in any building on campus or within 5m of that building.

#### 3.8 Warning Signs

Under EU rules all labels and signs conform to the following colours: Red - Prohibition. e.g. No Smoking Blue – Mandatory. e.g. Face masks must be worn Yellow – Advisory. e.g. Radiation Green – Safety. e.g. Fire exit

#### ANY ACCIDENT, INCIDENT OR POTENTIAL HAZARD WHICH OCCURS IN THE DEPARTMENT MUST BE REPORTED IMMEDIATELY TO LISA FELL

# 4 Laboratory Safety

For the first year of our new department, whilst our dedicated building is being built we will have use of the teaching space in the George Elliot Centre. This space must be respected and all usual codes of laboratory practice followed.

All of the guidance for the general department safety also applies to the laboratories. In addition extra care should be taken around equipment and workspaces.

#### 4.1 Supervision

A student may use the facilities in the department when required by the module only under the direct supervision of a member of staff for the laboratory concerned, who should be present in person. In no circumstances should you work alone in a laboratory.

#### 4.2 Coursework

Coursework that involves the use of the lab facilities must be confined to the hours timetabled for the module concerned (unless special arrangements with the lab supervisor has been made).

#### 4.3 Independent project work

This must be approved beforehand by the module leader and should be accompanied by a risk assessment (see <u>appendix</u> 3)

#### 4.4 Technical procedure

Written instructions will be distributed for experimental or analysis work. This must be strictly followed and all guidelines adhered to. Any deviation from the instructions must be approved by the lab supervisor/tutor.

#### 4.5 Personal protection

It is your responsibility to ensure you take all necessary precautions to safeguard your own and others health and safety in the lab setting. Safety glasses should be used when instructed, long hair tied back out of the way, ties and scarves removed where possible and sensible footwear worn. Loose flowing items of clothing can be a hazard in the laboratory setting.

#### 4.6 Electrical safety

Do not tamper with electrical equipment or anyone else's practical work.

All fixed and portable electrical equipment has to conform to the Electricity at Work regulations 1989, the Provision and Use of Work Equipment Regulations 1998, British Standard BS7671:2008 and must be wired to the IEE Regulations (17<sup>th</sup> Edition).

The College regularly conducts portable appliance testing but you should still check any electrical equipment you may use for obvious damage to wires, plugs etc. Should you find a fault immediately report this to the lab supervisor.

#### 4.7 Eating in laboratories

**No** food or drink will be consumed within any of the laboratories. Remember to wash your hands after working in the lab before eating. Don't forget the golden rule Liquids and electricity don't mix.

#### 4.8 Workspace etiquette

Keep the area you are working in clean and tidy. When leaving the lab turn off any equipment you have been using. Do not 'borrow your neighbours tools' she/he may be upset if misplace or damage them.

Faulty or damage components should be handed to the lab supervisor/technician to be disposed of safely. Do not dispose of anything hazardous in the waste bins – we do not want to harm our cleaners.

#### 4.9 Soldering

You will at the beginning of your programme be shown the correct techniques for soldering. It is important that you follow these instructions and wear the appropriate safety equipment (safety glasses) at all times. Fume extraction is provided and should be used whenever you solder for your own health and those around you.

All solder fumes can cause occupational asthma and other health problems if used for long periods of time. Solder wire can contain Rosin to help the solder flow when hot, this causes asthma if over exposed and is irreversible.

Besides the solder fumes, soldering irons run at very hot temperatures and will cause extreme burns if not handled correctly.

#### 4.10 Working with sharps

From time to time you may wish to use a sharp craft knife or scalpel in your project work. Always work away from yourself never towards your body/hands. A blunt blade cuts! If your blade is not sharp there is strong likelihood it will slip and cut you.

#### 4.11 Manual handling

In the general running of labs you will not be required to move anything that would require manual handling. However care should be taken if you are required to lift anything heavy or bulky. DO NOT attempt to lift a heavy load alone.

#### 4.12 Working at height

In the general day to day working in a laboratory there should not be a need to work at height. Should you need to retrieve an item from a high shelf ensure you use an appropriate item to stand on, such as a step ladder or kick stool. Never over stretch and ensure the stool or ladder is correctly placed.

#### 4.13 Accident/Hazard reporting

All accidents however small should be reported to the lab supervisor or member of staff on duty in that area. Any near misses should also be reported in order to establish if a hazard is present and needs preventative measures being put in place.

# 5 Appendices

# 5.1 Appendix 1 ~ Health and Safety Regulations which require Risk Assessment to be performed.

The purpose of the risk assessment is to identify the hazards that may be encountered in performing an activity, the risks posed by the hazards under the circumstances prevalent, and the control measures required to be imposed to reduce those risks to an acceptably low level. The assessments themselves form an essential part of the process but it is the **control measures** that are important. The list identifies the regulations and the undertakings requiring assessment.

Advice concerning risk assessments may be obtained from the Departmental Safety Coordinator and the <u>College Health and Safety Office</u> who arrange training sessions.

All work activities are to be assessed for risk under:

- The Health & Safety at Work etc. Act 1974;
- The Workplace (Health, Safety & Welfare) Regulations 1992 <u>Approved Code</u> of Practice and Guidance
- Control of Substances Hazardous to Health Regulations 2002 (as amended) <u>Approved Code of Practice and Guidance</u> – 6<sup>th</sup> edition;
- <u>EH 40/2005 Workplace Exposure Limits</u> containing the list of workplace exposure limits for use with the COSHH Regulations 2002 (as amended);
- Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) <u>Approved Code of Practice and Guidance.</u>
- The Health & Safety (Safety Signs and Signals) Regulations 1996 3rd Edition. <u>Guidance on Regulations</u>
- Manual Handling Operations Regulations 1992 (as amended) <u>Guidance on</u>
  <u>regulations.</u>
- Personal Protective Equipment (PPE) at Work 2013 <u>A brief Guide</u>
- Work with Display Screen Equipment Health & Safety (Display Screen Equipment) Regulations 1992 as amended by the Health and Safety (Miscellaneous Amendments) Regulations 2002 – <u>Guidance on Regulations</u>.

# 5.2 Appendix 2 ~ Royal Holloway University of London Health & Safety Policies and Procedures

- <u>Accident/Incident Investigation and Reporting</u>
- <u>Asbestos</u>
- Children and Young Persons
- Control of Substances Hazardous to Health (COSHH)
- Departmental Health and Safety Induction
- <u>Display Screen Equipment</u> (including eyesight tests)
- <u>Driving</u>
- First Aid
- Health and Safety Policy Statement
- Ionising Radiation
- Lasers
- Legionella
- Lone Working
- Maintenance of Portable and Transportable Electrical Equipment
- Manual Handling
- <u>Maternity</u>
- Personal Protective Equipment
- <u>Risk Assessment</u>
- <u>Smoking</u>
- <u>Stress</u>
- <u>Students Working and Studying in the UK and Overseas</u>
- Verbal and Physical Abuse (Violence)
- Work at Height
- Work Experience/Employment of Young People

#### 5.3 Appendix 3 ROYAL HOLLOWAY, UNIVERSITY OF LONDON: GENERAL RISK ASSESSMENT FORM

Name o Assessm	f Person Undertaking ent	Date Conducted	Department / Area (including description of what is being assessed)					
Ref No	Hazard under review	No & Description of Staff/Students/ Others Involved	Existing Controls	Assessed Level of Risk*		of	Further Action Required	By (Date) + Review Date
				L	М	Н		

\*The assessed level of risk will be Low; Medium or High. If in doubt speak with one of the technical staff who will be able to help.



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