

MME Safety Protocols v2019-11-01

MME safety protocols are guided by [UW Policy 34 - Health, Safety and Environment](#).

MME requires all people who enter MME spaces to have appropriate training. This includes undergraduate students, graduate students, staff, faculty, other employees, and visitors. Appropriate and specific hazard training is prescribed based on the person's activities as determined institutionally or by the supervisor and the individual.

This document is posted at hse.mme.uwaterloo.ca.

Listed below are the principal codes, standards, policies, and programs we follow and a description of our localized procedures. A training course summary with sign-up instructions are on the [MME Safety Training Matrix](#) at the end of this document.

Accessibility for Ontarians with Disabilities Act

All UW workers must take AODA training as per [Accessibility at Waterloo](#). Understanding accessibility can also be a critical component of safety.

note: The University's AODA training is currently being revised and a new course will be published on December 3, 2019. When it becomes available all University employees will need to take or re-take this training.

Biosafety

As per [UW Safety Office - Biosafety Program](#). Program review and the online quiz are mandatory for all MME Technical Staff.

Compressed Gas Cryogenic Liquid

As per [UW Safety Office - Compressed Gas and Cryogenic Liquid Program](#). Program review and the online training and quiz are mandatory for all MME Technical Staff. Liquid nitrogen and dry ice must be obtained from [Chem Stores](#) where hands on dispensing training will be provided as applicable.

Electrical Safety Certification

As per [UW Safety Office - Electrical Equipment Approval](#). We log certification status in the MME Equipment Inventory inv.mme.uwaterloo.ca. The MME Technical Staff - Electrical Group are compliance resources. Review of the [MME How to Get CSA Electrical Approval for Your Project](#) (available at hse.mme.uwaterloo.ca) is mandatory for all students building projects with electrical components.

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Emergency Contacts

As per [UW Safety Office - Emergency Contacts](#).

An [online MME laboratory list](#) details emergency contact information including assigned technician and lab owner's off-campus phone numbers. It's critical that this information be kept up to date. Emergency Contact information will be used for incidents such as fire, floods, leaks, or break-ins so this number needs to be an out-of-the office number such as your cell phone or home phone. This information is shared with the UW Police.

Equipment Inventory

The MME Equipment Inventory inv.mme.uwaterloo.ca keeps detailed equipment information such as electrical certification status, electronic copies of SOPs, and electronic copies of manuals. All research and teaching equipment must be in this inventory. Equipment owners must forward this information to their assigned technical staff for entry in the Inventory.

Fire Extinguishers

As per [UW Safety Office - Fire Safety](#). Program review and [classroom training](#) is mandatory for all MME Technical Staff.

First Aid

As per [UW Safety Office - First Aid](#). First aid training is encouraged for all employees. One day in-class [Emergency First Aid](#) is available for main campus employees. Two day in-class [Standard First Aid with CPR](#) is available for employees working at satellite campuses and employees supervising undergraduate student field work. First Aid Certification must be renewed every 3 years.

[Departmental First Aid Stations](#) are maintained at E3-2108H, E5-3111, ERC-3028, and FRF-1002.

Forklift

As per [UW Safety Office - Forklift Training](#). Maintenance logs are kept online at [MME Forklift](#). [Daily Inspection Logs](#) are completed and physically kept on the forklift. Program review, classroom training, and certification are mandatory for MME Technical Staff - Mechanical Group. Certification must be renewed every 3 years.

Hazard Disclosure

All students working on physical projects must complete the [MME Hazard Disclosure](#) (available at hse.mme.uwaterloo.ca) and submit it to their supervisor.

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Hazardous Materials Spills

As per [UW Safety Office - Hazardous Materials Spills](#). Everyone who uses chemicals must be very familiar with the procedures relevant to their usage. [Oil Spill Kits](#) are maintained in E3-2137, E3-2105, DC-1709. [Mercury Spill Kits](#) are maintained in E3-2119.

Hazardous Waste

As per [UW Safety Office - Hazardous Waste Program](#). Failures to properly manage Hazardous Waste have led to many serious incidents on campus and within MME. How you manage your Hazardous Waste must be documented in your Standard Operating Procedures.

Health and Safety Awareness

Everyone in MME must take the online [SO1001 Employee Safety Orientation](#) and the online [SO1081 Workplace Violence Awareness](#) training.

All MME Faculty and Regular Staff must take online [SO1100 Supervisor Orientation](#).

All MME managers must take the in-class [SO1003 Supervisor Safety Training](#).

Health, Safety and Environment Bulletin Boards

As per [UW Safety Office - Posting Requirements](#). HSE bulletin board locations are E3-2108J, E5-3809, ERC-3028, and FRF-1002. An online MME HSE Bulletin Board hse.mme.uwaterloo.ca provides localized instructions and copies of posters.

Injury/Incident Reporting

As per [UW Safety Office - Incident And Hazard Reporting](#).

All MME injuries and incidents must be immediately reported to your supervisor, the MME Lab Director, and the MME Safety Committee Chair.

All MME injuries or incidents must be reported to the Safety Office within 24 hours.

All MME reports must be signed by the MME Chair before being submitted.

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Laboratory Safety

As per [UW Safety Office - Laboratory Safety Program](#). Program review and the online quiz are mandatory for all MME Technical Staff and anyone working in our research labs. In addition, all MME grad students must take the additional [MME Lab Safety Course](#).

[Laboratory Hazards Posters](#) are located at the doors of all applicable laboratories.

Laser Safety

As per [UW Safety Office - Laser Safety Program](#). All class 3b and class 4 lasers must have a permit issued by the Safety Office before the lasers are turned on. Program review and the online quiz are mandatory for all MME Technical Staff.

Lifting Devices

As per [UW Safety Office - Lifting Device Program](#). Program review and [Inspection of Slings & Chains](#) classroom training are mandatory for all MME Technical Staff - Mechanical Group. All MME lifting devices are recorded in the MME Equipment Inventory inv.mme.uwaterloo.ca and include device details and last inspection date. All lifting devices are inspected annually via Plant Operations. All below-the-hook devices are inspected annually via the Safety Office.

Lockout Standard

As per [UW Safety Office - Hazardous Energy Control](#). Equipment lockout procedures must be detailed in the equipment's Standard Operating Procedures. Lockout hasps and padlocks for loan are kept by MME Technical Staff.

Nano Materials

As per [UW Safety Office - Nano Materials Guide](#). Nano particles are relatively new and many nano safety procedures are not well defined. All nano users must be knowledgeable with CSA Z12885-12 (R2017) "Nanotechnologies - Exposure control program for engineered nanomaterials in occupational settings"

Portable Ladder Safety

Portable ladder safety classroom [training](#) is mandatory for all MME Technical Staff.

Radiation Safety

As per [UW Safety Office - Radiation Safety Program](#). Program review and the online quiz are mandatory for all MME Technical Staff.

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Safeguarding of Machinery

As per CSA standard [Z432-04 Safeguarding of Machinery](#). The MME Technical Staff - Mechanical Group are compliance resources.

Safety Basics

All MME Undergrad Students must complete the [MME Safety Training Module and Quiz](#) on LEARN.

All other MME people including graduate students, staff, faculty, visiting faculty, post-docs, and TAs must complete the online [SO1001 Employee Safety Orientation](#).

Safety Posters

As per [UW Safety Office - Posting Requirements](#). An online HSE Bulletin Board hse.mme.uwaterloo.ca provides localized copies of all posters.

Standard Operating Procedures (SOPs)

SOPs must be written for all equipment or procedures where a risk to the health and safety of students or employees has been identified and the [MME SOP template](#) should be used. SOP's are stored online in the MME Equipment Inventory inv.mme.uwaterloo.ca.

Workplace Hazardous Materials Information System

As per [UW Safety Office - WHMIS](#). Safety Data Sheets and Workplace Labels are stored online at msds.mme.uwaterloo.ca and include location and MSDS issue date.

All employees must complete the [WHMIS 2015 for Employees training](#). All students must complete the [WHMIS 2015 for Students training](#).

Workplace Inspections

As per [UW Safety Office - Workplace Inspections](#). Inspections are carried out as per the following:

space	frequency	form
labs*	monthly	UW Lab Inspection
rooms with first aid stations	monthly	UW Office/Classroom Inspection
storage rooms	monthly	UW Office/Classroom Inspection
classrooms	every term - 3 times per year	UW Office/Classroom Inspection
meeting rooms	every term - 3 times per year	UW Office/Classroom Inspection
offices	10% per year chosen randomly	UW Office/Classroom Inspection

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** labs include any room where research is conducted, any room where student labs are run, computer labs, computer server and networking rooms*

Inspections are assigned to staff as per an internal document. Any inspection that indicates actions are required is forwarded to the owner of the equipment and space. Serious hazards are dealt with immediately. Completed inspection reports are stored at wi.mme.uwaterloo.ca for 2 years.

X-Ray Safety

As per [UW Safety Office - X-Ray Safety Program](#). Program review and the [online quiz](#) are mandatory for all MME Technical Staff.

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MME Safety Training Matrix v2019-11-01

Course	ID	Type	Approximate Length	Admin Staff	Tech Staff	Faculty	Grads	Undrgrads
AODA	OPD101	online	1 hour	x	x	x	x	
Biosafety	SO1069	online	1 hour		x			
Compressed Gas Training	SO1030	online	1 hour		x			
Emergency First Aid	SO1038	classroom	8 hours		x			
Employee Safety Orientation	SO1001	online	1 hour	x	x	x	x	
Fire Extinguisher Use	SO1088	classroom	1 hour		x			
Forklift Training Theory	SO1027	classroom	4 hours		x *			
Incident Investigation	SO1012	online	3 hours		x			
Inspecting The Workplace	SO1007	classroom	3 hours		x			
Inspection Of Slings And Chains	SO1035	classroom	1 hour		x *			
Lab Safety	SO1010	online	1 hour		x		x	
Ladder Safety	SO1050	classroom	1 hour		x			
Laser Theory	SO1066	online	2 hours		x			
MME Lab Safety	MME003	online	1 hour				x	
MME Undergrad Safety	LEARN	online	1 hour					x
Onsite Safety Inspection Training	MME001	online	1 hour		x			
Radiation Open Source Safety	SO1013	online	1 hour		x			
Radiation Safety Devices	SO1017	online	1 hour					
Radiation Safety Sealed Sources	SO1015	online	2 hours					
Radiation Safety Transportation	SO1021	online	2 hours					
Supervisor's Safety Awareness	SO1100	online	1 hour	x	x	x	x	
Supervisor's Safety Orientation	SO1003	classroom	3 hours		x	x **		
WHMIS 2015 For Employees	SO1002	online	1 hour	x	x	x	x	
WHMIS 2015 For Students	LEARN	online	1 hour					x
Workplace Violence Awareness	SO1081	online	1 hour	x	x	x	x	
X-Ray Safety	SO1011	online	2 hours		x			

* only mandatory for the Mechanical Group of MME Tech Staff

** only mandatory for MME faculty with experimental research labs

Notes

1. This list contains only the most common safety courses taken by MME employees.
2. x identifies mandatory courses for all people in each group.
3. An individual worker's additional required courses must be determined by the supervisor and the worker.
4. To sign up for Safety Office SO courses go to <https://uwaterloo.ca/safety-office/training>
5. To sign up for the AODA course go to <https://uwaterloo.ca/human-resources/accessibility>
6. Take MME Lab Safety MME003 at https://info.uwaterloo.ca/infohs/hse/online_training/MME/MME.html
7. Sign up for all other MME courses with the [MME Lab Director](#)