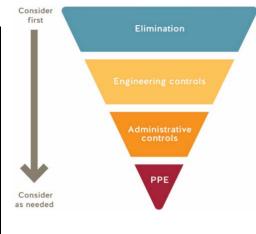
The BCIT COVID-19 Go-Forward Plan outlines the risk assessments, control measures, and the organizational process for our safe return to campus. All returning programs/courses must adhere to this process. Please refer to the <u>BCIT COVID-19 Go-Forward Plan</u> for additional information.

#### **CONTACT INFORMATION**

Course/Program Name:	Power Engineering								
Proportion of	~ 27 % is on campus								
program offered on									
campus:									
Start date:	Training Lab September 25, 2	020	End date:	December 31, 2020					
	Maintenance Lab October 9, :	2020							
# of students:	100 in total (10 per class X 2	classes a	# of employees:	10 max at any time					
	day X 5 days)			(dept total is 15)					
Completed by:	Name	Position		Date					
	Suzanne Doyon	Instructo	r	September 18, 2020					



### **ROOM INFORMATION**

In this section, please identify all of the rooms that will be used by this returning program/course.

NOTE: Common areas are covered by the BCIT COVID-19 Go-Forward Plan.

Campus/ Building	Room Number	Type of Space	Capacity
Sampas, Samanig	Floor Plans found <u>here</u>	Include washrooms and breakout rooms	Current capacity due to COVID-19
Burnaby Campus SE08	101C	Shop/Lab	6 refer to attached floor plan
Burnaby Campus SE08	102	Lab/Class	5 refer to attached floor plan
Burnaby Campus SE08	102B	Shop	3 refer to attached floor plan
Burnaby Campus SE08	106	Lab	2 refer to attached floor plan
Burnaby Campus SE08	201	Shop	5 refer to attached floor plan
Burnaby Campus SE08	208 Mezzanine	Shop	2 refer to attached floor plan
Burnaby Campus SE08	206A,D&E	Washrooms	1 per washroom
Burnaby Campus SE06	219,220	Washrooms	2 per washroom
Burnaby Campus SE08	210E, 210F	Instructor Offices / break rooms	1 occupant plus 1 visitor each
Burnaby Campus SE08	210B, 210D	Instructor Offices / break rooms	Up to 10 (1 each in isolated rooms)
Burnaby Campus SE08	101G	Technician Office / break room	1

## **RATIONALE FOR ON-CAMPUS ACTIVITY**

Please provide a short description explaining the need for students to be on campus. Your narrative should be focused on the practical elements of the program or activity that are critical to achieving learning outcomes, and why on campus components cannot be replicated in an online or alternative environment (e.g. student bringing learning equipment home).

The in-person hands-on training is a requirement of the provincial governing body (Technical Safety BC). As part of the conditions for their acceptance of BCIT as a recognized training provider, each student is required to actively participate in 200 hours of hands-on training with specific learning outcomes. Discussions with the governing body during a national conference (IPECC) over the summer indicated that these requirements were to be maintained

# **CONTROL MEASURES**

# **COVID-19 SAFETY PLAN: CONTROL MEASURES CHECKLIST**

# <u>Directions for completing a Safety Plan:</u>

- 1. First step of this process is to review the <u>BCIT COVID-19 Go-Forward Plan</u> as the overall planning document for this process.
- 2. Use this checklist as a tool to assess COVID-19 control measure preparedness for students and employees and the spaces they will be using. Refer to the BCIT COVID-19 Go-Forward Plan for standardized safety guidelines and procedures.
- 3. For each control measure, state the details. If the control measure is a 'No' or 'NA', please provide a brief explanation.
- 4. The manager requests all PPE requirements by submitting this draft Safety Plan to the PPE@bcit.ca.
- 5. Implement all the safety measures in this Safety Plan.
- 6. The manager completes a site visit to ensure all control measures and safety supplies are in place.
- 7. The manager signs the completed Safety Plan and submits it to <u>returntocampus@bcit.ca</u> for approval.
- 8. Once approved, the COVID-19 Safety Plan is posted in all work areas identified within this plan.

Note: The workspaces cannot be used until all applicable control measures are in place and Safety Plan is approved. For additional resources the <u>Risk Assessment Controls Guidance and Hierarchy of Controls</u>. For assistance email <u>ssemohs@bcit.ca</u>.

#	Control Measure	Yes	No	NA	Details (as per Directions)			
ELIM	ELIMINATION							
1.	Room(s) set up to allow for 2 metres physical distancing during instruction and practice.	$\boxtimes$			Please refer to attachments of layout plans			
2.	Demonstration, work and assessment stations are set-up to allow for 2 metres physical distancing.		$\boxtimes$		Assessment and demo could require close contact – barriers have been implemented, live video feed may be utilized, masks must be worn – hand sanitization to be used, once prior to handling project (to protect others), and once after handling project (to protect user). Reminders to			

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#	Control Measure	Yes	No	NA	Details (as per Directions)	
					be given to avoid face touching. Reason that close contact may be	
					required is that 2m distancing may not allow proper detailed	
					observation of actions, demonstration or giving feedback to smaller	
3.	Identified area(s) where students wait outside of teaching space	$\boxtimes$			detailed items. Measures will be taken to avoid close contact at all cost	
Э.	until allowed inside by instructor.				Tape, stickers or chalk to demonstrate distance on the ground	
4.	Work has been scheduled to minimize numbers of individuals on	$\boxtimes$			New shop capacity will limit students on site. Smaller class held 2 x a	
	campus at one time.				day, Instructors and Students are to leave campus once class is	
5.	In shared spaces, safety protocols have been put in place to				concluded  Show level to and harrison will halp provent contact (see attached floor	
Э.	reduce close contact between users.				Shop layouts and barriers, will help prevent contact (see attached floor plans)	
6.	Movement within the room is identified, such as with directional	$\boxtimes$			Signs or arrows on the floor identifying directions.	
	arrows, for walkways and entrances/exits.	<u> </u>				
7.	Water fountains are put out of service, and only touchless water bottle filling station available.				Water fountain in SE08 is out of service. There is a touchless water	
8.	Mobile fans have been removed or put out of service.			$\boxtimes$	fountain available in SE06, students are informed of this.  No mobile fans are required in theses spaces	
					The mostic june are required in theses spaces	
7.	Washrooms have been identified.	$\boxtimes$			SE02- 209 (M1) & 210(W1) SE06- 219 (W2 & 220 (M2)) SE08-206A (M1),	
	Drook area/s) for student use have been identified	$\boxtimes$			206D(I1) &206E (W1) (W=women, M=men I=instructor # is occupancy)	
8.	Break area(s) for student use have been identified.				Breaks will be given and students will remain in the shop at their designated stations following social distancing measures that have been	
					put into place	
9.	Break areas for employee use have been identified.	$\boxtimes$			Instructors will be taking their breaks in their office space.	
					Occupancy Limit_1 in each isolated space per room information on page	
					one, and attached floor plan_ If there is an occupancy limit, is sign	
10.	Other:				posted? Y 🗵 N 🗆	
10.						
1	NEERING CONTROL MEASURES	T	1			
11.	<u>Barriers</u> are implemented to separate work areas or walk ways, when physical distancing not practical.	$\boxtimes$			Barriers in place as per provided documents of shop/lab layouts	
12.	Barriers are stable and do not introduce other safety hazards,	$\boxtimes$			Barriers in place as per provided documents of shop/lab layouts	
	e.g. tripping.					
13.	The impact on ventilation requirements have been considered if there's been a significant use change for the instructional space.				Not considered due to no changes of the instructional space, air circulation is sufficient – number of students has also decreased in these	
	there's been a significant use change for the instructional space.				shop spaces	
	Other:				shop spaces	
-	AGE (ADMINISTRATIVE) Signage is available @ <u>BCIT online Inv</u>	_	<u>v</u> . Guid	delines	s for posting signs are available on <u>ShareSpace</u> .	
13.	Posted: Physical distancing (2 m) sign(s) Item 1A				Signage used as provided by bcit https://inventory.bcit.ca/collections/eocapproved-covid-19-signage	
14.	Posted: Hand washing sign(s) Item 29B				Signage used as provided by bcit	
					https://inventory.bcit.ca/collections/eocapproved-covid-19-signage	
15.	Posted: Health screen sign(s) Item 3C	$\boxtimes$			Signage used as provided by bcit	
					https://inventory.bcit.ca/collections/eocapproved-covid-19-signage	
16.	Posted: Hand washing sink location sign(s) Item 14A	$\boxtimes$			Signage used as provided by bcit https://inventory.bcit.ca/collections/eocapproved-covid-19-signage	
17.	Posted: Hand sanitizing station location sign(s) Item 13A	$\boxtimes$			Signage used as provided by bcit	
	ζ ,,				https://inventory.bcit.ca/collections/eocapproved-covid-19-signage	
18.	Posted: Protect yourself sign(s) Item 21A	$\boxtimes$			Signage used as provided by bcit	
10					https://inventory.bcit.ca/collections/eocapproved-covid-19-signage	
19.	Posted: Occupancy limit of this room sign(s) Item 37A	$\boxtimes$			Signage used as provided by bcit https://inventory.bcit.ca/collections/eocapproved-covid-19-signage	
20.	Posted: Other signs				Please list:	
					Trease not	
ORIE	NTATION AND TRAINING (ADMINISTRATIVE)					
21.	Routine safety discussions held to review control measures and	$\boxtimes$			Email reminders, and departmental zoom meetings will be sent/held.	
22.	safety protocols.  All students have completed the online COVID-19 Pandemic On-	$\boxtimes$			Students are to email there completion notice to the Chief Instructor	
	<u>Campus Guidelines</u> training.				·	
23.	COVID-19 safety Site orientation for students has been	$\boxtimes$			Site orientation checklist has been posted on the Learning Hub	
24.	developed and posted in the Learning Hub.  All employees have completed the online BCIT Pandemic	$\boxtimes$			Confirmation has been sent to the Chief Instructor	
r.	Exposure Control Plan Training.					
25.	All employees have completed the online New Employee	$\boxtimes$			New and Returning Employee Orientation Checklist found <u>here</u> .	
	Orientation module.				Each employee to save the checklist to their online New Employee	
26.	Other:				Orientation course	
RULE	S AND GUIDELINES (ADMINISTRATIVE)		•	•		
27.	All unnecessary and self-serve items have been removed from	$\boxtimes$			Only supplies required to be supplied for lab will be in the space. Pens,	
20	the spaces. e.g., pens, paper, etc.				paperare to be brought by the student and must leave with the student	
28.	Doors that students are to use to enter and exit have been clearly identified.				Door are clearly marked, and floors are marked	
29.	Handouts, papers, and items are not physically provided to	$\boxtimes$			items will be digitized and put onto D2L to fill in and students to submit	
	students.	<u> </u>			online using D2L via "Assignment" tool .	
30.	Students have dedicated tools/equipment, e.g., items are not	$\boxtimes$			Equipment and tools will be setup prior to first student arriving.	
	shared between students.				Disposable gloves and disinfectant will be at each station. Tools will be	
					cleaned before use by the student, and at the end of the class. (refer to procedure	
31.	If cleaning common touch points or tools/equipment not	$\boxtimes$			Instructors will clean common touch points before class begins, and once	
	practical, then it is identified when hands are washed/sanitized				class is complete. Students to clean tools before and after use.	
	before and after use.		<u> </u>			

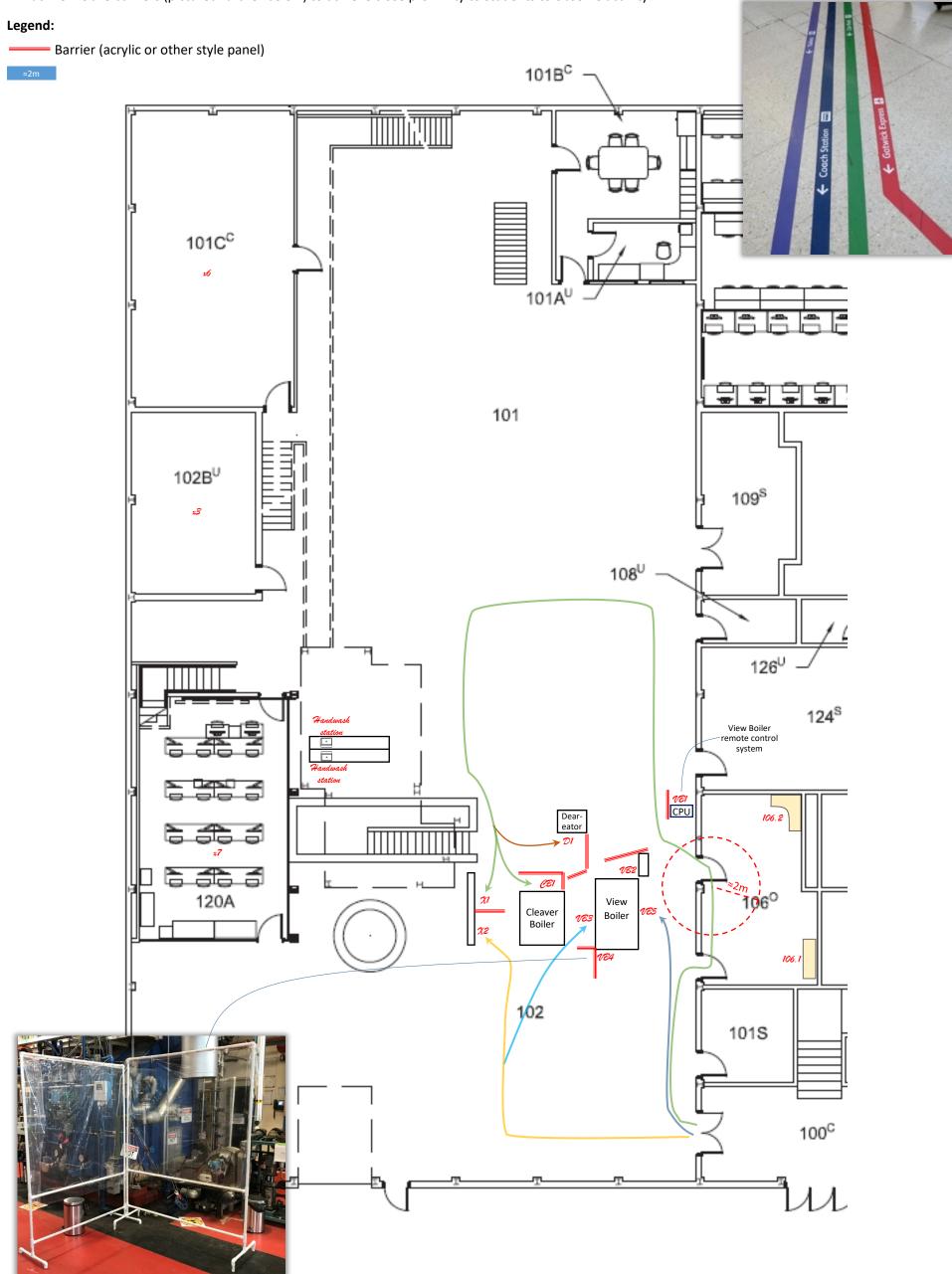
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#	Control Measure	Yes	No	NA	Details (as per Directions)	
32.	Work spaces/stations are dedicated for an individual or group use and not shared with others.	$\boxtimes$			Students have dedicated work stations Disposable gloves and disinfectant will be at each station. Stations will be cleaned before use	
33.	Single-use (disposable) products are used where feasible.	$\boxtimes$			by the student, and at the end of the class.  items will be digitized and put onto D2L to fill in and students to submit online using D2L via "Assignment" tool.	
34.	Measures are in place to accommodate student sick at home.	$\boxtimes$			Student will be scheduled for separate catch up session	
35. 36.	Procedures in place to screen students on a daily basis.  There is a procedure in place if a student or employee becomes ill on campus.				The <u>health screen</u> poster is posted at the entrance for reference. Studen and employees are expected to self assess daily, and a reminder will be given that the <u>BCCDC self-assessment</u> tool can be used to support this.  Refer to the <u>COVID-19 Pandemic Scenario Playbook</u> for more information. If the person is reporting symptoms, ask them to avoid	
37.	There are procedures in place if a student or employee travels	$\boxtimes$			others and return home. If they require immediate medical attention, call First Aid and 911.  Refer to the COVID-19 Pandemic Scenario Playbook for more	
	before coming to campus, or has been in close contact with someone who has tested positive for COVID-19.				information. Confirm if the person is aware of self-isolation requirements and protocols.	
38.	Provisions made for students to maintain same lab/class cohort throughout the Term.				Communication with student to remind and confirm group/class cohort	
39.	Other:					
PERS	ONAL PROTECTIVE EQUIPMENT (PPE). Refer to the PPE Flow	vchart	to de	termi	ne what PPE is required for COVID-19 purposes.	
40.	Appropriate PPE for the hazards of employee and student tasks are available to be provided (non-COVID-19 related ppe).				Coveralls, safety boots, mask/shield are required PPE for students. Students to provide their own boots, coveralls mask (shield for grinding). Instructor assigned personal set of PPE, safety footwear, lab coat, coveralls.	
41.	Training is provided for the above PPE to students and employees.				Items from #40 do not require training	
42.	Appropriate PPE for COVID-19 is available to be provided to students and employees. Supply requests emailed to ppe@bcit.ca.				A list of PPE has been formulated and the request has been forwarded to ppe@bcit.ca	
43.	PPE safe donning, doffing, disposal, and disinfecting instructional	$\boxtimes$			Post applicable signs in a visible location if ppe required.	
	materials are available for students and employees.				Use the <u>Student Orientation checklist</u> to assist orientation/training by instructors.  Use the <u>Employee Orientation checklist</u> to assist orientation/training by	
44.	Other:				their supervisors.	
CLEA	MING					
<b>CLEA</b> 45.	Facilities is aware of the cleaning needs for the area. Facilities work requests have been submitted.	$\boxtimes$			Facilities is aware of the cleaning needs, the requests numbers are as follows FCD#'s 1452204, 1452205 & 1452206	
46.	Training will be provided to faculty and students performing cleaning duties and cleaning materials have been provided.				Cleaning Standard Operating Procedures have been located <a href="here">here</a> . What are the cleaning products/materials:  Disposable gloves for disinfecting equipment, tools and work. Procedure to be followed for cleaning and donning of PPE and will be monitored by the instructor.	
47.	Assessment of sufficient number of hand wash stations conducted, and an appropriate number of handwashing stations are available				There are handwashing stations available in the lab spaces. Hand washing will take place before class commences and prior to leaving the class. All labs	
48.	Handwashing station(s), stocked, easily accessed, and have been	$\boxtimes$			Sink Location: all labs have sink access	
49.	identified to students and employees.  Hand sanitizing station(s), stocked, and have been identified to students and employees.	$\boxtimes$			Stocked with soap $Y \boxtimes N \square$ paper towel $Y \boxtimes N \square$ <b>ABHS</b> (Alcohol-Based Hand Sanitizer): Location(s) 1 at entrance, 1 at exit of each lab  Will hand sanitizer be refilled by department: $Y \boxtimes N \square$	
50.	All Safety Data Sheets (SDS) and cleaning procedures used are	$\boxtimes$			SDS sheets and cleaning procedures are posted at each station	
51.	found <a href="here">here</a> .  The area(s) have been decluttered so that cleaning is simplified.	$\boxtimes$			Shop 201 & 102C has been de-cluttered and re-organized to minimize	
52.	Barrier cleaning process has been arranged if the barrier(s) could	$\boxtimes$			room usage to only required tasks as per Course Outline. All "loose" non-essential items have been removed/re-located to a storage area for instructor access only.  Students have dedicated work stations. Disposable gloves and	
53.	become contaminated.  Common touch points and tools/equipment that must be shared	$\boxtimes$		$\boxtimes$	disinfectant will be at each station. Stations will be cleaned before use by the student, and at the end of the class.  Common touch points will be cleaned by instructors. Tools and	
55.	are identified and cleaned between students and classes.	لاے ر		لاے	equipment will not be shared	
54.	Storage space for personal articles have been identified and are cleaned regularly.	$\boxtimes$			Students have dedicated cubie in the work station. Disposable gloves and disinfectant will be at each station. Stations will be cleaned before use by the student, and at the end of the class.	
55.	Other:					
AUDI	T AND CONTINUOUS IMPROVEMENT					
56.	There is a plan to conduct <u>regular inspections</u> of all control measures and safety protocols to ensure they are in place.				The COVID-19 Safety Plan is posted in each lab. Audit will be done by Chief Instructor will do inspections bi weekly until satisfied that the plan is moving accordingly. Inspections will move to monthly once comfortable. Associate Dean will do random inspections.	
57.	Audits of inspections are planned to ensure that control measures continue to be effective.				Chief Instructor will complete the audit bi weekly until satisfied that the plan is moving accordingly. As above, audits will move to monthly once comfortable that the plan is functioning accordingly.	

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# Power Engineering: SE08-101C, 102, 120A, 102B, 106, 201, 208

Multiple spaces will be activated with shop work that are directly connected with the main Boiler Room, an active training shop and campus utility. Within the main shop, 7 stations will be utilized simultaneously (to permit physical distancing, station CB1 and X1 will not be utilized simultaneously), and handwash stations. A mezzanine (218) above the shop (2 students) will also be utilized. An activity where students are required to trace lines throughout the shop floor may require a creative rethink to avoid students accidentally impeding into other students' physically distanced (2 metre) proximity on the shop floor. Other adjacent spaces include a fabrication shop in 102B (3 students), a machine shop in 101C (6 students), a control room in 109 (2 students), in addition to a computer lab (120A) shared with Industrial Instrumentation (8 students). All spaces can be physically distanced utilizing the noted mitigation measures. Caution must be exercised to ensure that no more than 50 occupants circulate through this space at any one time – staggering adjacent room activity would avoid this scenario. Note: the layout below only contains equipment discussed as part of this plan, and does not represent precise equipment scale. To enable students to locate their piece of equipment, consideration should be given to employ wayfinding paths similar to hospitals and transit systems (pictured below). Instructors will utilize mobile barriers (pictured further below) to achieve close proximity to students to observe activity.



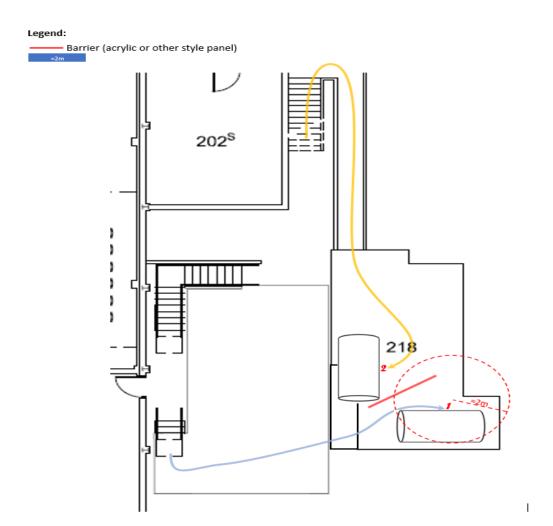
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# BCIT COVID-19 SAFETY PLAN ACADEMIC SPACES

# SE08-208 (Boiler Shop Mezzanine)

This mezzanine shop area will feature 2 student stations, with a barrier at the noted location to provide physical distancing between stations. To support physical distancing when accessing stations, given the number of other pieces of equipment in this area (not pictured), students can access their station through separate routes from the ground floor.



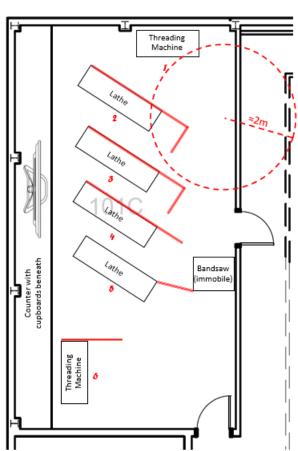




# SE08-101C (Machine Shop)

This shop area will feature 6 student stations, with barriers at the noted locations to provide physical distancing



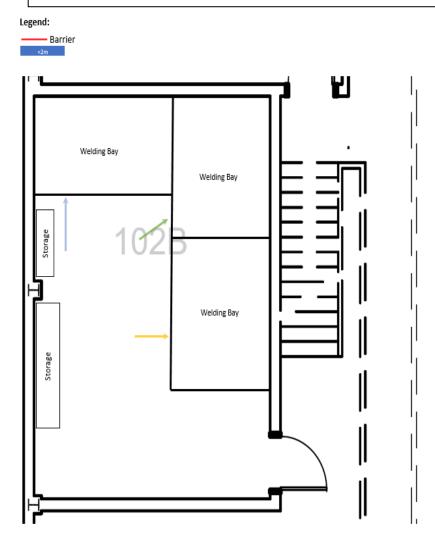








**SE08-102B (Welding Shop)** This shop area will feature 3 student stations welding curtains will provide barriers to allow for distancing.



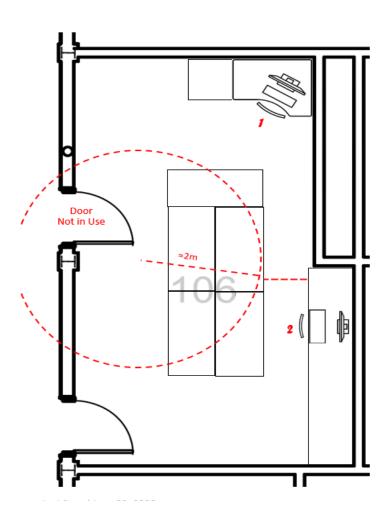




**SE08-106 (View Boiler Control Room)** This shop area will feature 2 student stations.

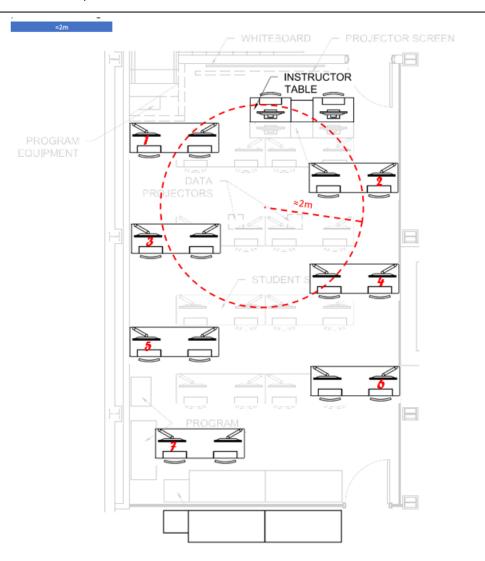
#### Legend:

---- Floor taped barrier





**SE08-120** This shop area will feature 7 student stations.



## **COVID-19 SAFETY PL**

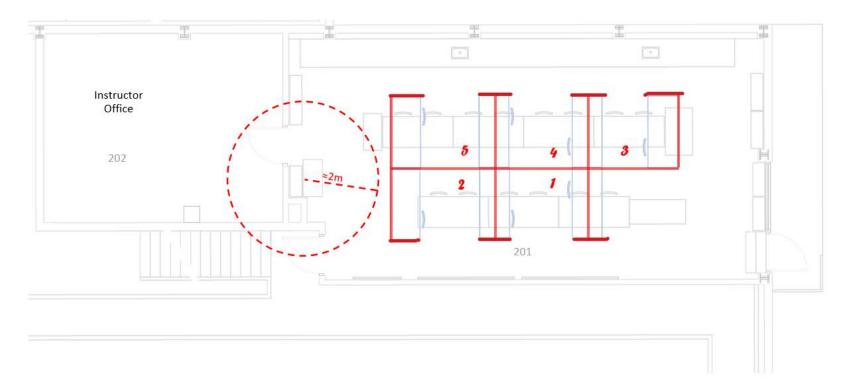


**SE08-202 (Maintenance shop)** This shop area will feature 5 student stations, with barriers at the noted locations to provide physical distancing

# SE08-201 (& 202)

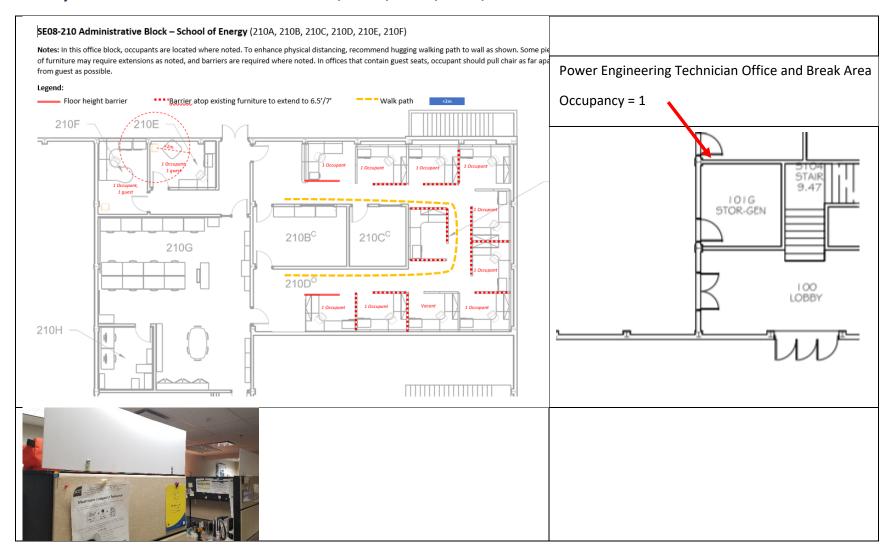
#### Legend:







# Faculty and Staff Break Areas: SE-08 101G, 210B, 210D, 210E, 210F



# **COVID-19 SAFETY PL**



# **APPROVAL**

All COVID-19 risk control measures for this campus activity are in place.								
Manager	Name  Brian Buckley  Brian Buckley	Position Associate Dean	Date September 28, 2020					
EOC	Name Glen Magel	Position EOC Director	Date October					

SSEM, OHS Division COVID-19 Safety Plan Date: July 21, 2020 Page 12 of 12