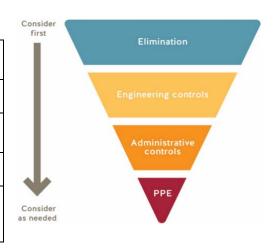


The BCIT COVID-19 Go-Forward Plan outlines the risk assessments, control measures, and the organizational process for our safe return to campus. All returning programs/courses must adhere to this process. Please refer to the <u>BCIT COVID-19 Go-Forward Plan</u> for additional information.

### **CONTACT INFORMATION**

Course/Program Name:	Biomedical Engineering Technology							
Proportion of program offered on campus:	BME Program = total of 12 courses, all lectures and tutorials will be online, on-campus lab activities are going to be reduced by more than 50%							
Start date:	January 4, 2021		End date:	May 28, 2021				
# of students:	53		# of employees:	6				
Completed by:	Name Anthony Chan	Position Program	Head	Date Nov 25, 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 Floor Plans found here	Type of Space Include washrooms and breakout rooms	Capacity Current capacity due to COVID-19
Burnaby/SE12	401	Laboratory Room	11 (incl. 2 instructor)
Burnaby/SE12	403	Laboratory Room	10 (incl. 2 instructor)
Burnaby/SE12	408	Women Washroom	2
Burnaby/SE12	411	Men Washroom	2



#### 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).

To achieve the learning outcomes from the BMET courses, students need to learn and practice hands-on skills in electronics and medical device technologies. All lectures and tutorials will be done online. Some of the lab activities that can be done online or at home by students will be done remotely. The remaining student learning activities that require special equipment at BCIT and/or instructor direct guidance will be preformed in the BMET labs (SE12 401 & SE12-403). A few labs (e.g., patient care course) may be performed at other BCIT laboratories and follow the safety plan of the host programs. This safety plan only covers student activities in the BMET labs.

#### **CONTROL MEASURES**

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

#### **Directions for completing a Safety Plan:**

- 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 <a href="mailto:returntocampus@bcit.ca">returntocampus@bcit.ca</a> 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</u> Assessment Controls Guidance and Hierarchy of Controls. For assistance email ssemohs@bcit.ca.



#	Control Measure	Yes	No	NA	Details (as per Directions)					
ELIN	ELIMINATION									
1.	Room(s) set up to allow for 2 metres physical distancing during instruction and practice.  Note: Contact returntocampus@bcit.ca for room capacity and layout if	$\boxtimes$			Exceptions allowed as per <u>BCIT COVID-19 Go-Forward Plan</u> , Risk Matrix Summary (explain):					
	needed.				We will follow the advice from OHS for our summer student workshops in June/July					
2.	Demonstration, work and assessment stations are set-up to allow for 2 metres physical distancing.	$\boxtimes$			Exception allowed as per <u>BCIT COVID-19 Go-Forward Plan</u> , Risk Matrix Summary (explain):					
3.	Identified area(s) where students wait outside of teaching space until allowed inside by instructor.	$\boxtimes$			Lab door will be open 15 min before time avoid student lining up in front of the door					
4.	Work has been scheduled to minimize numbers of individuals on campus at one time.	$\boxtimes$			Overall student lab time will be reduced; only one set of students will be scheduled on campus per day when possible.					
5.	In shared spaces, safety protocols have been put in place to reduce close contact between users.				Clear separation markings and directional signs are posted inside BMET labs					
6.	Movement within the room is identified, such as with directional arrows, for walkways and entrances/exits.				Signs or arrows on the floor identifying directions.					
7.	Water fountains are put out of service, and only touchless water bottle filling station available.			$\boxtimes$	No water fountain in BMET labs and in surrounding area.					
8.	Mobile fans have been removed or put out of service.			$\boxtimes$	There is no mobile fans in BMET labs					
7.	Washrooms have been identified.	$\boxtimes$			If yes, Washroom occupancy limit _2_ in each_SE12-408 & 411_ in the hallway, This is not controlled by BMET					
8.	Break area(s) for student use have been identified.				If yes, what control measures are in place to maintain physical distancing? Occupancy Limit If there is an occupancy limit, is sign posted? Y $\square$ N $\square$					
9.	Break areas for employee use have been identified.		$\boxtimes$		If yes, what control measures are in place to maintain physical distancing? Occupancy Limit If there is an occupancy limit, is sign posted? Y $\square$ N $\square$					
10.	Other:				Only one group of students (max. 9) are in each lab on campus per day. There are 2 labs (SE12-401 and 403) used by students. Labs will be scheduled consecutively so that students will leave campus once all lab learning activities are done.					
ENGINEERING CONTROL MEASURES										
11.	<u>Barriers</u> are implemented to separate work areas or walk ways, when physical distancing not practical.	$\boxtimes$			Barriers (see page 8) are installed, inspected and approved by OHS Safety Inspector					
12.	Barriers are stable and do not introduce other safety hazards, e.g. tripping.	$\boxtimes$		$\boxtimes$	See #11					
13.	The impact on ventilation requirements have been considered if there's been a significant use change for the instructional space.				Complete a <u>Facilities and Campus Development work requisition</u> for assessment, as needed.  No use change in BMET labs					

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#	Control Measure	Yes	No	NA	Details (as per Directions)			
	Other:							
SIGN	NAGE (ADMINISTRATIVE) Signage is available @ <u>BCIT onlin</u>	<u>ne Inve</u>	ntory.	Guid	elines for posting signs are available on <u>ShareSpace</u> .			
13.	Posted: Physical distancing (2 m) sign(s) Item 1A	$\boxtimes$						
14.	Posted: Hand washing sign(s) Item 29B	$\boxtimes$						
15.	Posted: Health screen sign(s) Item 3C	$\boxtimes$						
16.	Posted: Hand washing sink location sign(s) Item 14A	$\boxtimes$			Hand washing sinks in the washrooms (SE12-408 & 411) only			
17.	Posted: Hand sanitizing station location sign(s) Item 13A	$\boxtimes$						
18.	Posted: Protect yourself sign(s) Item 21A	$\boxtimes$						
19.	Posted: Occupancy limit of this room sign(s) Item 37A	$\boxtimes$						
20.	Posted: Other signs	$\boxtimes$			Student sitting plan posted in the BMET labs to prevent students from using more than one workbench location.			
ODIE	ENTATION AND TRAINING (ADMINISTRATIVE)							
	,				Through program meeting prior to the term starting date and in monthly meetings.			
21.	Routine safety discussions held to review control measures and safety protocols.				Through program meeting prior to the term starting date and in monthly meetings.			
22.	All students have completed the online COVID-19 Pandemic On-	$\boxtimes$			How will compliance be checked: attendance record in D2L			
23.	<u>Campus Guidelines</u> training.  COVID-19 safety Site orientation for students has been	$\boxtimes$			Procedure for orientation found <u>here</u> .			
23.	developed and posted in the Learning Hub.				Student COVID-19 Orientation Checklist found here.			
	developed and posted in the Learning ridb.				Online orientation including Covid-19 information is scheduled for returning and new			
					students on September 8.			
24.	All employees have completed the online BCIT Pandemic	$\boxtimes$			Will be completed before term start			
	Exposure Control Plan Training.							
25.	All employees have completed the online New Employee	$\boxtimes$			New and Returning Employee Orientation Checklist found here.			
	Orientation module.				Each employee to save the checklist to their online New Employee Orientation course			
26.	Other:							
RULI	RULES AND GUIDELINES (ADMINISTRATIVE)							
27.	All unnecessary and self-serve items have been removed from	$\boxtimes$			All supplies needed for student labs will be stored in SE12-402			
	the spaces. e.g., pens, paper, etc.							
28.	Doors that students are to use to enter and exit have been	$\boxtimes$			Signs or arrows on the floor			
	clearly identified.							



#	Control Measure	Yes	No	NA	Details (as per Directions)	
29.	Handouts, papers, and items are not physically provided to students.				If items are provided, they will be cleaned between student use or disposed, or other control measures are in place – Describe: students to use their own stationeries, electronic versions of handouts will be provided	
30.	Students have dedicated tools/equipment, e.g., items are not shared between students.	$\boxtimes$			Some special tools will be shared, these will be cleaned and sanitized between each lab sessions by students before and after using the tools. Also see #31	
31.	If cleaning common touch points or tools/equipment not practical, then it is identified when hands are washed/sanitized before and after use.				Explain: Students will be advised to wear disposable gloves and wash their hands before and after using shared equipment	
32.	Work spaces/stations are dedicated for an individual or group use and not shared with others.	$\boxtimes$			Student seating plan provided in page 8.	
33.	Single-use (disposable) products are used where feasible.	$\boxtimes$				
34.	Measures are in place to accommodate student sick at home.	$\boxtimes$			Accommodation plan: to be determined by instructor on a case-by-case basis and according to BCIT policy	
35.	Procedures in place to screen students on a daily basis.				The <u>health screen</u> poster is available for reference and is posted on building doors.  Students and employees are expected to self assess daily, and the <u>BCCDC self-assessment</u> tool can be used to support this. Students are required to confirm with signatures at the beginning of the day. Such records will be kept.	
u	There is a procedure in place if a student or employee becomes ill on campus.				Refer to the <u>COVID-19 Pandemic Scenario Playbook</u> for more information. If the person is reporting symptoms, ask them to avoid others and return home. If they require immediate medical attention, call First Aid and 911.	
37.	There are procedures in place if a student or employee travels before coming to campus, or has been in close contact with someone who has tested positive for COVID-19.				Refer to the <u>COVID-19 Pandemic Scenario Playbook</u> for more information. Confirm if the person is aware of self-isolation <u>requirements</u> and <u>protocols</u> .	
38.	Provisions made for students to maintain same lab/class cohort throughout the Term.	$\boxtimes$			Information will be shared with the students through their lab orientations	
39.	Other:					
PERS	SONAL PROTECTIVE EQUIPMENT (PPE). Refer to the PPE F	lowcha	art to d	leterm	nine 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).				List the PPE and tasks/activities it is required for, and provide the quantity and unit of measure, if applicable (e.g. 2 boxes of 20 each box):  2 boxes of face shields, 60 boxes of facemasks, 8 S, 8 XL, 20 M, 20 L boxes of gloves, 30 Liter of hand sanitizer, .plus 16 tubs of "Sani-cloth".	
41.	Training is provided for the above PPE to students and employees.					

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#	Control Measure	Yes	No	NA	Details (as per Directions)
42.	Appropriate PPE for COVID-19 is available to be provided to	$\boxtimes$			Based on circumstances allowed for in the <u>BCIT COVID-19 Go-Forward Plan</u> , Risk
	students and employees. Supply requests emailed to				Assessment Matrix Summary.
	ppe@bcit.ca.				List PPE and tasks/activities required for and provide the quantity and unit of measure, if
					applicable (e.g. 2 boxes of 20 each box):  Most PPE are already in stock in the lab, additional will be ordered when needed.
42	DDF cofe donning doffing disposal and disinfecting instructional	$\boxtimes$			Post applicable signs in a visible location if PPE required.
43.	PPE safe <u>donning</u> , <u>doffing</u> , <u>disposal</u> , <u>and disinfecting instructional</u> materials are available for students and employees.				Use the <u>Student Orientation checklist</u> to assist orientation/training by instructors.
	materials are available for students and employees.				Use the Employee Orientation checklist to assist orientation/training by their supervisors.
44.	Other:				
44.	other.				
CLF	ANING				
45.	Facilities is aware of the cleaning needs for the area. Facilities		ГП	ПП	Cleaning includes common touch points and appropriate frequency for the area. This
٦٥.	work requests have been submitted.				includes high touch areas. Provide FCD work request number(s).
	Work requests have been submitted.				Cleaning will be done by facilities , Work requests are:
					1449513, 1449514, 1449515, 1449516
46.	Training will be provided to faculty and students performing	$\boxtimes$		$\boxtimes$	Cleaning Standard Operating Procedures have been located <u>here</u> . What are the cleaning
	cleaning duties and cleaning materials have been provided.				products/materials:
					Students will be taught (at lab orientations) to properly clean and disinfect tools at the beginning of the lab session using approved agents such 70% alcohol solution.
					What PPE is required: included in #40
47.	Assessment of sufficient number of hand wash stations	$\boxtimes$			Consider time it will take for hand washing to take place, to determine what is e.a.
''	conducted, and an appropriate number of handwashing stations				sufficient number of hand wash stations. Some areas find a ratio of 8:1, students to sink,
	are available				effective. The minimum amount of hand washing required is once before class starts,
					after class ends and before and after breaks.
48.	Handwashing station(s), stocked, easily accessed, and have been	$\boxtimes$			Sink Location: inside washroomSE12 (408 & 411) Look after by Facilities
	identified to students and employees.				Stocked with soap Y $oxtimes$ N $oxtimes$ paper towel Y $oxtimes$ N $oxtimes$
49.	Hand sanitizing station(s), stocked, and have been identified to	$\boxtimes$			ABHS (Alcohol-Based Hand Sanitizer): Location(s)_2_at entrance of labs SE12-401 and
	students and employees.				SE12-403 Will be refilled and restocked by Alex Sayer, instructor.
					Will hand sanitizer be refilled by department: $Y \boxtimes N \square$ If No, describe:
50.	All Safety Data Sheets (SDS) and cleaning procedures used are	$\boxtimes$			If not, describe:
30.	found here.				ij not, desembe.
51.		$\boxtimes$			
51.	The area(s) have been decluttered so that cleaning is simplified.				
					Davis and horses and transitate if the course a touch a sint or if the contrast and with
52.	Barrier cleaning process has been arranged if the barrier(s) could	$\boxtimes$			Barriers can become contaminate if they are a touch point or if the contaminated with droplets by e.g. coughing or sneezing:
	become contaminated.				Students will be wearing face masks all time and reminded not to touch the barriers in
					the labs. Barriers will be sprayed with alcohol at the end of the week by the lab assistant
					instructor.

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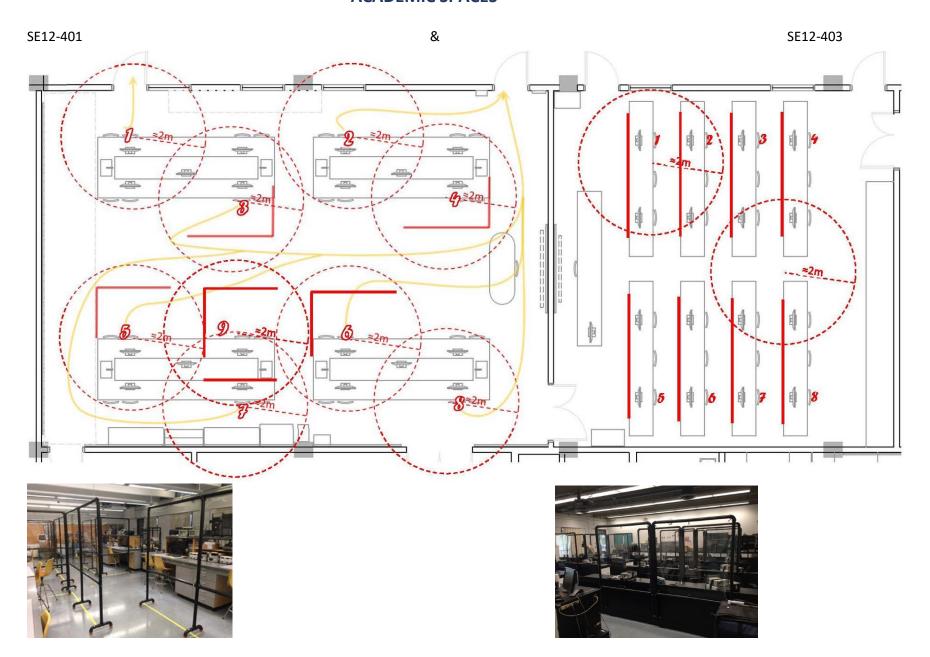


#	Control Measure	Yes	No	NA	Details (as per Directions)
53.	Common touch points and tools/equipment that must be shared are identified and cleaned between students and classes.				Cleaning/sanitizing procedures for common touch points and shared items are posted e.g. shared machinery, equipment, tools, etc. Identify who will clean and how often (e.g. staff and/or students): Student are responsible to clean and disinfect their bench tools/equipment with "sani-cloth" or alcohol spray at the beginning and the end of the lab. The lab instructor with monitor.
54.	Storage space for personal articles have been identified and are cleaned regularly.	$\boxtimes$			Who will clean: Cleaning staff from Facilities Where is the storage: on the floor inside the lab under the workbench
55.	Other:				
AUD	IT 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.	$\boxtimes$			Ensure this COVID-19 Safety Plan is posted. Who will conduct these inspections and how often? The instructor supervision students in the lab, on daily basis
57.	Audits of inspections are planned to ensure that control measures continue to be effective.				Who conduct the audits and how often? Anthony Chan, PH, Bi-weekly

### **APPROVAL**

All COVID-19 risk control measures for this campus activity are in place.									
Manager	Name Cheryl Isaak Cheryl Saak	Position Associate Dean	November 30, 2020						
EOC	Name	Position	Date						
EOC	Glen Magel	EOC Director	January 6, 2020						







#### **COVID-19 EXPOSURE PREVENTION PROCEDURES**

For the duration of the COVID-19 Pandemic, the following procedures will be used during all lab sessions to minimize the risk of transmission in the event that a student or staff member becomes infected.

#### **Before Entering the Lab:**

- Bring your personal tools and supplies with you to the lab. Avoid having to exit the lab to fetch items from your locker.
- Wash your hands in any washroom facility.
- Wear your mask if you have one. A fresh surgical mask will be available in the lab.
- Maintain 2m physical distance from anyone not wearing a mask at all times.

#### **Entering the Lab:**

- Wear your mask if you have one.
  - o If you do not wear a mask, maintain 2m physical distance from anyone else.
  - o If you wear a mask, maintain 2m physical distance from anyone not wearing a mask.
- Continue wearing your mask until everyone has moved to their workbench.
- Each student will have an assigned workbench that is to be used throughout the course. Proceed directly to your workbench.
- Use hand sanitizer when entering the lab.

#### **Working at your Bench:**

- Workspaces will be spaced 2m from other workspaces. You may remove your mask as soon as everyone has reached their workbench.
- Hand sanitizer is accessible from every workbench. Use it at the beginning and end of every lab session.
- Avoid touching your face during the lab session. If you absolutely must scratch an itch, sanitize your hands immediately before and immediately after doing so.

#### **Tools:**

### Student supplied tools

These are your personal tools that you bring into the lab session.

You do not need to use special precautions when working with your own tools.



But, DO NOT share your tools with anyone else.

#### Classroom provided, dedicated student/workbench tools

These are the tools that always stay at your workbench, including power supply, function generator, oscilloscope, cables etc.

BCIT owned hand-tools that have been assigned to your workbench are identified with a blue band. DO NOT share your tools with anyone else.

The equipment and tools will be sanitized by BMET instructor before your arrival at the lab session.

Additionally, you may use disinfectant wipes to sanitize all operator accessible surfaces at the beginning of each lab session.

#### Classroom provided, shared tools

These are tools that must be shared amongst students during a lab session.

Shared tools will be identified with a red band.

Shared tools will be placed in a central location where they are easily accessible.

Shared tools are potential vectors for disease transmission. Therefore, sanitize your hands immediately before <u>and</u> immediately after using a shared tool.

#### **Moving around during a Session:**

Students should remain at their assigned workbench as much as possible.

When movement between workbenches is necessary, wear your mask and respect the 2m physical distance to others at all times. If you do not have a mask, the instructor will provide you with a fresh surgical mask.

#### **Instructor Supervision:**

Instructors may approach a student's workbench under the following conditions:

- o The instructor is wearing a mask and face shield, OR
- o Both instructor and student are wearing masks.

Instructors must sanitize their hands immediately before <u>and</u> immediately after touching a student's tools or equipment.

#### **Collaboration:**

Two students may collaborate under the following conditions:

o Students maintain a 2m physical distance between each other at all times, OR



o Both students wear masks

Sanitize your hands immediately before <u>and</u> immediately after touching another student's tools or equipment.

#### **Exiting the Lab:**

- Clean up your workbench:
  - o Store unfinished work in the container provided. Include a note with your name and bench number.
  - o Move bench tools into the container provided at each bench (labeled with a blue band).
  - o Return shared tools (labeled with a red band) to the container labeled with a red band.
- Use hand sanitizer when exiting the lab.
- Wear your mask as you exit the lab.
- Maintain 2m physical distance from anyone not wearing a mask.

