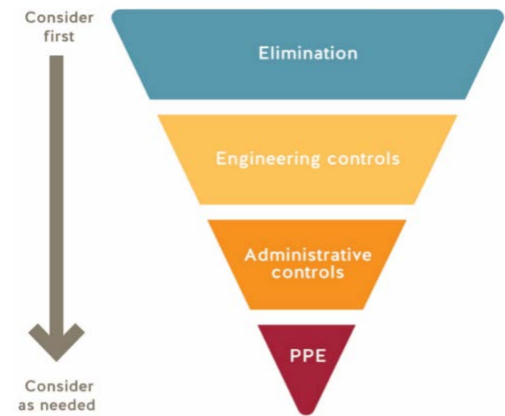


The BCIT COVID-19 Go-Forward Plan outlines the risk assessments, control measures, and the organizational process for our safe return to campus. All returning programs/courses must adhere to this process. Please refer to the [BCIT COVID-19 Go-Forward Plan](#) for additional information.

## CONTACT INFORMATION

<b>Course/Program Name:</b>	<b>AVAM 1102 Aircraft Reciprocating Engines/AME (M)</b>		
<b>Proportion of program offered on campus:</b>	<i>Program = 16 courses of which all have some on campus activities.</i>		
<b>Start date:</b>	8 Sep 2020	<b>End date:</b>	TBD
<b># of students:</b>	Up to 17/class, two classes	<b># of employees:</b>	<b>Up to 2 at a time (one per class)</b>
<b>Completed by:</b>	Name Ben Lazarus Andrew Cliff	Position Instructor	Date August 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 <small>Floor Plans found <a href="#">here</a></small>	Type of Space <small>Include washrooms and breakout rooms</small>	Capacity <small>Current capacity due to COVID-19</small>
ATC	241	Shop classroom	19

## 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).

This program is approved by Transport Canada (TC) and the Canadian Council for Aviation and Aerospace (CCAA) with many “perform” objectives as required outcomes of the program. In AVAM 1102 the most important outcome that cannot be completed by students at home is “Perform disassembly, cleaning, inspection, measuring and reassembly of engine”.

## 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 [BCIT COVID-19 Go-Forward Plan](#) 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](mailto: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 [returntocampus@bcit.ca](mailto:returntocampus@bcit.ca) 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 [Risk Assessment Controls Guidance and Hierarchy of Controls](#). For assistance email [ssemohs@bcit.ca](mailto:ssemohs@bcit.ca).

#	Control Measure	Yes	No	NA	Details (as per Directions)
<b>ELIMINATION</b>					
1.	Room(s) set up to allow for 2 metres physical distancing during instruction and practice. <b>Note:</b> Contact returntocampus@bcit.ca for room capacity and layout if needed.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Exceptions allowed as per <a href="#">BCIT COVID-19 Go-Forward Plan</a> , Risk Matrix Summary (explain): Students need to work in team of two per station on their engine projects. Due to the weight and size of the engine, it requires two students to safely handle the engine, and there are no other safety devices to assist. Students will wear appropriate PPE (safety glasses, masks, gloves) for this work. See attached shop diagram.
2.	Demonstration, work and assessment stations are set-up to allow for 2 metres physical distancing.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Exception allowed as per <a href="#">BCIT COVID-19 Go-Forward Plan</a> , Risk Matrix Summary (explain): Students need to work in team of two on their engine projects. Students will wear appropriate PPE (masks, gloves) for this work. See attached shop diagram.
3.	Identified area(s) where students wait outside of teaching space until allowed inside by instructor.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Students wait in the hallway outside the north wall of the shop.
4.	Work has been scheduled to minimize numbers of individuals on campus at one time.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	On-campus practical projects have been reduced to the minimum required to meet course objectives. There will be two shifts to accommodate one cohort (34 students). Using alternating stations (see purple and yellow triangles on map at end of this document). First shift will have up to 18 students and second can have up to 16 students.
5.	In shared spaces, safety protocols have been put in place to reduce close contact between users.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Students work in pairs and will wear mask and gloves at each workstation.
6.	Movement within the room is identified, such as with directional arrows, for walkways and entrances/exits.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Signs or arrows on the floor identifying directions.
7.	Water fountains are put out of service, and only touchless water bottle filling station available.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Mobile fans have been removed or put out of service.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fans have been removed
7.	Washrooms have been identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If yes, Washroom occupancy limit <u>2</u>
8.	Break area(s) for student use have been identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If yes, what control measures are in place to maintain physical distancing? No breaks will be taken. Occupancy Limit _____ If there is an occupancy limit, is sign posted? Y <input type="checkbox"/> N <input type="checkbox"/>
9.	Break areas for employee use have been identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If yes, what control measures are in place to maintain physical distancing? Occupancy Limit <u>8</u> If there is an occupancy limit, is sign posted? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
10.	Other: Additional tooling (torque wrenches and wrenches) have been purchased to eliminate the need for tool sharing between teams	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>ENGINEERING CONTROL MEASURES</b>					
11.	<a href="#">Barriers</a> are implemented to separate work areas or walk ways, when physical distancing not practical.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Quantity 20 welding curtains placed as per drawing provided by David Pereira
12.	Barriers are stable and do not introduce other safety hazards, e.g. tripping.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Faculty will inform students of tripping hazards.
13.	The impact on ventilation requirements have been considered if there's been a significant use change for the instructional space.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Complete a <a href="#">Facilities and Campus Development work requisition</a> for assessment, as needed.
	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>SIGNAGE (ADMINISTRATIVE) Signage is available @ <a href="#">BCIT online Inventory</a>. Guidelines for posting signs are available on <a href="#">ShareSpace</a>.</b>					
13.	Posted: Physical distancing (2 m) sign(s) Item 1A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Posted at ATC (All floors, all corridors, all common areas)
14.	Posted: Hand washing sign(s) Item 29B	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Posted in all washrooms
15.	Posted: Health screen sign(s) Item 3C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Posted at the campus entrance
16.	Posted: Hand washing sink location sign(s) Item 14A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Posted in the room
17.	Posted: Hand sanitizing station location sign(s) Item 13A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Posted in the room
18.	Posted: Protect yourself sign(s) Item 21A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Posted in the room
19.	Posted: Occupancy limit of this room sign(s) Item 37A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Posted in the room
20.	Posted: Other signs	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Please list:
<b>ORIENTATION AND TRAINING (ADMINISTRATIVE)</b>					
21.	Routine safety discussions held to review control measures and safety protocols.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Faculty will review control measures with students
22.	All students have completed the online <a href="#">COVID-19 Pandemic On-Campus Guidelines</a> training.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	How will compliance be checked: D2L Faculty will check in the learning Hub.
23.	COVID-19 safety Site orientation for students has been developed and posted in the Learning Hub.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Procedure for orientation found <a href="#">here</a> . Student COVID-19 Orientation Checklist found <a href="#">here</a> .
24.	All employees have completed the online <a href="#">BCIT Pandemic Exposure Control Plan Training</a> .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25.	All employees have completed the online <a href="#">New Employee Orientation module</a> .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	New and Returning Employee Orientation Checklist found <a href="#">here</a> . Each employee to save the checklist to their online New Employee Orientation course
26.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>RULES AND GUIDELINES (ADMINISTRATIVE)</b>					
27.	All unnecessary and self-serve items have been removed from the spaces. e.g., pens, paper, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All supplies asked for prior to class and stocked at each workspace
28.	Doors that students are to use to enter and exit have been clearly identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Signs and arrows on the floor
29.	Handouts, papers, and items are not physically provided to students.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If items are provided, they are cleaned between student use or disposed, or other control measures are in place – Describe: Student paperwork for projects will be placed on their benches prior to class start.
30.	Students have dedicated tools/equipment, e.g., items are not shared between students.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tools will not be shared between workstations. Specialty tools will be provided at each workstation. Each student will have their own toolboxes with general hand tools.
31.	If cleaning common touch points or tools/equipment not practical, then it is identified when hands are washed/sanitized before and after use.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Explain: Students are issued their own tools and assigned their own engine. There are no common touch points. Students paired up at workstations will be wearing gloves.
32.	Work spaces/stations are dedicated for an individual or group use and not shared with others.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Each pair of students will have their own workspace for the duration of the course. See map at end of document.
33.	Single-use (disposable) products are used where feasible.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#	Control Measure	Yes	No	NA	Details (as per Directions)
34.	Measures are in place to accommodate student sick at home.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accommodation plan: Student will have to opportunity to take missed portion in subsequent course offerings.
35.	Procedures in place to screen students on a daily basis.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The <a href="#">health screen</a> poster is available for reference and is posted on building doors. Students and employees are expected to self assess daily, and the <a href="#">BCCDC self-assessment tool</a> can be used to support this.
36.	There is a procedure in place if a student or employee becomes ill on campus.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Refer to the <a href="#">COVID-19 Pandemic Scenario Playbook</a> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Refer to the <a href="#">COVID-19 Pandemic Scenario Playbook</a> for more information. Confirm if the person is aware of self-isolation <a href="#">requirements</a> and <a href="#">protocols</a> .
38.	Provisions made for students to maintain same lab/class cohort throughout the Term.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Students will be assigned to a workstation for the duration of the course. Masking tape with students' names will be at the entrance to each workstation.
39.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### PERSONAL PROTECTIVE EQUIPMENT (PPE). Refer to the [PPE Flowchart](#) to determine 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).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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): 1 box of disposable gloves per student. 36 boxes total. Students will have their own ear defenders and safety glasses.
41.	Training is provided for the above PPE to students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Online training will be taken by students prior to shop activities. Instructor will give a demonstration prior to shop activities.
42.	<a href="#">Appropriate PPE for COVID-19</a> is available to be provided to students and employees. Supply requests emailed to <a href="mailto:ppe@bcit.ca">ppe@bcit.ca</a> .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Based on circumstances allowed for in the <a href="#">BCIT COVID-19 Go-Forward Plan</a> , Risk Assessment Matrix Summary. 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): 5 boxes of disposable gloves: 2 L 2 M and 1 S See item #40). Students will need to wash/sanitize their hands before and after using the gloves. Masks are required for the team working- 1 per person. 36 masks total per day. Gloves, mask, and alcohol for cleaning required the instructor to inspect student work and guide students in their tasks.
43.	PPE safe <a href="#">donning, doffing, disposal, and disinfecting instructional</a> materials are available for students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Post applicable signs in a visible location if PPE required. Use the <a href="#">Student Orientation checklist</a> to assist orientation/training by instructors. Use the <a href="#">Employee Orientation checklist</a> to assist orientation/training by their supervisors.
44.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### CLEANING

45.	Facilities is aware of the cleaning needs for the area. Facilities work requests have been submitted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cleaning includes common touch points and appropriate frequency for the area. This includes high touch areas. Provide FCD work request number(s). Faculty will submit the request prior to shop starts.
46.	Training will be provided to faculty and students performing cleaning duties and cleaning materials have been provided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cleaning Standard Operating Procedures have been located <a href="#">here</a> . What are the cleaning products/materials: Isopropyl Alcohol 99% and paper towel (17 ½ litre bottles per class) What PPE is required: · Gloves
47.	Assessment of sufficient number of hand wash stations conducted, and an appropriate number of handwashing stations are available	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hand sanitizing station at each entrance and exit to the room (3, see map at end of document). Hand washing available in the washrooms.
48.	Handwashing station(s), stocked, easily accessed, and have been identified to students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sink Location: Located north of shop in washrooms Stocked with soap Y <input checked="" type="checkbox"/> N <input type="checkbox"/> paper towel Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
49.	Hand sanitizing station(s), stocked, and have been identified to students and employees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>ABHS</b> (Alcohol-Based Hand Sanitizer): Location(s): At all three doors  Will hand sanitizer be refilled by department: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> If No, describe:
50.	All Safety Data Sheets (SDS) and cleaning procedures used are found <a href="#">here</a> .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If not, describe:
51.	The area(s) have been decluttered so that cleaning is simplified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-essential training aids have been moved into temporary storage in room 155 (Main Hangar). Purchase of a tent required for long term storage for duration of pandemic and physical distancing requirements
52.	Barrier cleaning process has been arranged if the barrier(s) could become contaminated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Barriers can become contaminate if they are a touch point or if the contaminated with droplets by e.g. coughing or sneezing.
53.	Common touch points and tools/equipment that must be shared are identified and cleaned between students and classes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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): There is no shared machinery, tools, etc. required.
54.	Storage space for personal articles have been identified and are cleaned regularly.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Who will clean? Students will clean storage area on their dedicated work benches at the end of each week.  Where is the storage: Under students' benches
55.	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### AUDIT AND CONTINUOUS IMPROVEMENT

56.	There is a plan to conduct <a href="#">regular inspections</a> of all control measures and safety protocols to ensure they are in place.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ensure this COVID-19 Safety Plan is posted. Who will conduct these inspections and how often? Department Heads will conduct inspections at random intervals not exceeding two weeks
57.	<a href="#">Audits of inspections</a> are planned to ensure that control measures continue to be effective.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Who conduct the audits and how often? Associate Dean will conduct audits of inspections

#### APPROVAL

##### All COVID-19 risk control measures for this campus activity are in place.

Manager	Name Sanja Boskovic	Position AD	Date August 27,2020
EOC	Name <i>Glen Magel</i>	Position EOC Director	Date September 17, 2020

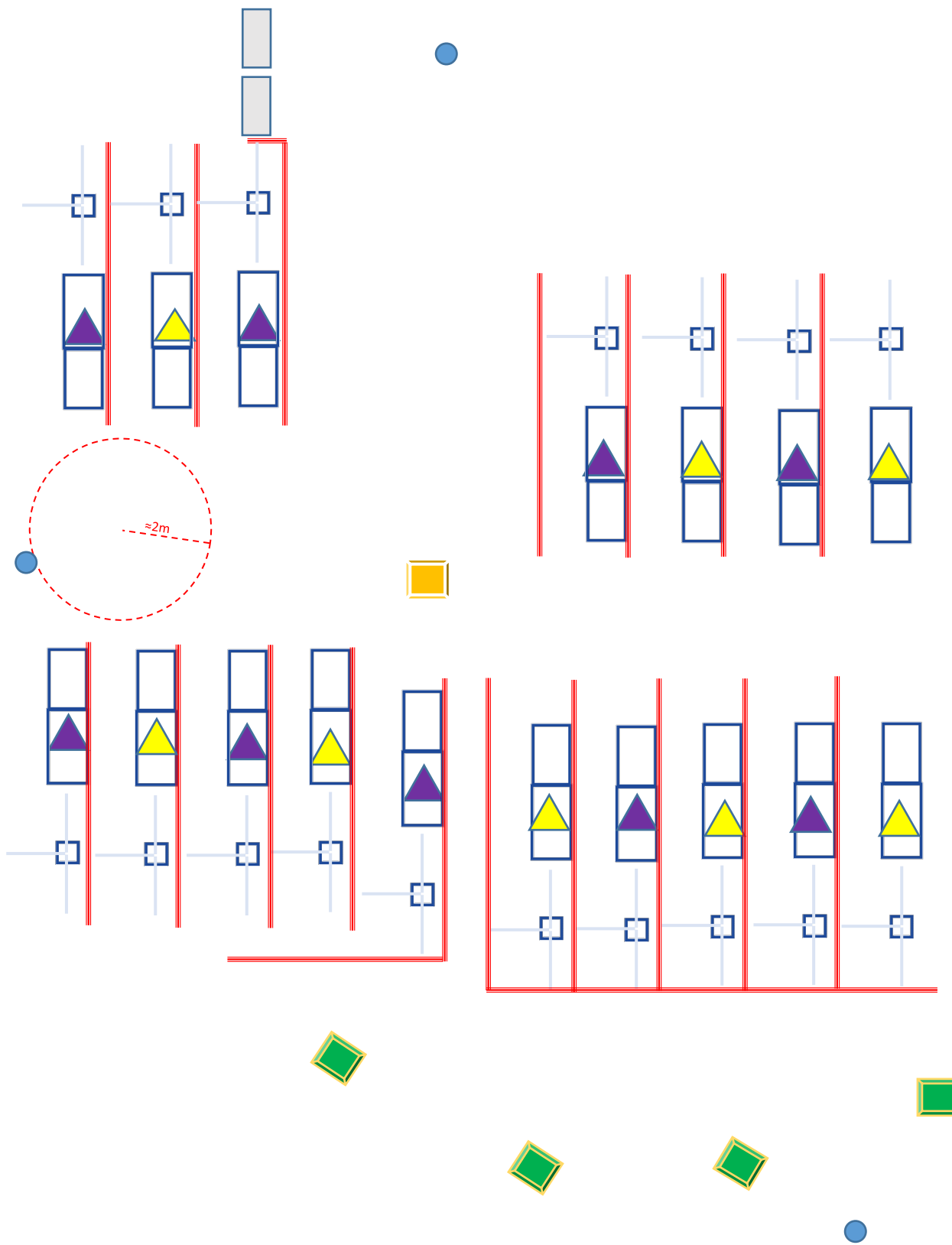


# ATC-241 – AME Term 1/ Level 2/ 1102, 1103

Notes: This shop has a potential capacity of 17 stations, with the inclusion of barriers as noted below.

## Legend:

- Barriers
- Hand sanitizer station
- Instructor station
- Testing stations
- Parts Cabinets
- 4' marker
- 1<sup>st</sup> shift
- 2<sup>nd</sup> shift





# BCIT COVID-19 SAFETY PLAN ACADEMIC SPACES