



COVID-19 Workspace Safety Plan

Integrated Engineering - Support Spaces

Change log:

| Date | Version | Writer | Change Description | Approved By |
|------------|---------|------------|--|---|
| 2021.02.25 | 2.3 | Jon Nakane | First application by Integrated Engineering. Updated with changes from template 2.2 from Marie Clopin (inserted Footer, replaced "Child" with "Workspace") | Daan Maijer, Head of MTRL David Kitts, Associate dean of research at LFS Rickey Yada, Dean of LFS |

This workspace safety plan will assist faculty and staff who wish to resume academic activities including the services that **directly** support teaching & learning. This plan will include a review of activities to be undertaken in the workspace to ensure effective controls are in place to prevent the spread of COVID-19. The applicants are responsible for ensuring this document reflects current government guidance and notices which can be found, along with information about UBC’s response to the pandemic at <https://covid19.ubc.ca/>.

This plan must be reviewed by your Local Safety Team, and signed by your Unit Head/Director.

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|---|--------------------------------------|
| Name of applicant | Jon Nakane |
| Department/School/Unit | Integrated Engineering |
| Faculty | The Faculty of Applied Science |
| Building(s) | MacMillan |
| Lab(s)/workspace(s) location | MCML 70, 76 (76A,76B, 76C, 76F, 76G) |
| Proposed Re-opening Date / Amendment Date | March 1 st , 2021 |

Introduction to Your Operation

1. Scope and Rationale for Opening

This workspace plan is for the Integrated Engineering (IGEN) Workspaces in the MacMillan building. The plan would allow a small number of IGEN students hired by the program (IGEN Student Workers), and the IGEN Program Director, to be able to access the IGEN workshop space in MacMillan in support of the IGEN Design Courses (IGEN 230, IGEN 330, IGEN 430). Allowing for this access would help students working locally and remotely gain access to components and fabrication to further their projects for the current year.

Student work submissions will be approved by course instructors for the IGEN Design Courses, and will have demonstrated that the components used for their projects will benefit an entire team, including students who are both working locally and remotely, and with different access to resources in



participating in their projects. Students in the Design Courses do have the opportunity to submit plans for machining and fabrication to the Materials Engineering Machine Shops for work, with instructor review and approval. However, the resources the MTRL Machine Shop have do not very much overlap with the resources available through the IGEN workshops (primarily no 3d printing submissions).

The IGEN Student Workers would be hired and paid for their hourly time working on the submissions, a practice which has been in place for at least the past 4 years. Pick-up and drop-off of items will be by relaying the items to the Materials Engineering Shipping and Receiving area for shipment and pick-up by IGEN students in the Design Courses.

This plan was written by Jon Nakane, Program Director for Integrated Engineering and Assistant Professor of Teaching in the Dept of Materials Engineering. This plan was based on an earlier submission made by the Dept of Mechanical Engineering for access to their Teaching and Support Spaces (October 2020, Jennifer Pelletier). The plan has been reviewed by the APSC Return To Campus Committee and the LFS Resumption Committee (LFSRC) (including MacMillan LST members). The plan will be vetted by the Materials Engineering Department Head (Daan Maijer) as the IGEN student Workers are hired through the system in Materials Engineering. The plan will also be vetted by David Kitts, Associate Dean of Research of Land and Food Systems (LFS) and Rickey Yada, Dean of LFS.

Service levels will differ from normal operations in that the number of people present in the space will be tracked and will be less than in normal operation: students will be limited to one or two individuals at any given time, and only for essential activities to support the procedures. Because the IGEN Student Workers are full-time students or are on co-op work terms in the Lower Mainland, access to the space will typically happen during evening and weekend hours. Procedures are in place to confirm that all entry, occupancy, and exits to the space are confirmed by QR code on the entrance door of the MacMillan building as well as cell phone text or calls to the IGEN Program Director.

Section #1 – Regulatory Context

3. Provincial and Sector-Specific Guidance

- [BC's Restart Plan: "Next Steps to move BC through the pandemic"](#)
- [BC COVID-19 Self Assessment Tool](#)

4. WorkSafeBC Guidance

- [COVID-19 and returning to safe operation - Phases 2 & 3](#)
- [WorkSafeBC COVID-19 Safety Plan](#)
- [WorkSafeBC: Designing Effective Barriers](#)
- [WorkSafeBC: Entry Check for Workers](#)
- [WorkSafeBC: Entry Check for Visitors](#)



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| <ul style="list-style-type: none"> • WorkSafeBC Protocol: Offices • WorkSafeBC Protocols: Post-Secondary Education |
| <p>5. UBC Guidance</p> <ul style="list-style-type: none"> • COVID-19 Campus Rules • Guidelines for Preparing for Reoccupancy • Guidelines for Safe Washroom Reoccupancy • Space Analysis and Reoccupancy Planning Tool • UBC Employee COVID-19 PPE Guidance • Ordering Critical Personal Protective Equipment • UBC Employee COVID-19 Use of Shared UBC Vehicles Guidance • UBC Facilities COVID-19 website - Service Level Information • UBC Employees COVID-19 Essential In-person Meetings/Trainings Guidance • Workplace Physical distancing Planning Tool and Signage Kit • Preventing COVID-19 Infection in the Workplace training course • UBC Cleaning Standards & Recommendations for Supplementary Cleaning • UBC Classroom Safety Planning • UBC Signage • COVID-19 Safety Plan Addendum: Required Non-Medical Masks |
| <p>6. Professional/Industry Associations</p> |
| <p>N/A</p> |

Section #2 - Risk Assessment

The below information is intended to serve as a guide for risk assessment and the planning of mitigation strategies. Activities are considered **high risk for COVID-19** if they meet **any three** risk considerations below. Your plan will be reviewed by your LST; they will consider both high and low risk activities as this will determine additional approval requirements (APSC Dean’s Office, Central UBC, etc.). Please note, the risk assessment is done **before** the risk mitigations are in place.

| Risk Consideration | Context | Important Risk Mitigation |
|--|---|---|
| <p>Risk #1 – public facing units (interactions with 10+ people who are not your regular colleagues)</p> | <p>The risk of COVID-19 introduction and spread is presumed to be greater as the number of contacts increases</p> | <ul style="list-style-type: none"> – Enable two metre physical distancing; pinch-points must be addressed and carefully managed. – Use of plexiglass barriers wherever possible – Reduction of high touch points or increased cleaning – Use of cohort groups, where appropriate – Enable and encourage increased hand hygiene |



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|--|--|--|
| | | <ul style="list-style-type: none"> – Strict non-admittance to anyone with symptoms |
| <p>Risk #2 – Prolonged close interaction with others (not in the usual cohort of colleagues); if contact lasts for more than 15 minutes</p> | <p>Person-to-person spread is more likely with prolonged contact</p> | <ul style="list-style-type: none"> – Enable two metre physical distancing – Reduction of high touch points or increased cleaning – Enable and encourage increased hand hygiene – Strict non-admittance to anyone with symptoms |
| <p>Risk #3 – The workplace or activity is indoors and windows cannot be opened (e.g., some classroom and meeting spaces)</p> | <p>A confined indoor space is presumed to have greater risk</p> | <ul style="list-style-type: none"> – Enable two metre physical distancing – Reduction of high touch points or increased cleaning – Enable and encourage increased hand hygiene – Strict non-admittance to anyone with symptoms |
| <p>Risk #4 – Employees/students/visitors have frequent contact with high-touch surfaces</p> | <p>A higher frequency of contact with high-touch surfaces (e.g., service counters, card payment machines) is presumed to have greater risk</p> | <ul style="list-style-type: none"> – Enable two metre physical distancing – Use of plexiglass barriers wherever possible – Reduction of high touch points or increased cleaning – Enable and encourage increased hand hygiene – Strict non-admittance to anyone with symptoms |
| <p>Risk #5 – The activity involves people who are at higher risk of severe illness (i.e., older adults or those with chronic health conditions)</p> | <p>COVID-19 can cause more severe illness among people who are 65 and over, and those who have compromised immune systems or other underlying medical conditions</p> | <ul style="list-style-type: none"> – Work with HR for individual accommodations – Encourage work from home arrangements – Enable two metre physical distancing – Reduction of high touch points or increased cleaning – Enable and encourage increased hand hygiene |



| | | |
|---|--|---|
| | | <ul style="list-style-type: none"> – Strict non-admittance to anyone with symptoms |
| <p>Risk #6 – The activity involves people who are not able to follow hygiene practices such as washing hands frequently, and identifying when they are feeling ill and staying home (e.g., childcare facilities, summer day camps)</p> | <p>COVID-19 spread can occur when personal preventive practices are not consistently followed. For example, young children are less likely to be able to carry out these practices</p> | <ul style="list-style-type: none"> – Reduction of high touch points or increased cleaning – Strict non-admittance to anyone with symptoms – Limiting of non-essential contacts in space – Strict non-admittance to anyone with symptoms |

Risks will be considered in accordance with <https://srs.ubc.ca/covid-19/safety-planning/determining-safety-plan-risk/>. Applicable risk factors may be subject to change based on COVID-19 developments and Campus operations, and will be addressed as part of required monitoring.

2.1. Risk # Associated to your Activity

List below the Risk # associated to your activity and give a brief description as to why. Activities are considered high risk if they meet 3 or more risks of the categories for risk consideration BEFORE mitigations are in place.

- Risk #1 does not apply,
- Risk #2 normally does not apply. Tasks which require an additional person being present for safety reasons do not require the person to be within the 2-metre physical distancing for any prolonged duration.
- Risk #3 applies in MCML 76B (room with 3d Printing Machines). Only one person will be allowed to be in MCML 76B at all times. All other rooms have windows for appropriate ventilation.
- Risk #4 does not apply.
- Risk #5 does not apply.
- Risk #6 does not apply.

2.2. Hazard Identification

Describe the type of contact (close/distant) and duration of the contact (brief/prolonged) under COVID operations - where do people congregate; what job tasks require close proximity; what surfaces are touched often; what tools, machinery, and equipment do people come into contact with during work

Generally, only one person will be present in the facility at any given time, as most tasks involved can be safely operated by a single person. These tasks include operation of the 3d Printing machines and unpowered hand tools. The person will report their entry into the building using the QR Code located



at the south entrance of the Macmillan building, and will submit a text message to the IGEN Program Director when they enter into the room.

Commonly touched surfaces include door knobs and light switches. These will be cleaned by students when they access the space after hours (evening and weekends). Tools and machinery can generally be allocated to a single person on a given day, and cleaned at the start and the end of each day (or each usage, if usage will be for less than a day).

In cases where two people are present in the workspace for safety considerations as they are for non-COVID related operations in the workspace, the two people do not have to be physically within 2 metres of each other for any prolonged duration. Any closer contact would be very brief, and generally restricted to lifting heavy items.

Job tasks and processes may bring workers in closer proximity to each other and how they will be managed:

- Machining / repair / fabricating work
 - Machining / repair / fabrication planning will be modified to take into account the requirement for 2m distancing;
 - Alternative machining / repair / fabrication methods, including considering sending out the job to another shop, will be considered;
 - If neither of the above is possible, how essential the work is will be considered;
 - Workers will be asked to maintain a 2m distance from one another;
 - Non-medical masks are mandatory when working in close proximity to each other.
- Item Pick-up and Drop-off
 - Item Pick-Up and Drop-off can be handled by the Program Director, who will have access to both the IGEN workspace as well as the Materials Engineering Shipping and Receiving area in the Frank Forward building.

Shared Tools and Equipment

The following tools and equipment may be shared by workers. Workers will be required to clean the equipment before/after using it, and wash their hands immediately afterwards.

- 3d Printing Machines
- Machining and fabricating equipment
- Electronic Test Equipment
- Tools
- Hand trucks, pallet jacks, and compressed gas transportation carts.

All surfaces and items to be handled, where it is unclear that they have not been touched within the 72 hours period prior, need to be wiped down with antiseptic wipes before proceeding. If this is not practical, then the affected persons shall wash or disinfect their hands as soon as practicable after finishing handling the item.



Dispose of wipes into the regular trash; do not reuse.

2.3. Pre-COVID vs. Post-COVID Occupancy and Contact list

Provide actual numbers and percentage of its normal capacity. Please fill out the excel spreadsheet “contact list template” to list the names and the contact details of the approved persons to come back on campus. This contact list should be sent to the LST chair or co-chair. They will update a master contact list stored on SharePoint. This is important to have that list up-to-date in case of Contact Tracing.

Both building and room occupancy restrictions should be met. Room occupancy will be set conservatively to reduce both proximity and ventilation load. Occupancy limits will be posted.

Workers should be verbally in contact with those in the vicinity when using walkways or moving about a space to ensure a 2m distance between persons is maintained at all times.

MacMillan Spaces

The total occupancy of the rooms below should not exceed 5 people on a given day.

- MCML 70 – 3 persons (typical – 10 people, 30% occupancy)
- MCML 76/76F – 2 persons (typical – 10 people, 20% occupancy)
- MCML 76A – 2 persons (typical – 10 people, 20% occupancy)
- MCML 76B – 1 person (typical – 2 people, 50% occupancy)
- MCML 76C – 1 person (typical – 6 people, 16% occupancy)
- MCML 76G – 3 persons (typical – 6, 50% occupancy)

2.4. Confirm that you have discussed each employee’s comfort level with returning to work and have addressed any concerns, or will require further assistance in doing so. *Any worker (staff, students, faculty, post docs, research associates, technicians and other research personnel) who has concerns about returning to work on campus can request an exemption to his/her supervisor.*

The IGEN Program Director will discuss the plan prior to the IGEN Student Workers scheduling themselves to come to campus. At this time, all students who are part of this plan have either requested or expressed a willingness to return to work.

2.5. Employee Input/Involvement

Detail how you have met the MANDATORY requirement to involve frontline workers, Joint Occupational Health and Safety Committees (JOHSC), and/or Local Safety Teams (LST) in identifying risks and protocols as part of this plan

The primary source for this plan was the template document provided by UBC Applied Science’s Return to Campus Committee, and an earlier submission by Mechanical Engineering for their Teaching and Support Spaces in Kaiser, the Rusty Hut, and CEME.



This plan has been reviewed by the APSC Return To Campus Committee (including JOHSC representatives) and the LFS Resumption Committee (LFSRC) (including MacMillan LST members).

2.6. Worker Health

Detail how all Supervisors have been notified on appropriate Workplace Health measures and support available and how they will communicate these to employees. <https://wellbeing.ubc.ca/wellbeing-campaigns-and-initiatives/thrive>

The IGEN Program Director is informed of appropriate Workplace Health measures and supports for staff mental and physical health, to be made available as they return to campus, particularly through [UBC Wellbeing](https://wellbeing.ubc.ca/wellbeing-campaigns-and-initiatives/thrive). Check in's and supports will also be made available via the following channels:

- Team email broadcasts
- One-on-one virtual meetings with direct supervisors
- JOHSC meetings & communications

Workers are reminded that Workplace Health measures and supports are available to them, as found at <https://wellbeing.ubc.ca/wellbeing-campaigns-and-initiatives/thrive>

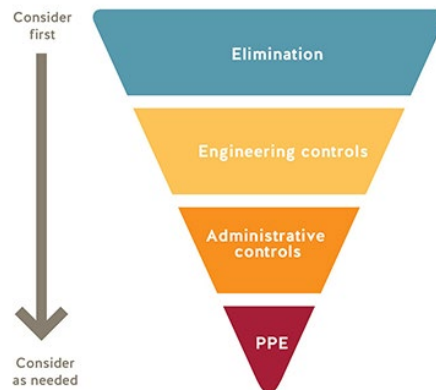
2.7. Plan Publication

Describe how you will publish your plan ONLINE and post it at your workplace for employees and for others that may need to attend site

The adopted plan will be emailed to the IGEN undergraduate students who will be coming to campus. A QR code and link directing people to the soft copy plan will be posted on each occupied door.

Section #3 – Hazard Elimination or Physical Distancing

Coronavirus is transmitted through contaminated droplets that are spread by coughing or sneezing, or by contact with contaminated hands, surfaces or objects. UBC’s goal is to minimize COVID-19 transmission by following the safety hierarchy of controls in eliminating this risk, as below.





The following general practices shall be applied for all UBC buildings and workspaces:

- Where possible, workers are instructed to work from home.
- Anybody who has travelled internationally, been in contact with a clinically confirmed case of COVID-19 or is experiencing “flu like” symptoms must stay at home.
- All staff are aware that they must maintain a physical distance of at least 2 meters from each other at all times
- Do not touch your eyes/nose/mouth with unwashed hands
- When you sneeze or cough, cover your mouth and nose with a disposable tissue or the crease of your elbow, and then wash your hands
- All staff are aware of proper handwashing and sanitizing procedures for their workspace
- Supervisors and managers must ensure large events/gatherings (> 50 people in a single space) are avoided

3.1. Work from Home/Remote Work

Detail how/which workers can/will continue to work from home (WFH); this is required where it is feasible

Workers will be coming to campus specifically for jobs and tasks which cannot be done at home. Whichever task that can be done remotely will be done from their home.

3.2. Work and room schedule

If you need to use a SHARED space, give the name of the person responsible of room booking in each building you plan on entering.

Visits to campus will be tracked on a Google Calendar.

3.3. Working alone procedure

Discuss your working alone procedures and how they will be adapted for this Local plan

Students will always contact the IGEN Program Director any time they enter and leave the IGEN workspace. The following procedure is required for the IGEN Student Workers:

1. A Google Calendar will be created to request and monitor the access to the shared space.
2. Just before entering into the building, contact the IGEN Program Director (all workers will have the cell number to either text or call in)
3. Workers will enter in through the door on the South of the Macmillan building. This entrance has been designated for Applied Science users in the MacMillan building. At that entrance, there is a QR code on the outside of the building for anyone from APSC to log their entrance to the building.
4. If the duration is longer than 3 hours, contact the IGEN Program Director every 3 hours to confirm that the work is ongoing.
5. When students are about to leave the IGEN workspace, a follow-up contact with the IGEN program Director to confirm the exit time.



3.4. Spatial Analysis: Occupancy limits, floor space, and traffic flows

APSC recognizes that some workspaces are dynamic environments and it may be challenging to adhere to physical distancing guidelines. Nonetheless, controls must be in place to keep personnel spaced at least 2m apart at all times. Clear communication of this to employees, monitoring of implementation, in addition to physical controls (signage) are needed.

As such: Using floor plans and/or photographs of your lab/workspace:

- 1) Identify and list the rooms and **maximum occupancy** for each workspace/area explaining **your methodology** for determining occupancy;
- 2) Illustrate a 2 metres radius circle around stationary workspaces/benches/instruments and common areas or equivalent approach to social distancing; and
- 3) Illustrate one-way directional traffic flows

Laboratory/Office Considerations

Occupancy limits will also be posted on the door of each room by the PI or office administrator.

Building/Facility Considerations

Common areas (lunchrooms, lounges, study space, admin, teaching spaces, bathrooms, elevators)

- All rooms will be sign-posted with the maximum occupancy based on available floor space to allow for 2m physical distancing.
- Busy or tight stairwells must be marked for ascending or descending between floors (this will not apply in an emergency, such as a fire).
- Staff and faculty and students using the campus during stage 2 will not be able to use common areas like shared kitchens for food preparation or consumption, and should make arrangements accordingly.
- When common office machines or appliances are used (e.g., copier, microwave, refrigerator, kettles) they must be wiped down by the user with disinfectant prior to and following use.
- Chairs and desks in lunchrooms / lounges / study spaces / administration areas (e.g., main office) must be spaced far enough apart to allow for physical distancing.
- Where possible, doors to multi-person washrooms should be propped open to minimize high touch surfaces and maximize air flow. Where possible, only one person should use the washroom at a time. Occupied/unoccupied door signage should be used or light on/off system must be indicated.
- Where a feature/service leads to formation of a line-up (e.g., coffee machine, machine shops, access to Stores), markings spaced 2m apart should be on the floor.

Points of Access to Building and Access Control

- Access to the buildings is provided using key cards and the buildings will remain locked until further notice. The now designated 'exit doors only' should have their fob deactivated by UBC Secure Access to prevent entry through these doors.
- To minimize high touch surfaces, interior doors that can be safely propped open without violating fire codes, should be propped open.

**Signage and Directional Guides**

- Elevators (maximum of either 1 or 2 occupants, based on elevator size).
- Stairwells that are busy or very tight (for directionality).
- Physical distancing signage must be posted at entrances and/or hallways.
- Narrow hallways should be designated one-way with appropriate signage on the floor and at eye level.
- There must be a Worker/Visitor Entry Check sign at every entrance that describes the symptoms of COVID-19 and other self-declaration items, and prohibits entry for any personnel that may meet one of the three criteria.
- Post signage within the units to inform of the measures in place.

Hand Sanitizer Stations

- Hand washing/sanitizing stations should be considered inside of building entrances, subject to availability.
- Hand sanitizers should be considered near the entrance to all shared labs/multi-user facilities (to be provided by PI or facility manager), subject to availability.
- Hand sanitizing stations should be considered at locations where propping the doors interferes with a building's airflow/temp stability subject to availability.

Shared Facilities

- Access to some facilities will be restricted to appointments made by email (e.g., machine shop, Stores), others will require online scheduling.
- All shared tools, computer keyboards, and other high-contact areas must be wiped down with disinfectant prior to and following use.
- If required, visits to the workplace to deliver samples (e.g., industrial partners) should be prearranged, staggered, and safety protocols should be communicated before entry into the workplace (e.g., email and/or signage posted to entrance). Keep a record of visitors to the workplace.
- Users MUST comply with procedures or access/services will be denied.

Maps / Spatial Analysis

- Maps are provided in Appendix 2.

3.5. Worker Screening

Describe how you will screen workers: 1) exhibiting symptoms of the common cold, influenza or gastrointestinal; 2) to ensure self-isolation if returning to Canada from international travel; and 3) to ensure self-isolation if clinical or confirmed COVID-19 case in household or as medically advised

- Every Department/School will ensure that the check-in & check-out QR code (provided by the Dean's Office) is posted on the entrance doors of each APSC building (where possible). The survey will have the questions from [Thrive BC Self-Assessment Tool](#).
- Every person (employee, visitor, contractor, etc.) returning on campus (also the employees working remotely) will do the [SRS training](#).



- To complete the SRS training, if the person does not have a CWL, a temporary one can be hosted by the Department/School/Unit through [UBC IT](#).
- Before coming to work, all personnel must check their health status.
 - Personnel experiencing any symptoms of COVID-19 (cough, sneezing, shortness of breath, loss of sense of smell/taste, sore throat, tiredness, fever) must not come to work.
- Individuals displaying symptoms of COVID-19 must remain at home and isolated until they have been confirmed COVID-free by testing or have been symptom free for the length of time recommended by the BCCDC.
 - Personnel who have been in contact with a person confirmed or presumed to have COVID-19 must also self-isolate as per provincial health guidelines. Personnel will be referred to the BC Health Self-Assessment Tool to determine if they require testing and/or medical care.
- Anyone returning from outside of Canada must follow the directions of the quarantine act, which specifies 14 days of self-isolation, regardless of whether or not they are experiencing COVID-19 symptoms.
 - Anyone exposed to a traveler must also self-isolate for 14 days. Supervisors cannot give personnel in quarantine work that would require them to break the quarantine.
- Every front and back entry door will include signage for both workers and visitors/guests that prohibits entry if any of the above criteria apply. The signage will either copy, or will directly use the signage below:
 - a. [UBC Entry Check Sign](#)
 - b. [WorkSafe: Entry Check for Workers](#)
 - c. [WorkSafe: Entry Check for Visitors](#)

3.6. Prohibited Worker Tracking

Describe how you will track and communicate with workers who meet categories above for worker screenings

The QR code Qualtrics survey database will have the information if someone who tried to access a building have not done the self-assessment. The workers feeling unwell will inform their supervisors by email and will decide if they want to take a sick day or work remotely if possible. If they decide to take a sick day, they will enter that request onto the Workday system.

Section #4 – Engineering Controls

4.1. Cleaning and Hygiene



Detail the cleaning and hygiene regimen required to be completed by the user for common areas/surfaces (Custodial has limitations on cleaning frequency, etc.).

Outline specific cleaning processes and schedule for high-touch equipment, specialized/sensitive equipment or other unique circumstances to your lab/workspace. Detail how and what types of cleaning products and disposal options you will provide. If possible, include cleaning stations/infrastructure on your lab photos/plan.

- Personnel must wash their hands regularly and avoid contact with one another.
 - Hand washing/sanitizing stations should be considered inside of building entrances, at locations near shared spaces, and at locations where propping the doors interferes with a building's airflow/temp stability, subject to availability.
- The standard UBC custodial standards will apply. Custodial crews will clean the common areas of buildings outside of operation hours (after 6 PM).
 - If there is any additional required cleaning (e.g. high-touch surfaces) the protocols and cleaning solutions must be provided. Any laboratory cleaning will follow the [WHO guidelines for decontamination](#).
- Cleaning supplies have been provided, including surface sprays and wipes.
- Workers have individual work areas with personal work equipment, but are encouraged to clean their desks, keyboards, and mice regularly.
- All workers are to clean the handle to the entry door (inside and out) at the end of their shift.
- All workers are to wipe the tools and printing equipment after using it.
- Used cleaning supplies can be discarded in regular waste bins, which are lined by custodial services.

4.2. Equipment Removal/Sanitation

Detail your appropriate removal of unnecessary tools/equipment/access to areas and/or adequate sanitation for items that must be shared that may elevate risk of transmission, both activity-related (i.e. instruments, tools) and general (i.e. coffee makers in break rooms)

All kitchen equipment in the IGEN workspace is out of bounds.

The following tools and equipment may be shared by workers. Workers will be required to clean the equipment before and after using it, and wash their hands immediately afterwards.

- 3d Printing Machines
- Machining and fabricating equipment
- Electronic Test Equipment
- Tools
- Hand trucks, pallet jacks, and compressed gas transportation carts.

All surfaces and items to be handled, where it is unclear that they have not been touched within the 72 hour period prior, need to be wiped down with antiseptic wipes before proceeding. If this is not practical, then the affected persons shall wash or disinfect their hands as soon as practicable after finishing handling the item.

Dispose of wipes into the regular trash; do not reuse.



4.3. Partitions or Plexiglass installation

Describe any needs for safety infrastructure i.e. physical barriers, plexiglass installation required for your lab/workspace and if possible include them on your photos/room plan.

- Partitions will not be installed in the IGEN workspace.

Section #5 – Administrative Controls

5.1. Training Strategy for Employees

Detail how you will mandate, track and confirm that all employees (including the ones who continue to work remotely) successfully complete the Preventing COVID-19 Infection in the Workplace online training; further detail how you will confirm employee orientation to your specific safety plan

- The SRS [Preventing COVID-19 Infection in the Workplace](#) online training course is mandatory for all employees (including those who remain working remotely).
- The SRS course link, the ‘Return to Campus Activity Commitment Form’ (please see **Appendix 1**) as well as a list of all documents required for reading ahead of returning to campus (i.e. building safety plans, and their specific Workspace safety plans) must be sent by email to all workers.
- A copy of the completed course certificate and a signed ‘Return to Campus Activity Commitment Form’ must be returned to the Department/School designate → [Nakane, Jon <jon.nakane@ubc.ca>](mailto:jon.nakane@ubc.ca)

5.2. Communication Strategy for Employees

Describe how employees may raise concerns and how you will address these, and how you will document all of this information exchange

Communication of the Plan to Employees

- To communicate the risk of exposure to COVID-19 in the workplace to the employees, the IGEN Program Director will disseminate this Workspace plan via e-mail to the workers and will post a QR code to access a soft copy on the door to the workspaces.

Communication of Worker’s Concerns

- When an employee is concerned about any of these policies, they should follow the standard WorkSafeBC reporting guidelines (see [Right to Refuse Unsafe Work](#)).
- They may also contact their worker representative of the APSC JOHSC to express their concerns.

5.3. Signage

Detail the type of signage you will utilize and how it will be placed (e.g. floor decals denoting one-way walkways and doors) ‘cleanliness state’ of equipment/instruments, hand-washing guidance. Please see signage templates on [Safety & Risk Services COVID-19 website](#) and [Worksafe’s COVID-19 – Resources](#)



Integrated Engineering will utilize the signage from the [Safety & Risk Services COVID-19 website](#), and [the WorkSafe's COVID-19 – Resources](#) website, WorkSafe BC, and from Building Operations.

Required Signage:

- Signs that state the maximum occupancy of common rooms
- Use of tape to block-off rooms and classrooms that are off-limits
- Use of tape and floor signage to direct traffic through high flow areas
- Signs to remind people to adhere to physical distancing guidelines
- Floor signs to mark of 2 m spaces where people might line up (if needed)
- Signed Access Agreement on lab doors indicating maximum occupancy

Checklist of items that require disinfection at the end of each shift. This should include switches, freezer / fridge handles, keyboards and mice of communal computers, cart handles, etc.

5.4. Emergency Procedures

The applicant must ensure that all employees entering the lab should be aware of the Building Emergency Response Plan (BERP) and have access to it. If applicable, detail your strategy to amend your lab's emergency response plan procedures during COVID-19.

See the SRS guidelines for handling potential COVID-19 incidents here: <https://srs.ubc.ca/covid-19/health-safety-covid-19/reporting-covid-19-exposure/>

The current Building Emergency Response Plan and the overall Building Safety Plan for the MacMillan building can be found at http://lfs-my-2020.sites.olt.ubc.ca/files/2020/10/BERP_2020_MCML_June-8-2020.pdf

Approach to handling potential COVID-19 incidents:

- Suspected positive incidents or exposure concerns are to be reported to the Supervisor. Further incident reporting information can be found on the [SRS webpage](#).
 - Direct people who are unsure about what they should do to the [BC Self Assessment Tool](#)
- OPH Programs and Services remain available to all staff, faculty, and paid students who have questions or concerns about their health and safety in the workplace, including questions around COVID-19.**

If there was a confirmed positive incident, SRS would defer to the government response protocols and rely on their direction. UBC would provide assistance as requested.

5.5. Monitoring/Updating COVID-19 Safety Plan

Describe how you will monitor your workplace (supervisor, departmental safety representative, other) and update your plans as needed; plan must remain valid and updated for next 12-18 months

- The workspace plan will be reviewed every 3 months.
- The following items would trigger an off-cycle review:
 - Request by Safety and Risk Services
 - Moving to higher building occupancy
 - Another wave of COVID-19



- Shift in provincial guidelines
- Or incidence of COVID-19 infections
- Area supervisors / senior staff will check the compliance as well as the LSTs for the periodic review.

5.6. Addressing Risks from Previous Closure

Describe how you will address the following since the closure: staff changes/turnover; worker roles change; any new necessary training (e.g. new protocols); and training on new equipment

- If a change to the worker role becomes necessary for continued operation, training in the new protocols of the job must be included (including full documentation of the training).

Section #6 – Personal Protective Equipment (PPE)

6.1. Personal Protective Equipment

Describe what appropriate PPE you will utilize and how you will/continue to procure the PPE

- The IGEN workspace has PPE as required by OHS regulations. Shared eye protection, which can be washed with soap and water, and disposable hearing protection is available for other workers. In the occasional instance where gloves are to be used, workers shall use their own or wear disposable nitrile or latex gloves inside of shared gloves.
- No PPE needs to be purchased or procured at this time, but gloves, hearing protection, etc. are readily available from our regular suppliers.

Section #7 – Non-Medical Masks

7.1. Non-Medical Masks (New)

Describe your plan to inform faculty and staff on the wearing of non-medical masks

- See [Using Non-Medical Masks](#) website for the most up to date information
- Effective September 16, 2020 UBC implemented a policy whereby students, faculty, staff and visitors are required to wear non-medical masks in common indoor spaces on campus.
 - Labs / workshops:
 - Non-medical masks are not required when working in a sole occupant lab / workshop or enclosed room.
 - In lab spaces / workshops that have been designated to ensure occupants are working 2m apart or have appropriate physical barriers: users have the option to remove their non-medical mask while engaged in activities where the physical distancing requirement is met.
 - As per UBC's policy, non-medical masks must be worn:
 - When travelling through building corridors and shared spaces;



- While entering or exiting research spaces or while moving from an assigned research location;
- While entering or exiting classrooms;
- Within classrooms while moving to a seat;
- Any other time that 2m physical distancing cannot be maintained

Section #8 - Acknowledgement

8.1. Acknowledgement

Plan must demonstrate approval by Administrative Head of Unit, confirming: 1) the Safety Plan will be shared with staff and how; 2) staff will acknowledged receipt and will comply with the Safety Plan.

Workers will sign the commitment form in Appendix 1.


Principal Investigator / Manager Submitting:

Jonathan Nakane, Program Director, Integrated Engineering
Assistant Professor of Teaching, Materials Engineering

Feb 25, 2021

Name, Title

Date

x 

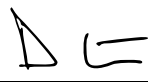
Department Head/School Director Approval

Daan Maijer, Department Head, Materials Engineering

February 25, 2021

Name, Title

Date

x 



Hosting Building (MacMillan) Approval

David Kitts , Associate Dean of Research for LFS

Name, Title

Date

x *David D. Kitts*

Rickey Yada, Dean of LFS

Name, Title

26 Feb 2021

Date

x *Rickey Yada*



Appendix 1 – Return to Campus Activity Commitment Form

Building requirements for conduct related specifically to COVID-19 safety have been developed for the Integrated Engineering Workspace in MacMillan. The building guidelines have been developed by the IGEN Program Director, in consultation with the UBC APSC Return to Campus Committee and MacMillan LST. **All students, staff and faculty** who are permitted to resume activities in the IGEN Workspace are required to complete the following requirements. Send completed form to jon.nakane@ubc.ca

| Requirement | Check when complete |
|--|---------------------|
| Review the intermediate safety plan (MacMillan Building) https://lfs-my.sites.olt.ubc.ca/files/2021/02/LFS_Workspace_Safety-Plan_MCML_Rev3.pdf | |
| Review the Workspace safety plan (Integrated Engineering Workspace) | |
| Complete the SRS online COVID-19 safety course and sent the certificate to jon.nakane@ubc.ca | |

Your name: _____ Date: _____

Faculty/Dept. Integrated Engineering Primary room: _____

Your role (faculty, staff, grad student, etc.): _____

Justification for Return: Fabrication of items in support of the academic courses IGEN 230 / 330 / 430.

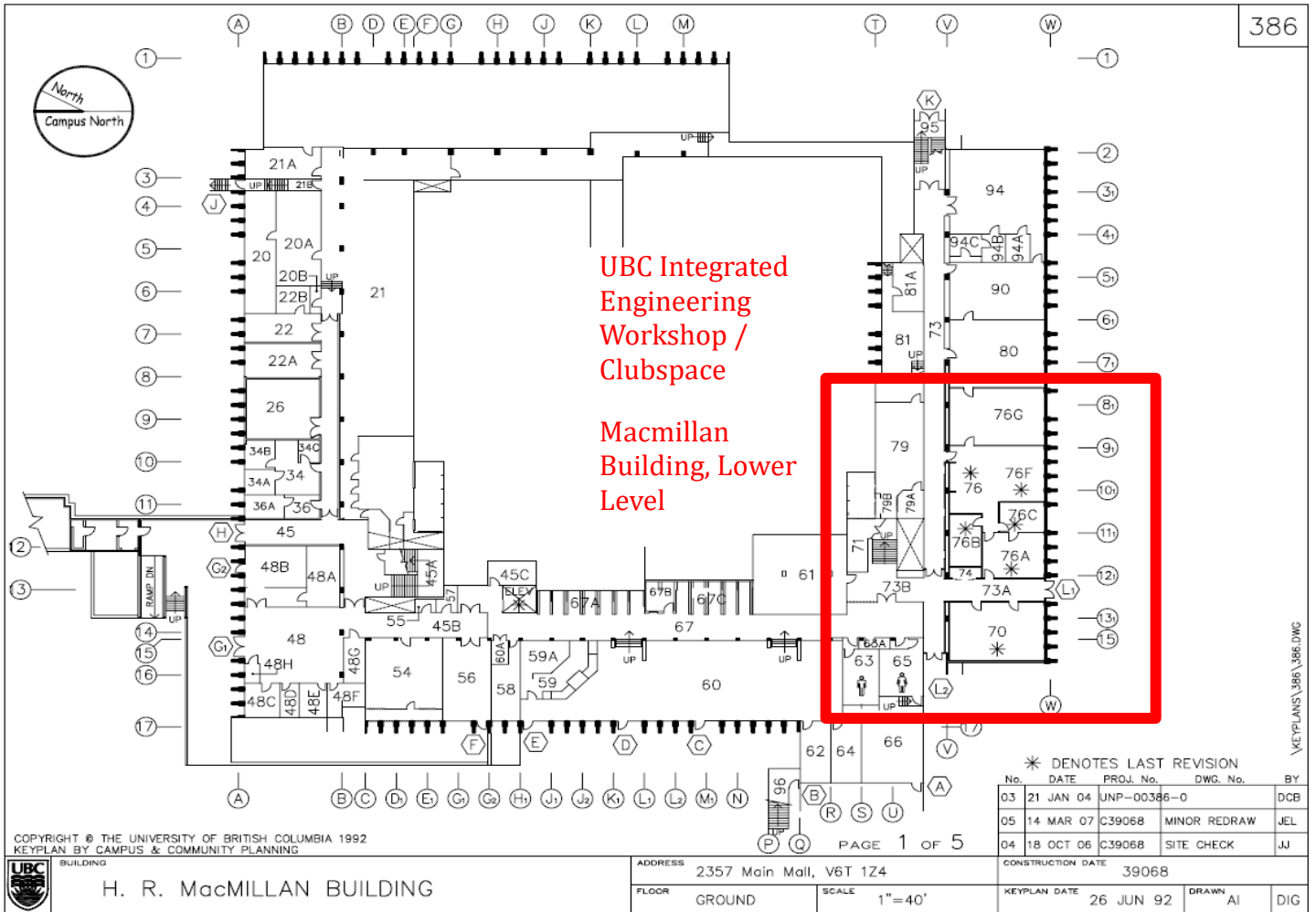
Your signature: x _____

By your signature you agree that you intend to meet the requirements/principles for:

- Doing the daily building check-in and check-out (QR code access) and text/call upon arrival and departure of IGEN spaces in MacMillan
- Practices for protecting against getting COVID-19 (stay home if ill; avoid touching your face; wash hands frequently; physical distancing > 2 m)
- No building access unless authorized by the schedule set up by the supervisor
- Knowing the guidelines for entry/exit to/from the building and getting around it
- Accessing washrooms
- Not accessing the shared kitchen facilities
- Cleaning and disinfecting commonly touched surfaces and shared equipment/tools
- Knowing who to contact for safety and interpersonal concerns/problems
- Abide by your unit’s working alone policy
- Building evacuation procedures in case of emergency
- What to do if someone shows signs of respiratory illness
- Consequences of not following requirements and rules

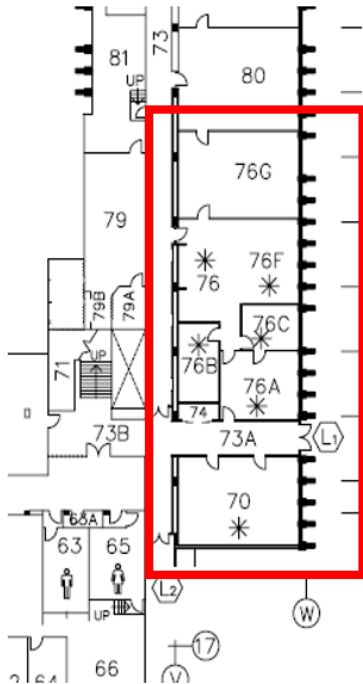


Appendix 2 – Area Maps

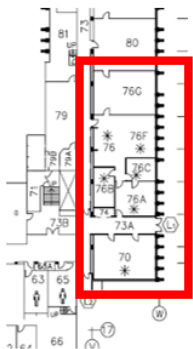




**UBC Integrated Engineering Workspace
Macmillan Building, Lower Level**



| Room | Description | Proposed Max Occupancy | Normal Max Occupancy |
|--------------|--|------------------------|----------------------|
| 80 and above | Spaces operated by Civil Engineering Research Groups | n/a | n/a |
| 76G | Workshop space (drill press, benchtop and hand tools, project storage space) | 3 | 6 |
| 76,76F | Club space (couches, tables, kitchen area, eating and study space) | 2 | 10 |
| 76C | Small conference room / study space | 1 | 6 |
| 76A | Study space (~10 desktop areas, Xerox printer) | 2 | 10 |
| 76B | 3d printing facility (multiple 3d printers) | 1 | 2 |
| 70 | Electronics work area and study space (soldering, irons, benchtop tools) | 3 | 10 |



**UBC Integrated Engineering Workspace
Macmillan Building, Lower Level**

- Blue – tables and work areas.
- Yellow – storage cabinets and shelving
- Green – sinks
- Red – social spaces and food areas (not to be used)
- Red Dashed Circles – 6' diameter zones for safe working.

