

MakeUofT 2025 Participant Package

Feb 15th, 2025 - Feb 16th, 2025

Welcome Aboard!

This package will provide preliminary information to MakeUofT 2025 participants. It will cover the logistics of the event in addition to what participants can expect to get out of it.

General Guidelines

IEEE UofT Student Branch is the organization hosting MakeUofT, and we believe in the creativity of our participants. MakeUofT is a 24-hour, 300-maker, open design challenge with the theme of **Sustainability and Green Tech, Wearable Technology** and **Video Games**! Teams will have the freedom to design and implement whatever they want, from innovative solutions for everyday issues to novel gadgets that push the boundaries of existing designs. You are welcome to bring your own hardware components, or you may use those provided by us.

Each team will be submitting to the Best Overall prize category (1st, 2nd, 3rd place prizes) through <u>Devpost</u>. Additionally, each team can choose to submit to additional prize categories also found on Devpost. During the showcase, each group will have around 5 minutes to present and demo their project. Participants are welcome to view other teams' demos outside of their own presentation time.

For determining overall 1st, 2nd, and 3rd place, your team's final design will be evaluated based on the following categories: Idea Originality, Technical Complexity, Working Demonstration and Presentation. Check out Devpost for more info.

Additional Resources

3D printing will be managed by MakeUofT staff to maximize efficiency and fairness, as well as to ensure the safety of the printers on loan to us. In most cases, printing will be standardized at 0.3 mm layer height using PLA.

Event Details

Date: Saturday, Feb 15th, 2025 to Sunday, Feb 16th, 2025

<u>Time</u>: Feb 15: 9:00AM (Registration Begins)

Feb 16: 6PM (Closing Ceremonies End)

Location: Myhal Centre for Engineering, 55 St. George St, Toronto, ON

M5S 0C9 (shown in orange)





Getting Here

Public Transit

The closest subway stop is **Queen's Park** Station (Exit to University of Toronto). Streetcars also run along College Street and Spadina Avenue.

Parking

There are no free parking spots available. Click on the <u>link</u> to see available locations and fees for on-campus parking.

You can click on the parking lot address to get more information about their parking fares, time availability and other restrictions. For more information, refer to the Parking FAQ webpage.

Event Schedule

Date	Time	Event	Location
Saturday, February 15th	9:00am	Registration and Team Formation	MY Lobby
	9:00am	Sponsor Booths	MY Lobby
	10:00am	Opening Ceremony	MY 150
	11:00am	Hacking Starts!	
	11:00am	Hardware Component Distribution	MY 320
	12:00pm	Lunch	MY Lobby
	1:00pm	Mentorship Room Opens	MY 330
	1:30pm	Workshop: MLH GitHub Copilot Workshop	MY 380
	2:30pm	Snack Round 1	MY Lobby
	3:00pm	Workshop: Arduino by Alphawave Semi	MY 330
	5:00pm	3D printing submissions close	
	5:00pm	HSS website closed until 8 PM (orders after 8 PM can be picked up 6 AM on Sunday)	
	6:00pm	Dinner	MY Lobby

	7:00pm	Hardware room closes for Saturday	MY 320
	8:00pm	MLH Mini-Activity: Cup Stacking	MY Lobby
	11:00pm	Karaoke!	MY 150
	12:00am	Midnight Snack	MY Lobby
Sunday, February 16th	8:00am	Breakfast	MY Lobby
	11:00am	Hacking Ends!	
	12:00pm	Lunch	MY Lobby
	1:00pm	Judging Starts	MY 150
	5:00pm	Closing Ceremony	MY 150

^{*}MY = Myhal Centre for Engineering, 55 St. George St, Toronto, ON M5S 1A4

Makeathon Rules

General Rules

- 1) Attending MakeUofT 2025 gives organizers the right to take photos and videos (that may include yourself or your physical and/or intellectual property) throughout the event, and edit and disperse them as they deem appropriate.
- 2) All participants are required to work in teams of 2-4 due to finite hardware.
- 3) If you are not present by **10:00 am**, your spot may be given to participants on the waitlist. **Let us know through email ASAP if you will be arriving late.**
- 4) Participants will have 24 hours to build a <u>physical</u> project of their choosing (provided it involves hardware of some sort).
- 5) Working or purchasing items in the Myhal Fabrication Facility (MyFab) is prohibited by hackathon participants.

What to Bring

- 6) Any personal hardware or components you may need, aside from a pre-assembled project.
- 7) Your laptop to program the hardware and view documents such as the competition package and datasheets. Along with your chargers.
- 8) At least one team member must provide **government-issued photo ID** to check out components.
- 9) A reusable water bottle we'll have water fountains at our event venue for you to use!

^{**}Schedule tentative to changes in location. Participants will be notified of any changes via Discord.

Rules about Signing Out Components

- 10) Components can be signed out at MY320 using a government-issued photo and student IDs. Larger components must be returned to us before the end of the event.
- 11) Immediately report to organizers if something is wrong with the equipment.

Rules about Pre-Trained Machine Learning Models

- 12) If you are using your own model you trained before the event started, you must indicate so on your Devpost and during judging.
- 13) You must make the model open source before the event and link it on your Devpost, otherwise, your hack will be disqualified.

Credit System

At the start of the competition, each team is allocated **300 credits**. Every component available for use is assigned a specific value, and teams can strategically rent the parts they need by spending their credits. **To earn additional credits**, teams have the opportunity to participate in exciting events and challenges. If you **run out of credits** you can reach out to Ashley Leal or Kovid Srivart (Tech Team Directors) **in room MY320 (HSS signout)** to discuss your options. However, **credit grants are not guaranteed**, so plan your spending wisely.

Range of Credit Values:

MCUs: ~100 credits

Peripherals: ~20-25 credits

Dongles: ~5 credits

Component Distribution

Component Distribution will be conducted using our Hardware Signout Site (HSS).

- Component distribution will begin immediately after opening ceremonies in MY320
- Government-issued photo ID will be required to sign out components, and all components must be returned by the end of the event
- You can see and check out components through https://hardware.makeuoft.ca
- You can sign out hardware in multiple rounds

3D Printing

3D Printing will be offered on a first come, first serve basis at MakeUofT. It will open promptly after opening ceremonies at 11am and close at 5pm on Saturday.

General Rules

Prints will be done in PLA on the Prusa MINI printers at MyFab. Below are the following rules associated with 3D printing:

 Prints must be functional in nature (i.e. no decorative 3D prints that only serve to make your design look better, like lettering or chess pieces)

- Prints must be no more than 5 hours in length, based on the criteria in the next section
- Prints must not be larger than 18cm x 18cm x 18cm
- Prints must be submitted using this form here: <u>3D Printing Form</u>
 - There is no guarantee your print will be processed based on the first come, first serve basis
 - Teams with prints that are rejected will be notified with the reason why
 - Teams are welcome to submit prints beginning on Thursday at 12:01am
- Prints must be submitted as either .3mf or .stl files
- 3D printing will be part of the credit system, and the corresponding item must be ordered on the HSS website - more on this is below
- Prints will be distributed in MY320

3D Printing Time Estimation

3D prints will be sliced with <u>PrusaSlicer</u> using the default settings for the Original Prusa MINI with the 0.4mm nozzle. Below are the complete specs used:

Print Settings: 0.2mm SPEED

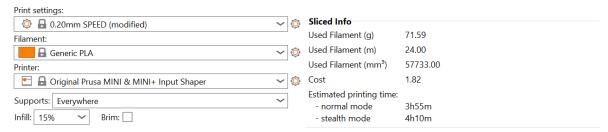
Filament: Generic PLA

Printer: Original Prusa MINI & MINI+ Input Shaper

Supports: Everywhere

Infill: 15%Mode: Normal

In the example below, the estimated printing time is 3h 55m.



Note that you will not need to provide us with the G-Code. A member of our team will check your submission to ensure that the time you provide for your print is accurate.

Credit System

3D printing will be part of the credit system. The corresponding values are shown below:

Print Time	Value
0-1 hours	4 credits
1-2 hours	8 credits
2-3 hours	12 credits
3-4 hours	16 credits

You must order the corresponding 3D printing item in the <u>Hardware Signout Site</u> for your 3D print to be successfully processed. If you submit a print without ordering the corresponding item in HSS, your print submission will be rejected.

Fabrication Space

This year, a fabrication space for hackathon participants will be available in a section of the **Myhal Arena**, located in the basement of Myhal. The following tools will be available (not an exhaustive list):

- Jigsaw
- Circular saw
- Drills
- Hot glue guns
- Screwdrivers
- Hammers
- Soldering irons
- Utility Knives

Materials (i.e. wood) and hardware (i.e. screws, nails) will **not** be provided. The only material provided will be scrap cardboard. Participants are welcome to bring their own building materials.

Any hackathon participants wishing to use the Fabrication Space **must fill out this waiver form:** 2025 MakeUofT Fabrication Space Waiver. Access to the Fabrication Space will be denied without completion of this form.

The Fabrication Space will be open from 11am to 7pm on Saturday, and 8am to 11am on Sunday. During off hours, participants may request access to the Space, but access is not guaranteed. Hours are subject to change based on staffing availability.

Room Allocation

Room	Location
Opening/Closing Ceremonies	MY 150
Showcase and Judging	MY 150
Participant Workspaces	MY 150, 350, 420, 430, 440, 480
Component Distribution	MY 320
Mentor Room	MY 330

Workshop Room	MY 380

Discord

Join our Discord! This will be our main form of communication to all participants during the makeathon. Sign up using this <u>invitation link</u>.

Wifi

Log into the eduroam Wi-Fi with your school credentials, this should be available for all major universities, domestic and foreign.

<u>Username</u>: <your school username>@<your school domain>.ca (for Canadian

universities)

Password: <same as your school's password>

If you do not go to a university or if you are having trouble connecting to the wifi, please contact hackathon directors for wifi.

Food

Saturday, Feb 15th, 2025

Lunch: Arz Fine Foods Sandwiches (all meats are Halal)

- Roast Beef Sandwiches
- Turkey Sandwiches
- Grilled Veg and Halloumi Sandwiches
- Gluten-free, Veg, Lactose-free Options Available

Dinner: Tasty's Caribbean Cuisine (all meats Halal)

- Rice and Peas, White Rice, Veggie Chow mein (Sides)
- Jerk Chicken, BBQ Chicken
- Curry Chickpeas (Vegetarian)
- Curry Potatoes (Vegetarian)

Sunday, Feb 16th, 2025

Breakfast: Assortment of pastries, cookies and croissants from Metro **Lunch**: Shawarmas from Tahini's (all meats are Halal)

- Chicken Shawarmas
- Falafel Shawarmas Available (Vegan and Lactose-free)
- Gluten-free Sandwiches Available From Subway

Important Notes

If you have a specific dietary restriction, please ask MakeUofT staff about ingredients and bring appropriate medical aid. If food is unavailable for your requirements, we will source

and pay for accommodating food. At check-in you will receive a wristband according to your dietary restrictions. Announcements will be made on Discord once food and snacks are served.

Emergency Procedures

If you have any medical (or similar) emergencies, contact an organizer or volunteer for help. We have a first aid kit on standby and can assist you if you message the #firstaid channel on Slack.

Important Links

MakeUofT Resources

- MakeUofT Official Website
- Invitation to MakeUofT Discord Channel
- MakeUofT <u>Devpost</u>
- Hardware/Mechanical Inventory List (will be updated up to the event)

General Electronics Aid

Datasheets: <u>alldatasheet.com</u>Tutorials: <u>electronics-tutorials.ws</u>

• Schematics: electroschematics.com

Nearby Stores

- Home Hardware: https://www.homehardware.ca/en/store/13817
- Canadian Tire:

https://www.canadiantire.ca/en/store-details/on/toronto-eaton-centre-on-600.html

Sponsors

TELUS



AMDI