ICAC
2026

Information Guide

EVERYTHING YOU NEED TO KNOW

DETAILS

DATE

May 28-29th 2026, 8am - 4pm for both days

LOCATION

Hart House building, UofT: 7 Hart House Cir, Toronto, ON M5S 3H3

PARTICIPATION

ICAC is an open-schedule event, meaning only the opening/closing ceremonies & your showcase timeslot (if applicable) are scheduled.

If a showcase team is not present for their timeslot, they are disqualified. Similarly, if a team is not present in the closing ceremony, it forfeits its achievement and awards.

Workshops & networking seminars are available throughout the day; Teams may take part in them as they wish, no sign-up required.

LAYOUT

The main room has tables for teams to store their models and for chapters to meet at.

The showcase room will be set up in booths, and teams will be assigned to judges upon entering. Teams must arrive at the showcase room 5 minutes prior to their time slot.

All participants will receive a judging itinerary in early May, stating their showcase time slot.

EVERYTHING YOU NEED TO KNOW

CHECKLIST

- Submit your analysis (showcase format) or report (written format) in the dropbox by May 1st, 2026
- **Showcase format**: Bring your model. Note that the model and any physical visual aid (e.g., trifold, etc.) must fit within the 50x50x50 cm size limit collectively.
- **Showcase format**: Bring a hard copy of analysis to submit to judges
- Dress in formal attire

STRUCTURE

Participants may choose to participate in any **workshops** or **seminars** taking place. Winners of the workshops, as well as the winners of ICAC 2026, will be announced in the closing ceremony.

At **registration**, you will receive your ID card, which you must have clearly displayed at all times. Next, in the opening ceremony, you will receive general information regarding the event, including the locations of the showcase rooms (only applicable to the showcase participation format).

Participants must arrive at the **presentation** room 5 minutes prior to their presentation time slot to allow for adequate registration time. Each team will have 10 minutes for their **showcase**, including set-up. Any questions judges ask will also be within the 10-minute time limit. It is highly advised that teams aim to finish their presentation with 2-3 minutes left to allow judges to ask any questions they may have.

EVERYTHING YOU NEED TO KNOW

Tips for Success: Showcase

1. Take a look at our **Winner Portfolios** to understand what makes a winning solution**.**

2. Consider registering for **Mock ICAC** to gain valuable feedback from judges that you can apply to your showcase for ICAC and increase your chance of success.

3. Maintain eye contact with the judge during your showcase; it demonstrates confidence and scores highly in the "Report and Showcase" criterion.

4. Ensure you include working technological components in your model, as it scores points in 4/5 of the criteria. The **STEAM IC Prototyping Bundle** contains the common components you would need for your model.

5. Ensure that your analysis is formatted according to the guidelines and includes all the necessary components. Late submissions of the analysis in the dropbox will not be accepted and will result in point deductions in the "Report and Showcase" criterion.

6. To score well in the "Analysis and Showcase" criterion, ensure your analysis demonstrates thorough planning with diagrams & detailed explanations using STEAM IC's application, **Fractyl3D.com**.

7. Make sure both your model and report are neat and organized. To ensure all parts fit seamlessly, opt to create custom 3D parts when possible using a 3D printer or the **STEAM IC ProtoPen**.

Ensure that your analysis is formatted according to the guidelines and includes all the necessary components. Late submissions of the analysis in the dropbox will not be accepted and will result in point deductions in the "Report and Showcase" criterion.

EVERYTHING YOU NEED TO KNOW

TIPS FOR SUCCESS: WRITTENS

1. Take a look at our **Winner Portfolios** to understand what makes a winning solution.

2. To score points in the “Structure”, "Prototyping Plan” and “Technology” criterion, ensure your analysis demonstrates thorough planning and testing with diagrams and detailed explanations using STEAM IC’s application, **Fractyl3D.com**.

3. Proofread your report for grammar and clarity before submission, as these errors may result in point deductions.

4. Consider registering for **Mock ICAC** to gain valuable feedback from judges that you can apply to your report for ICAC and increase your chance of success.

Ensure that your report is formatted according to the guidelines and includes all the necessary components. Late submissions of the report in the dropbox will not be accepted and will result in point deductions.

Criteria

Showcases

Analysis & Presentation (0-5)	The report is properly organized and well structured with the problem, methodology and solution outlined clearly. Diagrams, descriptions and explanations are in-depth and logically arranged to effectively communicate ideas. The presentation is engaging throughout and clearly communicates ideas. The presenter(s) is/are well-paced (presentation is within the given 10 minute time limit) and respond thoughtfully to questions.
Model (0-7)	The model demonstrates precision and attention to detail, effectively applying concepts and ideas to communicate a feasible solution to the problem. Functional technological components demonstrate the solution's practicality and scalability. The model is cohesive and logically organized to represent the solution cohesively. The model adheres to the given size limit of 50 x 50 x 50 cm.
Technology (0-7)	The project shows innovative integration of technology to solve the problem. Functional components are embedded in the design, emphasizing real-world feasibility, responsiveness, and interactivity. Future technologies are considered to make the solution adaptable to new environments and changes.
Scientific Application & Innovation (0-6)	Relevant scientific concepts are thoroughly explained and correctly utilized. The solution is efficient and well-researched, with thorough analysis of scientific principles. The project is original and creatively builds on past ideas through the use of technology. The design considers multiple factors related to the problem and anticipates future needs and developments.
Sustainability (0-5)	Project planning includes topics such as resource efficiency, long-term viability, sustainable use, etc. The model is also constructed sustainably through the use of recycled materials and thoughtful practices. Functional technological components minimize ecological footprint and promote sustainability.

Criteria

Writtens

Report (0-5)	The report includes components such as a clearly defined problem, relevant background research, the proposed solution, planning and development process. It uses visuals to support explanations and presents research and design thinking in a clear, organized format. The structure helps communicate the solution's purpose and feasibility effectively, ensuring all factors are discussed in depth.
Prototyping Plan (0–7)	Planning for the prototype uses feasible materials and available technology. The team has thought through potential challenges and addressed them through annotated diagrams and 3D sketches. The proposed design reflects careful planning and shows a clear path toward building a functional and scalable solution.
Technology (0-7)	The project shows innovative integration of technology to solve the problem. Functional components are embedded in the design, emphasizing real-world feasibility, responsiveness, and interactivity. Future technologies are considered to make the solution adaptable to new environments and changes.
Scientific Application & Innovation (0-6)	Relevant scientific concepts are thoroughly explained and correctly utilized. The solution is efficient and well-researched, with thorough analysis of scientific principles. The project is original and creatively builds on past ideas through the use of technology. The design considers multiple factors related to the problem and anticipates future needs and developments.
Sustainability (0-5)	Project planning includes topics such as resource efficiency, long-term viability, sustainable use, etc. The model is also constructed sustainably through the use of recycled materials and thoughtful practices. Functional technological components minimize ecological footprint and promote sustainability.

Guidelines

Showcases

The analysis is a maximum of 5 pages, has 1 inch margins, in Times New Roman size 12, and has 1.15 spacing. Models and any physical visual aids need to be maximum 50x50x50 cm including any physical visual aids. Participants are also responsible for providing any digital visual aids.

Writtens

The report does not need to be scientific in nature. It must have a maximum of 20 pages, not including the appendix, bibliography (APA 7), and title. There must be 1 inch margins on all sides , a font of Times New Roman size 12, and a 1.15 spacing.

Engineering

Prompt

As cities grow and land becomes scarce, there's often no room between skyscrapers to build ground-supported infrastructure for secondary routes or local connectors. Transportation systems must directly connect infrastructure with minimal reliance on the ground. What kind of in-sky transportation system can adapt dynamically by being modular while weaving through urban space? How can this system detect and respond to surrounding factors such as traffic, infrastructure stress, and weather conditions? What structural requirements must be met for the system to remain lightweight, cost-effective, and compatible with sustainable mobility (electric vehicles, public transit, cycling, etc.)?

Life Sciences

Prompt

With more than 43 million blind individuals and another 295 million people with moderate-to-severe visual impairment around the globe, the need for assistive technology is widespread. Current assistive technology like white canes and simple audio cues lack real-time spatial perception, putting the user in danger within changing environments. What sort of wearable navigation system can be designed to construct a 3D "sound map" of space to enhance independent spatial awareness? How can the device be lightweight, discreet, and affordable? How can this technology be implemented for different levels of vision loss?

Astronomy

Prompt

With human civilization moving towards interstellar expansion, studying exoplanetary systems has become essential. Colonization of exoplanetary systems can ensure long-term species survival in the case of planetary catastrophes like climatic change, extraterrestrial destruction, exhaustion of resources, etc. However, current detection techniques such as transit photometry and radial velocity favor large, close-orbiting planets like "hot Jupiters" and miss smaller, Earth-type planets which rest in habitable temperate zones. What other data must be measured to better detect Earth-like exoplanets? How can exoplanetary systems be classified to better prioritize future attempts at colonization?

Comp. Sci.

Prompt

Over 95% of home security camera video surveillance is never viewed, and the majority of footage only wastes storage and energy. With the surge in home surveillance systems, there has been a dramatic increase in energy usage, carbon emissions, and demand for data centers. How can stored video be compressed according to principles of human perceptual science to reduce storage needs without compromising perceived quality? How can "useful" footage be automatically identified using sensor data from the camera system or nearby devices? What algorithms and edge-processing techniques make this system scalable, privacy-conscious, and precise?