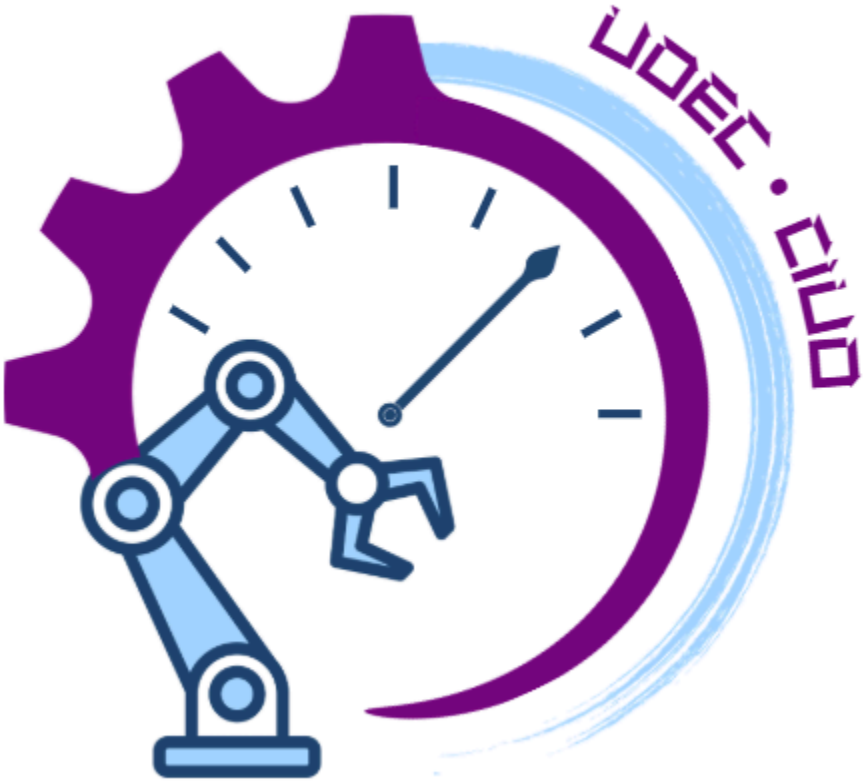


university of OTTAWA

ENGINEERING COMPETITION

Engineering Communication Competition 2026

uOttawa Engineering Students' Society

VP Internal

competition@uottawaess.ca

This document outlines requirements and expectations for competitors in the Engineering Communications category at uOEC 2026. Please read this document carefully and in full.

Overview

Engineering communication is a critical skill for translating complex technical concepts into actionable, ethical, and publicly accessible decisions. In this competition stream, participants are challenged to act as Lead Systems Engineers delivering an executive technical briefing to a non-technical oversight board based on a technical topic each team selects during the on-site design period. To succeed, teams must explain high-level system architectures, autonomous control logic, and failure modes using clear, jargon-free language, compelling visual aids, and rigorous engineering logic.

Teams may consist of a maximum of two (2) competitors.

Scenario

During the on-site design period, each team will select and develop a technical engineering topic and prepare a presentation for a general audience.

Objective

Your team must deliver an executive technical briefing that explains your chosen technical engineering concept, including how it works, the underlying engineering principles, its real-world applications, and its potential benefits and limitations. Because the audience consists of a non-technical committee of decision-makers and stakeholders, teams must maintain absolute engineering accuracy while translating complex concepts into clear, accessible language.

To satisfy the Committee, your presentation must explicitly address:

- **Your analysis must address the environmental, social, economic, and political impacts of your chosen topic.**

Topic and project eligibility

Presentation Topic Criteria

- **Technical Nature**: The presentation topic must be strictly technical in nature, focusing on engineering systems, architectures, or design methodologies.
- **Multidisciplinary Impact Assessment**: The presentation must assess the social, environmental, political, and economic impacts of the proposed topic. *(Note: All four dimensions, including political impacts, are formally evaluated under the Impact Analysis criteria.)*

Deliverables

Presentation Abstract Submission

- **Abstract Content Requirements**:
    - Length: Maximum of two hundred (200) words. Formatting is at the team's discretion, provided word count limits are strictly observed.
    - Topic Summary: Clear description of the technical presentation topic and its core system architecture.
    - Identification: Explicitly state the competitor name(s) and assigned team alias.

Slide Deck Submission & File Lock

- **Technical Testing & Logistics:**
    - File & Equipment Testing: The 12:00pm submission deadline (files are verified and preloaded over lunch) allows Competition Leads to perform technical verification on presentation files (testing aspect ratios, video/audio embeds, font rendering, and AV hardware compatibility). It does not constitute an on-site rehearsal or practice window in the presentation room for teams.

Facilities and Equipment

Presentation Competition Phase

- **Structure**: All deliverables are completed during the on-site design period, 8:00 am to 12:00 pm.

Provided Venue & Standard Equipment

- **Presentation Room**: One (1) dedicated room equipped for live technical briefings.
- **Presentation Computer**: One (1) designated competition computer loaded with standard presentation software (Microsoft PowerPoint, Adobe Acrobat PDF Reader) and standard system fonts. All submitted presentation files will be pre-loaded onto this computer.
- **Digital Projector & AV System**: One (1) digital projector and screen setup.
- **Physical Board**: One (1) magnetic whiteboard with standard dry-erase markers and erasers (guaranteed across all presentation rooms to ensure equipment uniformity).

Software, Laptop & Internet Policies

- **Custom Fonts & Media Compatibility**: To ensure proper rendering on the provided presentation computer, teams must embed all custom fonts into their PowerPoint files or submit their final slides as a high-resolution PDF.
- **Backup Laptops**: Competitors may bring a backup personal laptop to the presentation room; however, it may only be connected or used in the event of a verified technical failure of the primary competition computer, subject to approval by the Competition Lead.

- **Internet Access**: Live internet access is strictly prohibited during the presentation phase. All media, animations, or demonstration materials must be embedded directly within the submitted slide file and operate offline.

Resource Request Procedure

If a team requires specialized technical or physical resources beyond the standard list above (e.g., audio output for embedded video, specialized presentation remotes, or accessibility accommodations), they must submit a formal Resource Request.

Submission & Deadline

All resource requests must be submitted by email to competition@uottawaess.ca **before the end of the design period**. Requests submitted after this deadline or on the day of the event cannot be guaranteed.

External Resources

Team-Provided Presentation Materials

- Competitors are responsible for bringing any additional visual or display materials they plan to use to support their technical briefing such as physical models, hard-copy posters, technical diagrams, or demonstration props.

Permitted Equipment, Adapters & Demonstration Items

- **Physical Models & Props**: Physical prototypes, 3D-printed scale models, or non-hazardous mechanical components are permitted in the presentation room, provided they fit on the standard presenter table, do not require live electrical grid draw exceeding standard 120V outlets, and pose no safety hazards.
- **Backup Laptops & Display Adapters**: While presentation files are pre-loaded on the provided room computer, teams may bring a personal backup laptop along with standard display adapters (e.g., USB-C to HDMI, DisplayPort to HDMI). These may be used as emergency backup equipment in the event of a primary computer failure, subject to Competition Lead authorization.
- **Presentation Remotes & Peripherals**: Competitors may bring and use their own wireless presentation remotes (clickers) or pointer devices, provided they are plug-and-play and require no special driver installation on the host presentation computer.

Competition Durations

- **Design Period**: 8:00 am to 12:00 pm, on-site. Teams will choose their topic, conduct research, and prepare their presentation deck. An abstract (maximum 200 words) and presentation deck must be submitted by 12:00 pm to **internal@uottawaess.ca**. Presentation files will be preloaded during the lunch period.

- **Presentation Session**: Beginning at 1:15 pm. Each team will have 10 minutes to deliver its presentation, followed by up to 10 minutes of questions from the judges.
- **Question Period**: Judges only may ask questions during the question period immediately following the presentation.
- **Competition Duration**: Each team will be allocated a maximum of 20 minutes total, including the presentation and question period.
- **Time Usage Penalty**: Although presentations at OEC 2026 are prepared in advance and use a 17 to 20 minute presentation format, the under-use penalty from the 2025 rules remains in effect. Teams whose combined presentation and question period conclude more than three (3) minutes before the allotted time will receive a deduction of five (5) points per minute (or portion thereof) below the three-minute threshold.

Judging and Scoring

For your reference, the judging matrix is provided below.

Introduction to Topic	Introduction to Topic: How well you start your talk, set up the problem, and grab the judges' attention. Clarity of Topic & Background: Explaining the main Appropriate Level of Language: Using simple, clear words instead of heavy tech jargon, while keeping the facts right. Audience Engagement & Interest: Hooking the listeners early and making them care about your solution. Accuracy of Explanation: Making sure all your basic facts, science, and math are correct and trustworthy. Scoring Note: The judges give one total grade for the whole team, not separate grades for each person.	/ 25
Critical Analysis	Environmental Analysis Social Analysis Economic Analysis	/ 30
Written Abstract	Concise and Captivating Introduction of Topic: A great summary that explains the big problem, your solution, key risks, and real-world impact.	/ 5
Presentation	Voice Articulation and Timing Visual Aids Response to Questions	/ 40
Penalties	Plagiarism Insufficient Citation Documents Received After Deadline Absent Team Member	-50 -50 -50 -25
Total		/ 100

Additional Penalties

Grammar and Spelling Errors

- **Deduction Rate:** One (1) point per error, applied individually to every distinct grammatical or spelling mistake.
- **Scope:** This penalty applies to all written competitor deliverables, including both the submitted abstract and the presentation slides.

Late Abstract Submissions

- **Deduction Rate:** -50 per the rulebook.