



AMERICAN SOCIETY OF CIVIL ENGINEERS® CONSTRUCTION INSTITUTE STUDENT SYMPOSIUM COMPETITION

RULES AND REGULATIONS



TABLE OF CONTENTS

Section	on 1: Welcome Statement	(1)
1.1	Ethics and Required Conduct	(1)
1.2	Safety	(1)
Section	on 2: Competition Overview	(2)
Section	on 3: Participation and Eligibility	(3)
3.1	Team Member Requirements	(3)
3.2	Team Requirements	(3)
3.3	Student Chapter Eligibility	(3)
Section	on 4: Challenge Overview	(4)
4.1	Presentations	(5)
4.2	Team Resources	(6)
Section	on 5: Submission Details	(7)
Section	on 6: Student Symposium Scoring and Recognition	(7)
Section	on 7: Competition Schedule	(8)
Section	on 8: Judging	(9)
Scorii	ng Rubric for Judges	(Appendix A)
Eligib	ility for Student Symposium Competition	(Appendix B)
Inten	t and Eligibility Form	(Appendix C)
How	to Navigate Folders and Upload forms	(Appendix D)

Section 1: Welcome Statement

The American Society of Civil Engineers (ASCE) and the Construction Institute (CI) support and encourage a fully inclusive culture that celebrates individual uniqueness, engenders a sense of belonging, and promotes equitable opportunity for all people to participate in the ASCE CI Student Symposium Competition. (See ASCE Policy statement 417 - Justice, equity, diversity, and inclusion.) Participation should be inclusive, open, and fair to all interested and eligible students. Welcome!

1.1 Ethics and Required Conduct

This competition is to be conducted with the highest regard for ethical responsibility per <u>ASCE's Code of Ethics</u>. All members of ASCE, regardless of their membership grade or job description, commit to all of the ethical responsibilities in this Code. All ASCE members should make themselves familiar with ASCE's Code of Ethics.

All participants shall act professionally and respectfully at all times. Failure to act appropriately may result in sanctions, disqualifications, and loss of invitations to future symposia competitions or Society-wide competition finals. The inappropriate use of language, alcohol, or materials, uncooperativeness, and general unprofessional or unethical behavior will not be tolerated.

1.2 Safety

Safety is the highest priority and risk of personal injury will not be tolerated. Judges and student symposium hosts, including Safety Officers, are empowered to stop or prohibit an activity which is deemed to be hazardous, or to postpone an activity until the hazard is rectified. All participants are responsible for complying with all campus/venue protocols and procedures, including those deemed necessary for the public health purposes.

Given continually changing environments, virtual competition provisions may be provided and may be activated in coordination with ASCE.

If there is a thunderstorm, all outdoor activities shall cease and may not resume until at least 30 minutes have passed since the last observed occurrence of thunder or lightning.

Section 2: Competition Overview

CI is one of nine institutes that represent ASCE in providing professionals, students, and organizations the resources to enhance skills, grow their network, and shape the future of the civil engineering industry. The vision of the Construction Institute is to be a leader in promoting quality in construction.

CI has plans to be a leader in institute participation among ASCE student conferences, and with help from the institute's Young Professionals Council (YPC), a competition was developed to provide a construction focused experience for engineering students. CI hopes to challenge students to work *towards* something and not just *on* something; showing that project management is less about managing projects and more about leading people. With CI's devoted network across the country and with the assistance of ASCE student symposium hosts, CI is confident that students will get the most out of the Construction Institute Student Symposium Competition. This is the fourth year offering this competition and it is being held as a pilot at select student symposia.

CI hosts an additional student competition annually to provide an opportunity for students to be fully immersed in the construction industry before graduation. This program is called Student Days, and it is held each summer over a 5-day weekend. Each year upwards of 150 students nationwide apply to attend Student Days while only 40-50 are selected to attend. The event is designed to be fun and engaging, while challenging and educational, and contains several networking and social events, a project competition requiring various deliverable submissions, and jobsite tours as well. Student Days is the inspiration for Cl's symposia competition, yet this challenge is scaled down to fit into a one-day session. The project will give students a taste of what Student Days is like, and it will be a fun and educational challenge that will have participating teams dive into all aspects of civil and construction engineering. This year, one individual from the winning team at each student symposium will be invited to bipass the application process to attend Cl's flagship event in August 2024, Student Days in Los Angeles, California.

Section 3: Participation and Eligibility

3.1 Team Member Requirements

Team members must be undergraduate students, enrolled during all or part of the current competition academic year, members of an ASCE Student Chapter in good standing, registered participants of the student symposium, and Society Student Members of ASCE. (Society student membership is free; be sure to join.)

3.2 Team Requirements

It is an expectation that teams will reflect diversity, foster an inclusive culture, and treat everyone with dignity and respect.

Only one team per ASCE Student Chapter may compete in the competition. A team may consist of up to four (4) students. A student chapter may compete in only one ASCE Student Symposium per year. Each team must designate one team captain. Conference assignments and student symposium hosts are listed here.

ASCE Student Chapters hosting symposia may invite Official Guest teams, which are teams from Region 10 colleges or universities that have an official ASCE Student Chapter that is not yet assigned to any Student Conference. Official Guest teams may compete in only one student symposium per year and are eligible to place and receive awards at the student symposium competition (if they meet the other requirements, including eligibility requirements). ASCE Student Services shall be notified by the ASCE Student Symposium host school of an Official Guest team prior to the start of the student symposium via e-mail to student@asce.org.

An ASCE Student Chapter team wanting to enter a competition that is NOT being hosted at their assigned student symposium may request to compete at another ASCE Student Symposium as a guest team. If the student symposium host grants permission, the guest team may compete. The guest team will be scored but shall not win awards at the student symposium competition.

3.3 Student Chapter Eligibility

Eligibility criteria for the Student Symposia Competitions are shown in Appendix B.

Teams shall submit an Intent and Eligibility Acknowledgement Form (see Appendix C), no later

than 5:00 p.m. Eastern on November 3, 2023. By completing this form, a student chapter states their intent to have a team participate in the competition at their assigned student symposium as well as acknowledges the eligibility requirements for student symposium competition participation. The form must be signed by the Team Captain, ASCE Student Chapter Faculty Advisor, ASCE Student Chapter President, and Competition Team Faculty Advisor (if different than ASCE Student Chapter Faculty Advisor).

The team captain shall upload the Intent and Eligibility Acknowledgement Form to ASCE's Cerberus files transfer protocol (ftp) server. Refer to Appendix D for upload directions.

ASCE will send student chapters an online CI competition team member form to complete by February 1, 2024. The following information will need to be provided on the team member form:

- Each team member's first and last name (one designated as captain)
- Each team member's ASCE ID number

Section 4: Challenge Overview

Participating students will receive a focused scope of work for one real-world engineering project and will then be tasked to solve various construction related challenges related to that project. Performing calculations, writing short answer responses, or gathering other forms of documentation will be required for each challenge.

The real-world project documents for the scope of work will be handed out (digitally) during the scheduled time slot at the student symposia. No work or information will be given out to registered teams prior to the competition weekend, so the whole competition will take place at the symposia. The competition duration is three hours plus one additional hour for a presentation component.

The Construction Institute Student Symposium Competition tasks participating students with several real world construction engineering challenges to which teams will be asked to provide written, numerical, or diagrammatic responses. Sample projects will entertain all sectors of civil engineering, while the individual challenges will be related to: Traffic Control / Site Logistics, QA/QC, Safety, Public Outreach, Environment, Risk Management, and other

project management and engineering considerations. Each student team shall act as a construction engineering firm, and these responses shall be directed and delivered professionally, similarly to how a real company would address an owner requesting additional technical information from a firm during the pre-construction or proposal phase of a job.

For example, student teams will be given a plan sheet that illustrates the construction of a new roadway. A few tasks could be: 1) Estimate the quantity of asphalt pavement needed and provide a total price for the construction (*numerical response*); 2) Illustrate a proposed traffic control plan to have traffic switch lanes when the southbound lane is closed (*diagrammatic response*); 3) Describe a proposed public outreach plan to gain insight on public concern regarding the project and its demands (*short response*). All challenges where calculations are required shall contain the work to support the answer in the response. If the written work for a calculation is not provided, the answer will not be scored.

The CI YPC reserves the right to add to, clarify, or modify the project documents and requirements as seen fit (i.e. issue addendums). If changes are made during the competition, addendums will be posted on ASCE's Cerberus ftp server (a secure link will be distributed prior to the symposium). In the proposal stage of a real world project, an addendum will be issued by the Owner to the Contractor during the bidding process and as such, addenda are intended to become part of the contract documents when the construction contract is executed. Therefore, addendums may be used in the Student Days event as well as the student symposium competition to reinforce the realism of the challenge.

4.1 Presentations

General requirements

Viewership: only the team presenting and those from their student chapter may be present in the room during presentations. A judge will inform all teams of their time to present at the end of the allotted time period given to complete the written portion of the competition. Then all teams may be dismissed, but be ready outside of the room, five minutes prior to their start time. Team's may work on their presentations inside the same room or outside in any public area. If a team chooses to stay in the work room, they will have to leave prior to other presentations starting.

- Deliverables: There are no deliverables required. A PowerPoint presentation can be created for the delivery of the presentation. If used, the presentation should be stored on a flash drive or file sharing account to then be pulled up on the host computer.
- Allotted Time: Presentations should be no more than 10 minutes but no less than 8 minutes. Judges will stop teams at the 10-minute mark.
- Speaker requirements: Each team member is required to speak for 1-minute minimum.
- Note cards and resources used: Students may use note cards or other tools to help deliver information in a non-distracting way.

Topic Requirements

- Company Qualifications: Teams shall create qualifications and positions/responsibilities
 for themselves as if they were a real contracting company delivering a presentation to
 an owner. Qualifications and past project history are essential elements for an owner's
 decision in awarding a project.
- Management Practices: Elaboration on the management practices including but not limited to, QA/QC, Health, Safety, and the Environment, Risk Management,
 Subcontractor Selection, Public Relations/Communication, etc.
- Technical Approach: Describe the process or flow of construction for how the assigned project would be constructed as it relates to the questions/problems given in the written portion of the competition.

4.2 Team Resources

Considering the format and objective of the competition, students shall come prepared with any materials they deem necessary to be successful. Consider the competition as "open book"; where anything goes in the creation of the deliverables. The only limitation is the competition may only be participated by the team members as defined by Section 3. Other students and advisors are not permitted to help the competing teams. All participating students should come prepared with a laptop. Laptops or computers will not be provided at the competition. One per team is sufficient, but it is recommended that each participating student brings a laptop.

Section 5: Submission Details

Project deliverables will be turned in digitally during the competition at the end of the allotted time period. The deliverables and responses shall be gathered in one PDF package and uploaded to a secure submission link for ASCE's Cerberus ftp server before the competition time is over. ASCE will provide each team captain and faculty advisor a secure submission link the week of the competition. If the time stamp on the sent PDF containing the responses is over the competition end time mark, the team's submission **will not** be graded. This deduction is to emphasize the real-world challenges that firms must abide by when turning in information to an owner.

This document, also available on the <u>ASCE Student Conferences</u>, <u>Symposia</u>, <u>& Competitions page of the ASCE Website</u>, defines the 2024 ASCE Construction Institute Student Symposium Competition Rules. There will be no Requests for Information (RFI), as the entirety of the competition will take place during the symposia. Any additional information or clarifications needed about this document shall be emailed to <u>student@asce.org</u> (subject line: CI Student Symposium Competition Question). Major clarifications and changes to the rules will be publicly published on the ASCE website as a revision to the Rules document.

Section 6: Student Symposium Scoring and Recognition

Teams will be scored based upon the judge's discretion using the rubric in Appendix A. Each problem or challenge that is given to the teams to respond to will be given a description of what type of question it is, and whether it is content based or completion based for scoring.

Using the scoring rubric, teams will then be able to see how each problem will be scored and the weight applied to it.

The top scoring teams will receive points that may be applied to symposium overall student chapter scoring if the student symposium has an overall student symposium winner (to be determined by the symposium host chapter). In addition, the first, second, and third place teams and their members will receive recognition awards. The breakdown of this competition's "worth" or the amount of points going to the student chapters' overall symposium score is to be determined by the student symposium host planning committee.

Section 7: Competition Schedule

- Release of CI Student Symposium Competition Rules and Regulations 9/5/2023
- Intent and Eligibility Acknowledgement Form due by 11/3/23 at 5:00 p.m. Eastern
- CI Competition Team Member form due by 2/1/2024 at 11:59 p.m. Eastern
- Symposium dates vary early March through end of April 2024
- Awards for 2024 ASCE CI Student Symposium Competition Student symposium awards ceremony

The ASCE Construction Institute Student Symposium Competition should take no more than four hours of students' time during the symposium weekend. Host schools should provide adequate information on the room assignments to give teams plenty of notice so they can arrive on-time. The first 30 minutes will be used for announcements and set-up. The project materials will be passed out (digitally) after all teams have taken their seats and announcements have been made. The competition will be held in a single classroom or event hall determined by the host school. A room with small tables to accommodate teams of four would be ideal. Deliverables will be turned in electronically prior to the end of the 90 minutes. Presentations will begin after an additional hour for teams to prepare with the order determined randomly by the head judge.

A sample timetable could be as follows:

Student Symposium

CI Student Symposia Competition - Saturday (10:00 AM - 2:00 PM EST)

10:00 AM – Teams arrive at XYZ Hall 321

10:15 AM – Announcements

10:30 AM – Link to Project Documents and Challenges Accessible on Cerberus

11:59 AM - All responses must be turned in using the team's individual Cerberus link

12:00 PM – Judges select presentation order, teams prepare their presentations

1:00 PM – First team begins presentation (arrive 5 minutes prior to presentation time slot) wait outside of room door until a judge invites your team in.

Section 8: Judging

CI YPC will assist the host planning committee in finding a minimum of three (3) judges for reviewing project deliverables. The panel will be composed of industry professionals and/or those with involvement in CI. Judges will have the authority to score teams based on their individual interpretation of the rules and rubric criteria with the guidance of the CI representative on campus or virtually. The CI representative will be responsible for ensuring the judges are competent in understanding the scope of work in regards to the construction projects.

Scoring data shall be recorded for each team that competes. Official judging forms shall be used and will be provided to the judges by the CI representative. The information from the judges' data sheets is entered into an official scoring spreadsheet which tabulates the official results of the competition. A summary report will be provided to each symposium host for their records and distribution to the individual competing student chapters if they wish to do so. At the end of the student symposium competition, the head judge shall promptly upload the completed official scoring spreadsheet for the student symposium competition to ASCE's Cerberus ftp server. ASCE will provide the head judge a secure submission link for ASCE's Cerberus ftp server in February 2024.

Scoring Rubric for Judges	Overall Score	
Team (Company) Name: Student Chapter:	Challenge Make-up Breakdown	
Numerical Responses and Calculations		
Challenges that require a numerical calculation or answer will be		
scored:		
1 pt. for a good faith effort in the response	20%	
2 pts. for an answer within 25% +or- of the correct answer		
3 pts. For an answer within 10% +or- of the correct answer Short Response		
Challenges that require a descriptive response under 500 words:		
1 pt. for a good faith effort in the response	20%	
3 pts. for a reasonable and logical engineering solution		
Diagrammatic or Pictorial Response		
Challenges that require a diagrammatic response in one page:		
1 pt. for a good faith effort in the response	20%	
3 pts. for a reasonable and logical engineering solution		
Presentation Delivery		
Volume and articulation, eye contact, enthusiasm		
1 pt. for a good faith effort in presentation delivery	20%	
2 pts for good articulation and transition from speaker to speaker		
3 pts. for good enthusiasm, articulation, and professionalism		
Presentation Content		
Understanding of project and engineering approach to each problem		
1 pt. for basic walkthrough of each problem		
2 pts for understanding of problem cause and effect		
	20%	
3 pts. for thorough description of problems, understanding of		
solutions, and detailed response to construction engineering purpose behind the technical approach and project management plan for each		
problem.		
proofens.		
Deductions (Late submission)	Submission	
,	Forfeited	

APPENDIX B – ELIGIBILITY FOR STUDENT SYMPOSIUM COMPETITION

Invitations to Student Symposia Competitions are a privilege, not a right. Failure to act professionally can result in letters of reprimand, mandatory behavior management plans, and loss of invitations to further competition for individual institutions and/or entire conferences.

Student Chapter Eligibility for Student Symposium Competition

The following qualifications are required of all ASCE Student Chapters to compete at the Student Symposia Competitions:

An ASCE Student Chapter must:

- 1. Be in good standing with ASCE:
- a. Have paid their annual dues, as received by ASCE, no later than the start of their Student Symposium.
- **b.** Have submitted their student chapter's full Annual Report or EZ Annual Reporting Form **no later than February 1, 11:59 p.m. EST.**

Questions regarding eligibility should be directed to student@asce.org.

2024 ASCE Construction Institute Student Symposium Competition Statement of Intent and Acknowledgement of Eligibility Requirements for Student Symposium Competition Participation

Teams shall submit an Intent and Eligibility Acknowledgement Form, **no later than 5:00 p.m. Eastern on November 3, 2023.** By completing this form, a student chapter states their intent to have a team participate in the competition at their assigned student symposium as well as acknowledges the eligibility requirements for student symposium competition participation. The form must be signed by the Team Captain, ASCE Student Chapter Faculty Advisor, ASCE Student Chapter Faculty Advisor).

The team captain shall upload the Intent and Eligibility Acknowledgement Form to ASCE's Cerberus ftp server. The main folder contains a sub-folder for each Student Symposia. (Note: This is a pilot competition. Please verify that your student symposium host is conducting this competition prior to completing this form and if not, consider the guest team option.) This is a Read/Write link (no delete). Refer to Appendix D – How to Navigate Folders and Upload Intent and Eligibility Acknowledgement Form for directions.

File names shall be in the form of "School Name – CI Intent and Eligibility Acknowledgement Form Year" (example: George Mason University – CI Intent and Eligibility Acknowledgement Form 2024).

Click this link to submit the Intent and Eligibility Acknowledgement Form

https://upload.asce.org/public/folder/iqvHuvv_rk6NiYAOutKwyw/Construction%20Institute%20Student%20Symposium%20Competition

Late and/or incomplete submission of this form may be subject to deduction.					
School/University Name					
ASCE Student Chapter Name					
Assigned Student Symposium Name					

Statement of Intent

It is the intent of our student chapter to have a team participate in the 2024 ASCE Construction Institute Student Symposium Competition at our assigned Student Symposium.

Acknowledgement of Eligibility Requirements for Student Symposium Competition Participation

ASCE CI Student Symposium Competition Team Captain (TC) and ASCE Student Chapter Faculty Advisor (FA), please initial next to each statement below to indicate your acknowledgement and understanding of that item. If you have questions about any statement, please contact us at student@asce.org.

			TC	FA
1.	 We have read the 2024 ASCE CI Student Symposium Competition Rules and understand the following: 			
	a.	The team member requirements per Section 3.1 of the Rules.		
	b.	The team requirements per Section 3.2 of the Rules.		
	C.	The student chapter eligibility requirements to participate in the <u>ASCE</u> <u>Student Symposium Competition</u> per Appendix B of the Rules, specifically:		

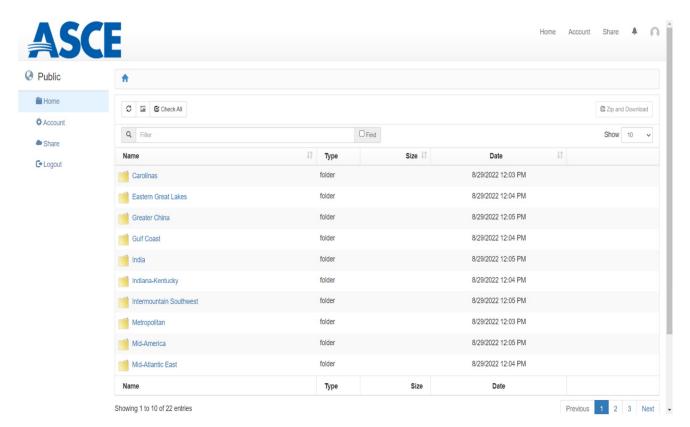
An ASCE Student Chapter must: **1.** Be in good standing with ASCE: a. Have paid their annual dues, as received by ASCE, no later than the start of their Student Symposium. (Please note that some educational institutions managing student chapter finances may require long lead times to generate and send payments. ASCE strongly recommends that these requests are generated by December before you leave for winter break.) b. Have submitted their student chapter full Annual Report or EZ Annual Reporting Form no later than February 1, 11:59 p.m. EST. 2. Submitting a student chapter full annual report is typically the responsibility of the student chapter officers. As team captain and faculty advisor, ASCE suggests that you connect with your student chapter officers as early as possible to discuss the annual report and deadline. I have read and understand the student symposium competition information stated above, including eligibility requirements for student symposium competition participation. Please print names and email addresses clearly. This information will be used to send the CI Competition Team

Member form to team captains and faculty advisors in January 2024.

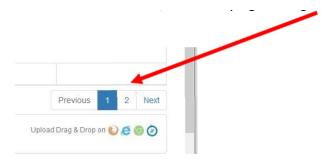
Team Captain	ASCE Student Chapter Faculty Advisor		
Date	Date		
Email Address	Email Address		
Signature	Signature		
ASCE Student Chapter President	ASCE CI Student Symposium Competition Faculty Advisor (if different than ASCE Student Chapter Faculty Advisor)		
Date	Date		
Email Address	Email Address		
Signature	Signature		

Appendix D – How to Navigate Folders and Upload Intent and Eligibility Acknowledgement Forms

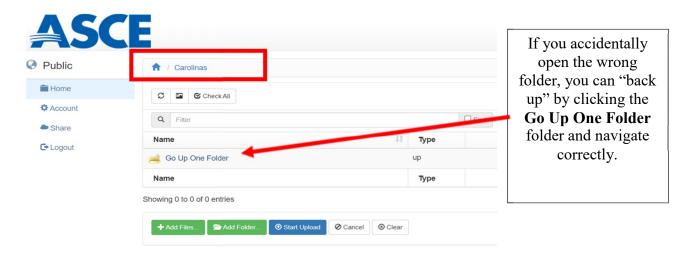
When you first arrive at the upload site, you will see folders labeled for each Student Symposium:



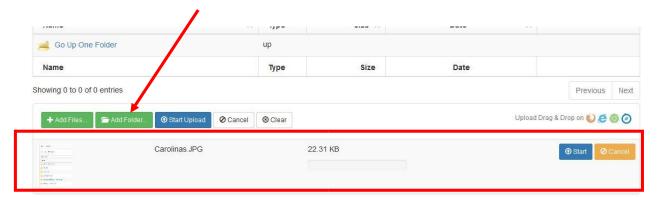
Locate your Student Symposium and click the folder to open it. If you do not see the name of your Student Symposium, click the page navigation to move to the second page:



When you have opened the folder for your Student Symposium, double-check that you are in the correct location before you begin uploading your files (In this case, **The Carolinas** Student Symposium):

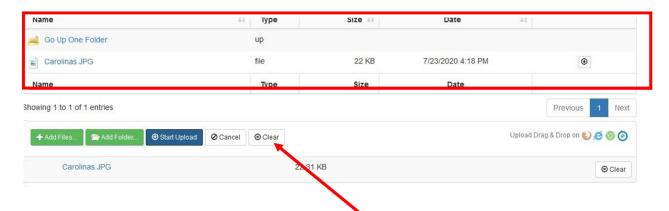


When you have confirmed that you have navigated correctly to the proper folder, you can either click the **+Add Files** button and then browse to find the files to upload, or drag and drop files to the area directly below the **+Add Files** button.



The selected (or dragged and dropped) files will appear in the upload area. To upload the file into the folder, click **Start Upload**.

When the file has been successfully uploaded, the name of the file will appear under the **Go Up One Folder** folder



To clear the uploaded file from the upload area, click Clear.

Need help?

If you uploaded a file to the wrong folder, or want to replace an uploaded file with a corrected version, **s**end an email to jupmeyer@asce.org and ask that the incorrect file be deleted. Include both the location (folder path) and **exact name** of the file you want deleted. (Files cannot be moved – you will have to upload the file again to the correct folder after it has been deleted).

Reminder

Please ensure you have uploaded to the correct folder for your symposium and school. Submissions outside of your own symposium folder will be considered non-responsive and will not be considered.