





2024 CWEA
STUDENT
DESIGN
COMPETITION

Competition Overview

Each year, CWEA hosts a competition for undergraduate and graduate students to design and present solutions to problems relevant to all aspects of environmental engineering, including the water/ wastewater industry.

Teams prepare a written report and oral presentation that are evaluated by industry professionals in the Chesapeake region.

The winning team is awarded <u>a \$1000</u> scholarship and a travel allowance up to <u>\$4000</u> to compete at the national WEFTEC Student Design Competition in New Orleans in October 2024.

Fall 2023

Form your team and coordinate with CWEA to identify a qualifying problem statement

Spring 2024

Brainstorm solutions to your problem, conduct an alternatives analysis, and develop preliminary designs

May 2024

Submit your final design report and present your team's solution at the CWEA/CSAWWA Spring Meeting

October 2024

The winning team will present their solution at the WEFTEC national competition for a chance to win additional prizes!

INTERESTED IN LEARNING MORE?

For more information, please reach out to Tom Howard (tom.howard.water@gmail.com) or go to www.chesapeakewea.org/sdc.php





CWEA Student Design Competition Frequently Asked Questions

Who can participate?

Any students enrolled in undergraduate or graduate programs in the Chesapeake region (Delaware, Maryland, DC, and Virginia).

What are teams expected to submit to CWEA for scoring?

Teams competing in the student design competition are expected to identify a problem related to the water/wastewater field, submit a preliminary design report, and present their solution at the CWEA/CSAWWA Spring Meeting. A panel of industry professionals will review and score each team's design report and oral presentation.

What types of projects have teams done in the past?

Prior teams have developed conceptual/preliminary designs for:

- Stormwater management practices for a pumping station site
- Secondary treatment processes at a WWTP
- Sedimentation and filtration unit processes at a WTP
- Coastal and climate resilience using nature-based features to protect infrastructure.

Teams may use their creativity to identify problems that are interesting and relevant to them. Please coordinate with the CWEA Student Design Competition Committee to identify qualifying projects.

Can a submission double as a capstone project?

Yes, several teams have submitted projects that have also been the focus of their senior design/capstone projects!

For more information, please reach out to Tom Howard (tom.howard.water@gmail.com) or go to www.chesapeakewea.org/sdc.php