

1 S T A N N U A L



MIDWEST DESIGN COMPETITION

2020

APRIL 6, 2020
MONONA TERRACE
MADISON, WI

**\$5000 IN
AWARDS AND
PRIZES**

**PRIZES INCLUDE:
GWS SERVICE TRIP
TO COSTA RICA**
(\$4,000 VALUE)

The Midwest Student Design Competition is intended to promote 'real world and hands on' design experience for students interested in pursuing an education and/or career in water/wastewater engineering and sciences field. This year, the Midwest Student Design Competition on **Monday, April 6, 2020** in Madison, Wisconsin at the Monona Terrace Convention Center. This is a unique opportunity for students at the college level to demonstrate their engineering skills and practices by researching and preparing a design for a water quality-based project and presenting their project to water industry professionals.

There are three categories of Student Design Competitions available for students:

💧 WEF Wastewater Design 💧 WEF Environmental Design 💧 Global Water Stewardship

Register Online at www.cswea.org/student-yps/design-competition/

All students & professors will receive complimentary registration to the CSWEA 25th Annual Education Seminar on April 7, 2020.

REGISTER TEAMS BY JANUARY 31, 2020

SPONSORED BY:





2020 Student Design Competition

COMPETITION GUIDELINES

INTRODUCTION: The Midwest Student Design Competition is intended to promote “real world and hands on” design experience for students interested in pursuing an education and/or career in water/wastewater engineering and sciences field. This year, the Midwest Student Design Competition will be on **Monday, April 6, 2020** in Madison, Wisconsin at the Monona Terrace Convention Center. This is a unique opportunity for students at the college level to demonstrate their engineering skills and practices by researching and preparing a design for a water quality-based project and presenting their project to water industry professionals.

There are three categories of Student Design Competitions available for students:

- WEF Wastewater Design
- WEF Environmental Design
- Global Water Stewardship

WEF Student Design Competition: The Water Environment Federation (WEF) categories at the Midwest Student Design Competition, feed into the national WEF competition at the WEFTEC conference on October 4, 2020 in New Orleans, Louisiana. The WEF competition requires teams of students to design and present a program meeting the requirements of a problem statement, developed by the students. **There are two levels of competition**; a conventional Wastewater Design category which includes traditional wastewater design projects and an Environmental Design category which would include contemporary engineering design topics like sustainability, water reuse, wetland construction and Engineers Without Borders projects.

The WEF Student Design Competition is designed to be a function of the WEF Student Chapters program however being part of a WEF Student Chapter is not required to compete at the Midwest Student Design Competition. However, the winning teams will have to ultimately be WEF student members to participate in the national WEF competition at the WEFTEC conference.

Global Water Stewardship Student Design Competition: The Global Water Stewardship (GWS) category at the Midwest Student Design Competition requires teams of students to design and present a project meeting the requirements of the real-life problem statement for the town of La Fortuna, Costa Rica titled “Global Water Stewardship: La Fortuna, Costa Rica”. Winning teams will receive a stipend of up to \$1,000/student for travel and lodging expenses to accompany GWS representatives on their August fact-finding trip to Costa Rica and to present their project to local community representatives.

WORKLOAD: The project should include a problem statement, a development of alternatives and a recommended solution. The depth of the effort should be comparable to preliminary design. A key criterion in the judging of the competition is the manner and level of effort spent in evaluating the alternatives. Students are expected to work with little assistance from an advisor and/or professor, and the students are expected to work together as a team to find a solution to their problem. Students may use whatever references or resources they choose.

REQUIREMENTS: Teams may consist of more than four members, but only four students may present at the competition. Student teams will compete through oral presentations, in powerpoint format. Each presentation will be 20 minutes followed by a 10-minute question and answer period.

The winning teams of the WEF competition categories will be required to submit a design notebook complying with the WEF competition requirements set forth in the WEF design competition entry guidelines. These guidelines will be provided to competitors when published, usually in May.

TIMELINE: January 31, 2020: Submittal of the Entry Form for the 2020 Student Design Competition is due. Submit to Mike Holland at mholland@kishwrd.com or online at www.cswea.org/students-yps/design-competition

April 6, 2020: CSWEA Design Competition will be held in Madison, Wisconsin at the Monona Terrace.

SELECTION: Representatives from wastewater industry will judge the design competition. The results of the competition will be issued to participants at the conclusion of the competition.

AWARDS:

WEF Competition Categories: The winning teams (max. of 4 members) from each category of the WEF competition will receive free registration from WEF to the WEFTEC conference in New Orleans, Louisiana (October 3 -7, 2020). Stipends for travel and lodging expenses to New Orleans vary depending on the student's respective WEF Member Association (MA).

Prizes for the winning team at the national WEFTEC conference will vary depending on sponsorship opportunities. Monetary awards typically provided by WEF for the top 4 design teams are: 1st place \$2,500, 2nd place \$1,500, 3rd place \$1,000, 4th place \$750.

Global Water Stewardship Category: The winning team (max. of 4 members) from the Global Water Stewardship category will receive a travel and lodging stipend of up to \$1,000/student (which is typically sufficient to cover travel and lodging) to accompany the next GWS team trip to Costa Rica for site analysis and investigations.

ARRANGEMENTS: Many teams may wish to stay overnight the night before or after the competition. Each team that competes in the competition will be reimbursed up to \$500.00 to cover travel and lodging expenses. Teams are asked to manage their own budgets and provide receipts for reimbursement. If teams need assistance in making arrangements, please contact Mike Holland at the below email address.

FOR ADDITIONAL INFORMATION, CONTACT:

Mike Holland
Midwest Student Design Competition Chair
Email: mholland@kishwrd.com