

# 2024 - 2025 AIChE Student Design Competition Rules

Active AIChE Student Membership is required in order for solutions to be considered. All student members must login and renew their membership every year to keep it active. Students can join or renew online at <http://www.aiche.org/students/>.

1. The 2024 - 2025 Student Design Competition is designed to be solved either by a group of no more than four students working together.
2. A period of no more than **sixty (60)** days is allowed for completion of the solution. The finished report should be submitted to the faculty advisor within the 60-day period. Students & faculty advisors should include the date assigned and the date completed along with their signature on the competition entry form.
3. Assume that the problem statement contains all the pertinent data except for those available in handbooks and literature references. The use of internet, textbooks, handbooks, journal articles, and lecture notes is permitted.
4. Students may use any available commercial or library computer programs in preparing their solutions. Students using commercial or library computer programs or other solution aids should so state in their reports and include proper references and documentation.
5. **Chemical Engineering Departments, including advisors, faculty, or any other instructors, cannot provide technical aid specifically directed at the solution of the AIChE Student Design Competition.** For example, if the problem statement asks for students to design a hydrogen production process, faculty members should not be directly telling the students how to design this process or suggesting to them which process to use.
6. Students are permitted to ask generalized questions to faculty members and outside experts. For example, if students are designing a hydrogen production process and they have two production methods in mind, the students may ask a Faculty Member and/or professional with expertise in

hydrogen production about their experiences working with the different methods so that they can make an informed decision on which method to choose for their design. Students are also permitted to ask for assistance on how to use process simulation software.

7. AIChE has created a forum for participants to ask questions and receive guidance from a select group of professional AIChE member volunteers. All questions and answers shared in this forum will remain visible to all other participants, and no private messaging will be allowed. To be added to this forum your design professor must email [studentchapters@aiche.org](mailto:studentchapters@aiche.org) with the full names, email addresses, and titles (e.g. student or faculty advisor) of your faculty advisor and participating student(s).
8. **Students working on this problem are asked to not share or discuss the topic of this problem statement with other students from their university or from other universities while they are working on the problem.** Students should be aware that sharing the problem statement topic with students from other universities might be giving those other universities an unfair advantage in this competition, as those Universities may not have started their 60-day time limit yet.
9. Solutions will be graded on (a) substantial correctness of results and soundness of conclusions, (b) ingenuity and logic employed, (c) accuracy of computations, and (d) form of presentation.
10. Accuracy of computations is intended to mean primarily freedom from mistakes; extreme precision is unnecessary.
11. The design professor will choose the best solution or solutions, not to exceed two, to submit to AIChE for consideration in the contest. The design professor will upload no more than two candidate solutions. Design professors should use the 2024 AIChE Design Competition Entry Form to collect the information needed from each student (including name, AIChE Member ID, contact information and dates of problem assignment/completion).
12. The finished report must be in the required format and suitable for reproduction, that is, computer-generated and in pdf format. The

document should be written as an engineer making a report and recommendation to a client.

13. The competition rewards a strong use of graphics, plots, infographics, and tables for information conveyance. The report should include each of the elements in the “[Deliverables](#)” document.