



Qualifying Round

Updated: 3/2/2023

- 1. I have a question about eligibility. I was there last year as a participant and am still finishing up my degree in process technology. Am I still eligible to participate in this year's competition?**

Because process technology is typically a two-year degree program, a student may compete in the competition for more than one year if the student is currently enrolled in a process technology or instrumentation program and meets all other stated criteria.

- 2. What type of computer requirements do we need to meet (i.e., what size and resolution monitor)?**

The Qualifying Round will use a web-based Learning Management System to administer a test based on troubleshooting scenarios and related questions. Systran's Talent LMS is being utilized for the Qualifying Rounds of the competition. No simulator is required.

The primary specifications for using Systran's Talent LMS are Internet access (high speed recommended), and an Internet browser such as Microsoft Edge, Chrome, Firefox, or Safari, with pop-up blockers disabled. In general, there are no monitor size specifications for using Talent LMS. Two monitors connected to the computer is the preferred configuration.

NOTE: Teams selected to participate in NAPTA's Championship Competition will use a simulator from Simtronics, Inc. (the Dynamic Simulator System).

- 3. Do we need one or two monitors? Can we display on a big screen HD TV as well?**

You can use any monitor arrangement that suits your team's needs. However, you may want to have dual or large screen monitors to simultaneously view more than one of the items that will be supplied for the Qualifying Round (such as a detailed P&ID).

- 4. How will teams connect to the simulation program?**

You will need an internet connection to access the web-based Talent LMS during the Qualifying Round. You will not use a simulator in the Qualifying Round.

- 5. How long does the first round take on average? We need to book a computer lab.**

You should plan on booking at least five hours of computer- access time for your team's participation in the Qualifying Round.

- 6. The simulator program we use at our school is GSE Envision, with many refinery models. I was told that the troubleshooting simulator is a model by Simtronics. Will the students actually be running the simulator, or are they just seeing a snapshot of a graphics screen and then trying to troubleshoot from that? Or will they need to operate the simulator, and if so, how do we get access to the simulator needed for the testing? Is it just a download or is there a link?**

For the Qualifying Round, teams will view troubleshooting scenarios (which can include P&IDs) through a web-based Learning Management System and take a test, answering questions about the scenarios using the supplied information. See question #4.

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The Championship Competition will use the Simtronics simulator. Not everyone has this simulator, so teams selected to compete in the Championship Competition will attend a training session and have practice time on the simulator. San Jacinto College will provide enough computers to ensure all teams will have a chance to practice and become familiar with the system. For more details, you can view information about the simulator by visiting www.simtronics.com.

7. Will team members get to practice as individuals on the Learning Management System for the Qualifying Round, or are they only allowed to practice as a team?

*Early access to the LMS will be provided, prior to your competition date, so a technical person from the college (or location where the team will hold its Qualifying Round) is able to ensure that the LMS can be properly accessed at the location. Also, your team and/or individual team members will be able to view a sample test and become comfortable with how to use the LMS, although only 1 login will be permitted at any time. The actual troubleshooting competition test will not be made available until your scheduled competition date. The entire team must be together to compete on that date, using the 1 login credential provided. By giving a team or its members early access to the LMS and a sample test, the purpose is not to practice, so much as to learn about using the system. **The sample test content does not reflect the Qualifying Round test content.***

8. What steps are involved for students to access the LMS?

A document with a link and test login instructions will be sent to all coaches. The coach should share the link with a technical person at the college or other location to verify the LMS can be accessed through the Internet at that location.

9. Will the students get to practice on the LMS at only certain times of the day, or can they access the website and practice 24/7?

Access to the LMS is 24/7. The coach will be given a login for the team which will be used to log on to the LMS and complete the sample test.

10. Will team members be able to access the LMS individually?

The coach can distribute the provided link and login instructions for the LMS to the individual students, if desired. Keep in mind that only one (1) login will be permitted at any one time. As stated, the purpose of accessing the LMS PRIOR to your Qualifying Round competition date is to test whether the LMS will work at the designated Qualifying Round location, for team members to familiarize themselves with how the LMS works, and to complete the practice test.

11. Can we have four teams from the same campus participate in the Qualifying Round?

*Yes, you can field as many teams as you want to compete in the Qualifying Round, as long as each team's students are enrolled in your process technology or instrumentation programs and meet the other criteria (see page 1). **The same student cannot participate on multiple teams.***



12. If two of our school's teams score among the top 12, will both teams be allowed to participate in the Championship Competition?

Two teams from any one campus will be eligible to participate in NAPTA's Troubleshooting Competition Championship.

13. Can the Qualifying Round be conducted on a Saturday?

The Qualifying Round must be scheduled and be completed Monday through Friday from 8:00 AM to 8:00 PM Central Time.

14. Can teams from the same campus compete in the Qualifying Round on different days?

Yes, it is up to your school, your team, and your team's proctor(s) to agree on the Qualifying Round dates for your team.

15. What if the LMS does not work with our computer infrastructure?

While the LMS is compatible with most popular browsers in use today, you will be allowed to use an alternate location with computer and Internet access to participate in the Qualifying Round, if necessary. If any difficulties are encountered accessing the LMS, they should be identified during your practice phase before your competition date.

16. Is the LMS accessed via a website?

Yes, the web-based Systran Talent LMS will be used for the Qualifying Round.

17. What if I do not know who will serve as proctor yet?

Enter "To Be Determined" for all the proctor-related information fields on the registration form. You must designate a proctor by March 1, 2023, by emailing the proctor information to troubleshooting@naptaonline.org. This information is required in order to create a Learning Management System login for your proctor.

18. Can the team have students that have already graduated, but have not worked in a plant yet?

Students must be currently enrolled in a process technology or instrumentation program at your college during Spring 2023, in either a semester or quarter system.

19. When will we get further information?

This FAQ will be updated regularly on <http://www.naptaonline.org/events/tsc>. Also, information is currently posted on the troubleshooting web page. Read the rules. Nothing in this FAQ supersedes or changes the rules.



20. 2 years ago, the Qualifying Round was computer-based. If it is now paper-based, why does it need to be in a computer lab?

No information will be disseminated via hardcopy. All information will be accessed from the LMS only. The computer is needed to review the information and answer the test questions.

21. We have Envision at our school. Would we have to purchase a particular Simtronics Simulator?

No – Students should be familiar with how to use a simulator, including understanding how to read information on display screen, alarm screens, and trend screens. Students should be familiar with common responses such as silencing or acknowledging an alarm, placing controllers in different modes, starting and stopping equipment, and navigating between display screens.

22. Can you say which Simtronics model the competition will be on?

No – Students should work toward being proficient in troubleshooting skills and be able to apply them to any process.

23. Can the proctor be an instructor from another program?

Faculty or personnel from another college program can proctor the test. The proctor should not be an instructor in the process technology or instrumentation program or be in any way affiliated with the programs.

24. Will the computers need specific simulator software?

The Qualifying Round does not use a simulator program. The computer is needed for accessing scenario information and answering test questions in the LMS.

25. I have a student who completed the process technology program and has a degree. The student served as an alternate on a team for a previous year's competition. The student is currently enrolled in the instrumentation program. Is this person eligible to participate as a team competitor?

Per eligibility rules, all student competitors must be currently enrolled in a process technology, instrumentation, or other related program approved by the TSC Committee.

26. Why must we designate a floating alternate?

The 2023 team structure requires 3 team members. Additionally, a designated alternate must be named, who may serve as the alternate for multiple teams from your school. This allows your team to continue to participate, should one of the original team members need to drop out.

27. Can my team compete with only 2 members?

No – If your team should qualify to advance to the Championship Competition, 3 team members are required to participate.



28. Can a coach interact with their team during the break between exercises in the Qualifying Round?

Yes – Coaches may strategize with the team outside the competition room while they are on a break.

29. Can my team(s) be composed of all one gender (i.e., all female or all male)?

Yes – While diversity is encouraged, you are not restricted by any gender qualification as long as the team members meet the stated criteria.

30. Are the three Qualifying Round exercises going to be pulled from these 20 learning materials, or will it be similar exercises with the same type of equipment, but different scenarios?

The Qualifying Round exercises are not taken from these modules. The exercises are not released until competition day. You will receive access to a practice module. Please have your students practice as much as possible while the practice module in the LMS is available. The practice module and LMS will close at midnight on March 14th.

31. Due to COVID and other factors, my class population has dwindled. I have students who would like to compete but have not completed the recommended courses. Would the team be eligible to compete?

We recommend that colleges enter teams who have completed basic process technology courses and are enrolled in advanced coursework. Colleges may enter student teams that have not completed advanced courses in order to give them the experience of competing in the event.

32. Do I have to send in the team name now? Or can I send it later or change it? We are just now in the formation process and I would like for them to come up with the name.

Your team information, both team name(s) and team member names, must be submitted by the close of registration. Team names can be changed until the date of your Qualifying Round competition.

33. From my understanding, I can send in only 1 alternate per team, or a floating alternate that would be for both teams. Is that correct? I can't have a "pool" of 3 alternates, can I?

You can have one named alternate per team, or a floating alternate named between 2 teams. You cannot have 3 alternates for only two teams. Your alternate must remain with the team he/she is assigned to for the duration of the competition. See the example below.

As stated in the competition documentation:

Teams will consist of three (3) members plus an alternate. Schools may designate one floating alternate for their teams, or one alternate may be named for each team.

Team Composition and Selection

** A team will consist of three (3) students.*

** A named alternate (floating or assigned to a team) MUST be designated.*

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**The name(s) must be submitted with the team member names, and he/she must meet the same criteria to compete with the team.*

** Alternates MAY attend the TSC Championship Competition with their teams.*

To clarify:

For each team entered, an alternate must be named. This alternate may be assigned to one specific team or may be the alternate for two teams - what is called a floating, or shared, alternate.

The name of the alternate must be submitted along with the other team member names. In the case of a floating, or shared alternate, the person designated for this position will stay with the teams they've been associated with throughout all rounds of the competition.

As an example:

If a school enters 4 teams and opts to designate 2 floating alternates, their names must be submitted as: John Doe - alternate for Teams 1 & 2 and Jane Smith - alternate for teams 3 & 4.

Should teams 1 and 2 qualify for the championship competition, only John Doe would accompany teams 1 & 2, since he was the named alternate for those two teams. Since Jane Smith was the named floating alternate for teams 3 & 4, and neither of those two teams qualified for the Championship Competition, she would not attend.

The advantage of naming an alternate for each team is that the alternate is attached to one team and participates throughout the competition with that team, ensuring an alternate for every team in both competition rounds.

NOTE: If your team qualifies as one of the top twelve teams in the Qualifying Round, you will be invited to take part in the Championship Competition of NAPTA's Troubleshooting Skills Competition at the LyondellBasell Center for Petrochemical, Energy, & Technology on San Jacinto College's Central Campus in Pasadena, TX on April 21 – 22, 2023.



Championship Competition

Updated: 3/2/2023

34. Can my alternate attend the Championship Competition?

If your team(s) score high enough to win a place in the Championship Competition, your alternate(s) may attend if he/she chooses to do so.

35. I saw that an application called the Virtual Field Operator will be added to the Championship Competition. What is the Virtual Field Operator?

The Virtual Field Operator (VFO), developed by Simtronics, Inc., is an immersive 3D plant operating environment. With the VFO, users can navigate an operator around virtual units with a game controller, tracing flows and locating equipment.

According to the Simtronics website, users can view local gauges and panels to observe actual operating conditions, start and stop pumps, and open and close valves to interact with the process.

Troubleshooting teams selected for the Championship Competition will attend a VFO training session before the competition and will have an opportunity to familiarize themselves with its operation.

36. Are any funds provided to help with the travel costs of the teams that progress to the Championship Competition?

NAPTA will award a hotel stipend of \$500 to cover hotel costs for each team selected to enter the Championship Competition. Any remaining travel costs are the responsibility of the college whose team is selected for the TSC Championship Competition. Fundraising and industry sponsorship is encouraged. More information is given in the general documentation found online on NAPTA's Troubleshooting web page.

37. Is the Championship Competition split with inside and outside operators communicating on radios, or is everyone around one simulator screen?

In previous competitions, one exercise round required the teams to split up. One group worked as outside operators in a separate room at a separate station from the group working as console operators. Students should expect they will experience both.

38. How many teams are eligible to move into the Championship Competition?

Twelve teams will compete in the Championship Competition. See also FAQ Question #12.

39. Why was the competition format changed?

The competition was expanded to allow more students to compete in the event as a result of feedback from previous student competitors and coaches via surveys, face-to-face discussion, and other venues.



40. Will there be an opportunity to practice prior to the Championship Competition?

Please see answers to #6-10.

41. Is my alternate eligible to attend the Championship Competition?

Alternates may attend the Championship Competition with their teammates.

42. Why do I need to bring copies of my resume?

Industry representatives will conduct practice interview sessions with competitors as an activity and opportunity for students to practice related interpersonal skills. Students should bring multiple copies of their resume that can be provided to industry representatives. Industry representatives who desire to discuss potential employment with attending students will not be prohibited from doing so.

43. Are all teams invited to the activities on the first day of the Championship Competition?

Only the teams who qualify for the Championship Competition and their stated alternate(s) for those team(s) are invited to attend the Friday events. Everyone is invited to the Awards Banquet on the final evening of the Championship Competition. Tickets for the Awards Banquet can be purchased on the TSC web page or by emailing administrator@naptaonline.org.

44. Will all participating teams in both the Qualifying Rounds and the Championship Competition receive a certificate of participation for the TSC?

If requested, a link to an electronic certificate of participation will be forwarded to the coach to document participation in the Qualifying Round. Teams competing in the Championship Competition will receive certificates at the close of the event during the Awards Banquet.

45. Can the college invite members of its Industry Advisory Committee to the Championship Competition events?

Industry Advisory Committee members employed by NAPTA member companies are encouraged to attend the Championship Competition and assist as volunteers in various roles throughout both days. All volunteers from NAPTA member companies and educational partners need to preregister on the TSC web page.

Industry Advisory Committee members who are not employed by NAPTA member companies are welcome to attend during the "VIP Insider Look at the TSC" marketing event, which will allow for limited attendance by non-members. An invitation and registration is required. If you would like to have your Industry Advisory Committee members added to the invitation list, please email administrator@naptaonline.org.

Industry Advisory Committee members and others, whether NAPTA members or non-members, are welcome to purchase tickets to attend the Awards Banquet on the final evening of the Championship Competition. Tickets for the Awards Banquet can be purchased on the TSC web page or by emailing administrator@naptaonline.org.



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- 46. Are the TSC learning materials in alignment with the Simtronics SPM 100 software so our students can practice on the computer while using the learning material scenarios?**

The modules were developed under the PTSE grant using the Simtronics software. Some are paper-based using the software or company drawings. There will be screen shots of the simulation software that detail normal and abnormal operating conditions. All these exercises are open-source, free of charge, and downloadable.

To submit a question, email troubleshooting@naptaonline.org.