1.0 Overview

The 2021 NAPTA Troubleshooting Skills Competition (TSC) is a two-round competition:

- Qualifying Round
- Championship Round

Up to forty (40) teams from NAPTA member colleges from across the country will compete in the Qualifying Round vying to become one of the top ten schools to advance to the Championship Round.

Teams will compete using a PC-based dynamic process simulator on their home campus.

- The Qualifying Round Competition will take place during the week of April 5 – 9, 2021.
- The Finals Competition will take place virtually on April 23 – 24, 2021.
- Registration will open on December 1, 2020 and close on March 12, 2021.
- Registration is on a first-come, first-serve basis. The email date and time stamp will be used to validate your registration entry.
- Registration is limited to two (2) teams per college.
- Team member names do not need to be submitted at the time of registration.
  - Team names and team member names must be submitted no later than close of business on March 12, 2021. Each college may place two (2) teams in the Qualifying Round. Two teams from the same college may advance to the Championship Round based on the highest ten (10) team scores of all participating teams.

_**TRAVEL IS NOT REQUIRED TO COMPETE IN THE 2021 COMPETITION EVENT.**_

_**QUALIFY ROUND COMPETITION WILL TAKE PLACE DURING THE WEEK OF APRIL 5 – 9, 2021**_

2.0 Teams

Schools may enter two teams in the competition. The teams must meet the criteria below:

2.1 Description

- Teams consist of four students
  - one team captain
  - three team members
- An alternate CAN be designated for each team.
  - Their name must be submitted with the team member names, and they must meet the same criteria to compete.
- Students cannot participate on multiple teams.
- Teams may compete with three (3) members in the Qualifying and Championship Rounds of competition if alternates are not available.
Coach’s Information and Guidelines
Troubleshooting Skills Competition

- An alternate may be on standby for the Qualifying Round and Championship Competition if needed to serve as a regular team member.

**NOTE**
Coaches/instructors have discretion of team member selection to meet the student qualification criteria listed below.

### 2.2 Student Qualifications

- Must be currently enrolled in the Process Technology program at your college
- May be enrolled on a full or part-time basis
- Cannot be employed now or in the past in industry as an operator
- Students serving as co-ops or interns are acceptable

### 3.0 Qualifying Round

The Troubleshooting Skills Competition begins with a Qualifying Round. The team (or teams) from each school will participate in this round on their home campus. The Qualifying Round will be conducted with the use of a PC-based dynamic process simulator.

**NOTE**
PETROSILLS/SIMULATION SOLUTIONS WILL PROVIDE THE SOFTWARE PLATFORM AND EXERCISES FOR THE QUALIFYING ROUND OF COMPETITION.

### 3.1 Format

The Qualifying Round consists of three (3) troubleshooting scenarios. During each scenario, the team will work in a simulator-based process environment using a PC-based simulator.

Each scenario is timed. Time begins when the facilitator says to start.

- Scenario A 30 minutes
- Scenario B 30 minutes
- Scenario C 30 minutes

The scenario is complete when either the team leaves the competition area or the time expires.

The top ten teams based with the highest scores from the Qualifying Round, will compete in the Championship Competition. Teams not in competing rounds will participate in virtual activities designed to enhance their opportunity for employment as a Process Technician.

### 3.2 Process

As the coach, you will need to:

- Register your team(s)
- Work with PetroSkills to receive access to their software
- Practice, Practice, Practice
- Update the coordinator with your team name(s) and the names of the team members including your alternate(s) by the designated date.
3.3 Preparations

- Make sure teams have read the “2021 NAPTA Troubleshooting Competition Qualifying Round: Team Member Information and Guidelines.”
  - Check for questions from your team members
- Ensure the software is in place for practice
- Practice, Practice, Practice
- PetroSkills software will be made available for practice on Monday, March 15

**CAUTION**

Please ensure you get your team name and team member names to the coordinator by the due date of March 12, 2021.

Alternates may be present on standby for the TSC if serving as a regular team member.

3.4 Qualifying Round Competition Rules

1. Coaches are not allowed into the room where the Competition Rounds are conducted.
2. Teams may consult with coaches during breaks between rounds.
3. Team members cannot bring any outside materials into the room, including hard copy or electronic textbooks, notes, or information.
4. Backpacks, satchels, or similar items are not allowed into the computer center.
5. The team may not use any electronic devices (cell phones, tablets, watches, etc.) in the computer center. Team members must not use or wear any headphones, earbuds, or earpieces (like Bluetooth devices).
6. The team must follow all computer center rules (including food/drink, security, etc.) or the team may be disqualified.
7. Timed rounds start when the facilitator gives the command to begin.
8. Once the timed scenario starts, team members cannot leave the room. If a team member leaves for any reason, the team may be disqualified.
9. There will be a 15 minute break between the A, B and C scenarios. Team members must promptly return from the breaks.
10. The team must log out of the system at the completion of each scenario to demonstrate they completed the exercise.
11. Team members of the same team can converse with each other at a reasonable volume not disruptive to the other competing teams.
12. Team members must monitor their own time; the facilitator will not provide verbal time remaining notices. The facilitator will stop the team at the maximum time limit for each exercise.
4.0 NAPTA Troubleshooting Competition Championship Format

SIMTRONICS/SYSTRAN WILL PROVIDE THE SOFTWARE PLATFORM AND EXERCISES FOR THE CHAMPIONSHIP ROUND OF COMPETITION.

- The NAPTA Troubleshooting Skills Championship Competition will take place on April 23 – 24, 2021 in a virtual format on your home campus.
- Simtronics/Systran will provide the software and exercises for the Championship Rounds.
- The Championship Competition will consist of four (4) exercise rounds that are simulator-based; rounds will be timed.
- The competition will open with registration followed by a Q & A session on Friday, April 23, at 2:30 p.m. to be followed by the Industry Networking Hour.
- The Championship Round will take place Saturday, April 24.
- Teams not in competing rounds will attend learning sessions to enhance his/her employment opportunity in breakout rooms.
- Cumulative scores from the four (4) Championship rounds will determine the ranking of the teams, from 1st - 10th place.
- The awards ceremony and the announcement of the top three highest scores will take place after the judges scoring on Saturday evening at 6:00 PM.
- Team trophies and award medals will be sent to the top three finishing places.
- Certificates of participation will be sent to all participating team members.

Contact Martha McKinley with questions or for more information about registration at troubleshooting@naptaonline.org or 903.452.8511