

PETROBOWL RULES AND REGULATIONS

2023 Edition



Society of Petroleum Engineers



PetroBowl Rules and Regulations

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About PetroBowl®

The PetroBowl[®] competition pitches SPE Student Chapter teams against each other in a series of games answering technical and nontechnical industry-related questions. Teams from all over the world are selected through Regional Qualifiers to participate at the Championship games.

Traditionally this game is hosted physically, but due to global circumstances virtual methods of hosting the contest have been introduced to allow members to continue playing SPEs most popular student contest.

History of PetroBowl®

The PetroBowl® competition was founded in 2002, and was created, organized, and administered by the SPE Gulf Coast Section, taking place once a year during the SPE Annual Technical Conference and Exhibition (ATCE).

As its popularity grew, a two-stage pilot program was introduced in 2013 to transition the contest into a truly global event. This included two regional qualifiers taking place in Africa and Asia in 2014, and an expansion to six regional qualifiers in 2015 and 2016 (Africa, Asia Pacific, Europe, Latin America and Caribbean, Middle East, and North America).

Following the successful completion of the pilot program, PetroBowl[®] is now recognized as an SPE International global program and is managed by the SPE Standing Committee, the Young Member Engagement Committee (YMEC).

The 32 teams who participate in the Championship will consist of 5 SPE Student Chapters representing each "PetroBowl Super Region", plus the top two teams from the previous Championship. All Regional Contests aim to be completed by 1 August to allow students time to prepare for the Championship in September/October. Questions relating to the program can be sent to <u>petrobowl@spe.org</u>.

PetroBowl® Super Regions / Regional Qualifiers

The regional selection process for qualifying Chapters will be run by volunteers under the authority of the Regional Directors who manage those regions. Regional Directors determine how the selection process will be run to suit their region in a fair manner. When there are multiple Regional Directors within one PetroBowl Super Region, they can collaborate to either host an event or run separate contests.

In an effort to ensure continuity across the Regions in hosting regional qualifiers, uniform rules and regulations are in place under the guidance of the SPE Young Member Engagement Committee and SPE International Young Member Programs Staff. This includes set processes for the game structure and standardized questions. The aims of these changes are to help teams prepare for the Championship round, and make this a truly global contest. Games may take place in either a physical, or virtual format, as per the request of the Regional Directors. Both approaches will be standardized to ensure continuity.

Multiple contests can be hosted within one Super Region, however the number of qualifying teams that go through to the Championship will remain the same for the PetroBowl Super Region.



Chapters cannot participate in Regional Qualifiers outside their Board Regions. Regional Qualifier details will be published on the Petrobowl Webpage (<u>https://www.spe.org/en/students/petrobowl/regional-qualifiers/</u>).

PetroBowl Super regions are distinguished as follows;

Geographic Distribution of Regions:

Africa	Asia Pacific	Europe & Russia	Middle East	North America	Latin America and Caribbean
Covers the Africa Board Region	Covers the Northern Asia Pacific and South Asia and the Pacific Board Regions	Covers the South, Central, and East Europe, North Sea and Russia & Caspian Board Regions.	Covers the Middle East and North Africa Board Region	Covers the Canadian, Mid- continent, Eastern, Gulf Coast, Southwestern, Rocky Mountain, Western North America Regions.	Latin America and Caribbean Board Region



Prizes, Awards, and Funding

SPEI will not provide financial sponsorship for participation at a regional competition, nor for the Championship. Teams will be responsible for all costs associated with traveling to the Championship, and registering for any coinciding events/conferences. Teams who qualify for the Championship will be given Free admission to the SPE Annual Technical Conference & Exhibition (ATCE), where the Championship is due to take place. If the Championship is not able to be hosted as part of ATCE for any reason, the event will be moved to a virtual format.

Regional events will not have Prize money associated with it unless specific sponsorship is sourced for that purpose.

Prizes at the 2023 Championship will be provided given the rates below. Successful teams will be contacted by SPE Staff after the competition to determine how they would like the funds to be redistributed to players.



1st Place\$5,000 USD (Guide: 1,000 USD per player if maximum players used)2nd Place\$3,750 USD (Guide: 750 USD per player if maximum players used)3rd Place\$2,500 USD (Guide: 500 USD per player if maximum players used)

The Prize money amount will not change depending on how many players the teams have or if they wish to redistribute to people/mentors/groups outside of the team. Prize money may vary each year depending on finances of the program and sponsorship.

A plaque will also be awarded to the top three Championship teams (1 plaque per team), and certificates will be provided to all players who participate.

The PetroBowl Trophy will be sent to the winning team once the engraved plaque has been completed. Teams will be able to look after the trophy from this time until it is required back for the following Championship. Costs to ship the trophy will be covered by SPE International.

CONTEST RULES

1.0 Eligibility

1.1 There are some criteria that must be upheld for participation of SPE Student Chapters for Regional Qualifiers and the Championship. Teams who do not meet the criteria below, will not be able to participate in the PetroBowl Program. In this case the region may be required to select an alternative team if time permits.

Team Eligibility Criteria

- 1.2 Five teams from each PetroBowl Super Region will be selected for the Championship by the Regional Directors who cover that area. They will determine the game or selection format shown in this document, based on factors and requirements specific to each region.
- 1.3 The top two teams from the previous year's Championship will be automatically invited to the Championship as long as their university remains a compliant SPE Chapter.
- 1.4 Teams must be from compliant SPE Student Chapters (the definition of which includes submission of the prior year's annual report). Only one team per SPE Chapter is permitted.
- 1.5 Teams will consist of no more than 5 members. There will be no degree specific criteria for each team, although it is considered best practice that teams diversify participants amongst Bachelor, Master's and PhD level to ensure continuity across future years. This diversity will not be enforced by SPE International. Teams may have mentors or coaches, though they will not be able to join or participate in live games in any way.
- 1.6 Teams may play short, with a minimum of two players. Fewer than two players will result in the team forfeiting the game.
- 1.7 Each team shall designate a Team Captain, who is confirmed in advance of the contest. Team Captains will be the primary point of contact for communication with teams.
- 1.8 Teams must identify a Faculty Advisor and a team captain at the time of registration. The team captain shall be responsible for all team-related decisions and any correspondence



with SPEI. The Faculty Advisor must be a member of the university community and SPE and cannot be a student.

1.9 Players and schools are responsible for any liability arising from their conduct while at the tournament. Any purposeful act of dishonesty or an act which does not conform to the spirit of the competition, observed by any tournament official, will be considered cause for disqualification.

Individual Players

- 1.10 Players participating must be SPE Student Members in good standing and enrolled in the university represented by the Team at the time of the competition.
- 1.11 Players must conform to all <u>US and EU Sanction Laws</u> as per SPE Guidance for International Programs.
- 1.12 Players will be considered eligible as long as they are currently enrolled in the institution, are studying towards a degree, and do not have more than two (2) years of full-time technical work experience (excluding internships) at the time of the competition. The latter rule shall be self-enforced by the team's Faculty Advisor.

2.0 Game Format, Bracket, and Seeding

- 2.1 The Championship games will follow a standard single elimination bracket-style process in which two teams compete and the winning team (team with most points at end of the round) advances to the next round.
- 2.2 While travel is still restricted in many parts of the world the PetroBowl Regionals contests will have two options to be run. If Regional Directors deem it suitable for the region, physical games will be possible as detailed in this document.
- 2.3 If Physical games are not appropriate for the region (as determined by the Regional Directors), the contest will take place in a virtual format, preferably utilizing SPE International PetroBowl software, however this is at the discretion of the Regional Directors. If changes are needed to be made to a regional contest this will be notified to all players in advance. All versions of the game will use the same standard of questions to ensure continuity across the Regional Qualifier games and the Championship.
- 2.4 **NEW FOR 2023:** The Championship is due to take place in the hybrid format of the game at ATCE, allowing for physical and virtual participation of the contest.

3.0 Game Overview

All versions of the PetroBowl[®] competition consist of SPE Student Chapter teams playing against each other in a series of quick-fire rounds, answering technical and non-technical industry-related questions. Within a set time frame, players will be asked questions, and the player who responds the fastest will be reviewed by a panel of judges.

Players must answer questions based on their own knowledge, and cannot use additional sources (including, but not exclusive to, digital devices, online resources, written notes, books, printed materials, conferring with other players, or others not participating).



The number of questions asked will be determined by the stage of the contest the Teams are playing in. If they answer correctly, they will be awarded 10 points for their team. If they answer incorrectly, they will receive -5 points, and the fastest response from the opposing team will be considered.

The opposing team's response will also be scored in the same way. If teams do not submit a response no points are awarded for that round and the game will move on until all questions for that round have been asked.

In the event of a tie a series of tie-break questions will be asked until a tie is broken. As the format of the game is a "knock-out" bracket, no Tie games can be allowed.

4.0 Virtual Game Format (Regional Games):

When hosted virtually, the following additional processes will apply to each game when using the SPE PetroBowl Software. This software will be made available for all Regional Qualifiers, however if Regional Directors deem the software inappropriate for the facilities/resources available, they opt for alternative methods of the game. In these instances, Regional organizers will provide alternative rules and processes.

- 4.1 Teams will be invited to a Zoom meeting with the game volunteers (Game Host, Judges, Score Keepers, Administrators). Teams should remain on this call with Cameras on for the duration of their game.
- 4.2 All players should update their Zoom name to reflect their name and team as follows;

Team Captain:	Team Name_CAP_First Name_Last Name
Team Members:	Team Name_First Name_Last Name
Judge:	Judge_First Name_Last Name
Petrobowl Committee Role:	Role_ First Name_Last Name
SPE Officials/office bearers:	SPE_First Name_Last Name

Team names can be abbreviated to save space.

- 4.3 All Teams and Facilitators will be asked to stay muted on the Zoom call during the question stage of the game so that no players will interrupt another player's game. If any issues arise during the game, they will be asked to message the Facilitators directly.
- 4.4 When all players are ready, the Game Administrator will set up the contest using SPE International PetroBowl Software. All Players will log into this software and begin the game when announced by the game Moderator.
- 4.5 Players will answer a series of "Toss up" questions individually until the game time has elapsed or all questions have been completed. As teams progress through the contest the number of questions asked will be increased. **No conferring between players is allowed.**

Group Stage Round 1 Round 2 Quarter Final Semi Final & 3rd Place Round Final 10 Questions per game (if applicable)
20 Questions per game
20 Questions per game (if applicable)
30 Questions per game
35 Questions per game
40 Questions per game



- 4.6 The Virtual Software is available in two main options; Where all questions are asked to all players before the judging review stage, this is called "game by game" format. Alternatively, Judges can review the results of each question before the next question is asked. This is called the "question-by-question" format. Which format is used will be determined by the regional organizers, and will be notified to teams in advance of the contest. If for any reason the PetroBowl Software is not deemed appropriate, or not functioning properly. Questions can be asked in turn
- 4.7 In all virtual formats, the software will show in writing, and read aloud using computer software. Teams will have 5 seconds from the time the question has finished being read to "buzz in" (confirm) if they wish to answer the question. This response time is recorded and used to determine the players response time. This response time is recorded locally on the computer so internet speed will not be a factor that can affect the recorded time.
- 4.8 Players will confirm they have completed their question, and the software will submit the recorded scores to the Software Administrator. In the Question-by-Question format the judges will see who has completed their response, so player confirmation may not be required.
- 4.9 During the Judging stage of the Game all players must keep their microphones on while questions are being directed to them.
- 4.10 Players are allowed to use separate devices for the Zoom (video and audio feeds) and PetroBowl Software feed. Additional devices cannot be used for any other purpose.
- 4.11 The Moderator or Super Judge will share the software, which will show each question in turn to those on the Zoom call. The players who responded the fastest will have their answers reviewed by a panel of judges who will determine the appropriate scores.
- 4.12 While the questions are being reviewed, players will have the opportunity to appeal decisions made by the judges if they feel the results are not correct. Teams will only be able to Appeal 2 times per game.
- 4.13 When all questions have been reviewed the final scores will be revealed and the winning team will be confirmed. Once this stage has been reached no further Appeals will be accepted, even if teams have not used up their two available Appeals.
- 4.14 In the event of a tie game, a series of "sudden death" questions will be asked until the tie is broken.
- 4.15 The teams with the highest score will be declared the winner and move to the next round until all games have been completed.
- 4.16 Teams will be asked to leave the Zoom meeting to allow for the other teams to join for their game.
- 4.17 Using any online platform requires players to ensure that they have a reliable internet connection. If players lose internet connection during a match or are unable to participate at the planned time of their game, the game must continue with the remaining players. The Software will attempt to reconnect with players automatically, and all efforts will be made to reconnect the player within a reasonable timeframe that does not affect the timings of other games. In the event of any connection issues the player should let the organizers know as soon as possible via alternative means that do not disrupt the game, such as via WhatsApp or email.



Players have a responsibility to ensure to the best of their ability that the equipment and internet they are using is appropriate for the contest, and not being able to participate to this level will be considered a "No Show" in the same way as players not being able to attend a physical event.

5.0 Physical Game Format (Regional Games)

When hosted physically, the following processes will apply.

- 5.1 Teams will be invited to separate tables for each team where they will be joined by a Moderator, Timekeeper, Scorekeeper, and Judges.
- 5.2 Each player will have a Buzzer assigned to them which they will test before the game to ensure it is operating properly. Each player is responsible for ensuring their equipment is working during the game. Any faults should be reported as soon as possible to the facilitators, however if this happens while a question is in play their response cannot be counted.
- 5.3 The Moderator will ask a question verbally to both teams. Players are able to "Buzz in" as soon as they believe they know the answer. Teams will have until 5 seconds after the question has been read to respond. If a player used the buzzer after this time, it will not be accepted.
- 5.4 The first player to buzz in will be asked to promptly give their answer verbally. This answer will be reviewed by the panel of judges and points will be awarded. If answered correctly 10 points will be awarded.

If answered incorrectly or judges determine a significant delay in their response time, the Team will receive -5 points. If the team answered incorrectly, and the opposing team buzzed in within the 5 second limit they will be offered the chance to give their answer. If Players from a Team do not buzz-in, they will not receive any points.

- 5.5 Players will have the opportunity to Appeal a Judge's decision or if they feel the Rules of the Game have not been followed. Each Team can Appeal a maximum of two times during a game.
- 5.6 Players will answer a series of "Toss up" questions individually until the game time has elapsed, or all questions have been completed. As teams progress through the contest the number of questions asked will be increased. Players are not allowed to confer.

Group Stage	10 Questions per game (if applicable)
Round 1	20 Questions per game
Round 2	20 Questions per game (if applicable)
Quarter Final	30 Questions per game
Semi Final & 3rd Place Round	35 Questions per game
Final	40 Questions per game

- 5.7 If a question is in play, the game will continue until the question has been completed, and answers from both teams have been reviewed as per the rules.
- 5.8 Players found to be deliberately delaying game time will receive a warning and if behaviour continues, they will be disqualified from the game.
- 5.9 Once the Game Time has elapsed, or all questions have been answered, the winner will be announced, and the highest scoring Team will proceed to next round.



- 5.10 In the event of a tie score, a series of "Sudden-Death" questions will be asked until the tie is broken.
- 5.11 Tardiness of more than 5 minutes from the scheduled match time will result in a forfeit, unless the lateness is the fault of the tournament, or the tournament officials are satisfied with another good cause. Due to variable time to complete matches teams should make all efforts to ensure they are prepared in the event their game time is moved or delayed.

6.0 Hybrid Format (Championship Format)

When hosted in a hybrid format the following additional processes will apply to each game. Teams are encouraged to attend games in person, so that they can benefit from other opportunities during ATCE. However, if a Team is not able to Travel they can participate as a Virtual Team. Hybrid Format is possible at a Regional Level however it is not recommended due to the additional cost and facilities required to host the event in this way.

- 6.1 Physical and Remote Teams will be invited to a Zoom meeting with the game volunteers (Game Host, Judges, Score Keepers, Administrators). Teams should remain on this call with Cameras on for the duration of their game.
- 6.2 All players should update their Zoom name to reflect their name and team as follows;

Team Captain:	Team Name_CAP_First Name_Last Name
Team Members:	Team Name_First Name_Last Name
Judge:	Judge_First Name_Last Name
Petrobowl Committee Role:	Role_ First Name_Last Name
SPE Officials/office bearers:	SPE_First Name_Last Name

Team names can be abbreviated to save space.

- 6.3 All Teams and Facilitators will be asked to keep their Zoom microphones on during the question/answer part of the game. Individual players should ensure that they are playing in a suitable environment to avoid potential disruptions. If any players are unable to comply with this, they may be asked to leave the game.
- 6.4 All virtual players will be required to use headphones and microphone when participating in the game. These will be tested prior to each game. Players unable to comply will not be able to participate in the game.
- 6.5 When all players are ready, the Game Administrator will set up the contest using SPE International PetroBowl Software. All Players will log into this software and begin the game when announced by the game Moderator.
- 6.6 Players will answer a series of "Toss up" questions individually until the game time has elapsed, or all questions have been completed. As teams progress through the contest the number of questions asked will be increased. Players are not allowed to confer.

Gro	up Stage	10 Questi
Rou	nd 1	20 Quest
Rou	nd 2	20 Quest
Qua	rter Final	30 Quest
Sem	ii Final & 3rd Place Round	35 Quest
Fina	l	40 Quest

10 Questions per game (if applicable)
 20 Questions per game
 20 Questions per game (if applicable)
 30 Questions per game
 35 Questions per game
 40 Questions per game



- 6.7 The software will show in writing, and read aloud using computer software, the questions. Teams will have 5 seconds from the time the question has finished being read to "buzz in" (confirm) if they wish to answer the question. This response time is recorded and used to determine the players response time. This response time is recorded locally on the computer so internet speed will not be a factor that can affect the recorded time.
- 6.8 Once all players have had the opportunity to give a response to the question, the software will show who buzzed in first.
- 6.9 The moderator will invite the fastest player to give their answer verbally. Only the person who has been asked to speak can give their answer. Players must give their response immediately. Any significant delay in responding may be considered cheating and can result in disqualification. Players cannot confer during this time.
- 6.10 During the Judging stage of the Game all players must keep their microphones on while questions are being directed to them.
- 6.11 Players are allowed to use separate devices for the Zoom (video and audio feeds) and PetroBowl Software feed. Additional devices cannot be used for any other purpose.
- 6.12 The Moderator or Scorekeeper will open the software which will show each question in turn to those on the Zoom call. The players who responded the fastest will have their answers reviewed by a panel of judges who will determine the appropriate scores.
- 6.13 While the questions are being reviewed players will have the opportunity to appeal decisions made by the judges if they feel the results are not correct. Teams will only be able to Appeal 2 times per game.
- 6.14 When all questions have been reviewed the final scores will be revealed and the winning team will be confirmed. Once this stage has been reached no further Appeals will be accepted, even if teams have not used up their two available Appeals.
- 6.15 In the event of a tie game, a series of "sudden death" questions will be asked until the tie is broken.
- 6.16 The teams with the highest score will be declared the winner and move to the next round until all games have been completed.
- 6.17 Teams will be asked to leave the Zoom meeting to allow for the other teams to join for their game.
- 6.18 Using any online platform requires players to ensure that they have a reliable internet connection. If players lose internet connection during a match or are unable to participate at the planned time of their game, the game must continue with the remaining players.

SPE Staff will provide laptops and internet access for those who participate physically.

If connection is lost outside the game time, all efforts will be made to reconnect the player within a reasonable timeframe that does not affect the timings of other games. In the event of any connections the player should let the organizers know as soon as possible via alternative means that do not disrupt the game, such as via WhatsApp or email.

Players have a responsibility to ensure to the best of their ability that the equipment and internet they are using is appropriate for the contest, and not being able to participate to



this level will be considered a "No Show" in the same way as players not being able to attend a physical event.

7.0 **Question Format**

- 7.1 Questions are intended to test the contestants' knowledge of petroleum engineering and issues relevant to the petroleum industry.
- 7.2 2023 contests will only use questions that are commonly referred to as "toss-up" questions. This entails questions with short definitive answers, that should not be easily guessed. Calculation, image, and questions that require deduction or description (traditionally referred to as bonus questions) will not be asked to keep continuity between physical and virtual games.
- 7.3 Each correct answer to a toss-up question is worth 10 points. An incorrect answer will be given a 5-point penalty.
- 7.4 All questions are sourced through verified source materials and are created and maintained by SPE Professional Members.
- 7.5 All questions will be presented in English. Questions can be repeated, however this will take place during 5 seconds players have to buzz in. In the virtual format questions will be presented by software generated audio, and the text will also be visible.
- 7.6 Questions can cover any SPE or Industry related topics, including historical, business, or technical topics. This includes how the industry relates to other areas such as governmental regulation relevant to the industry, technological advancements, sustainability, and the oil and gas industry role in the energy transition.
- 7.7 If a question is deemed unsuitable for the contest by the Judges, it can be withdrawn during a live match.
- 7.8 The Moderator will accept only the first answer given by a player. Players may be asked to elaborate if an answer is deemed unclear, but only if the Judges or Moderator requests this.
 - a. Only the first portion of a multi-part answer to a singular question will be considered, even if the rest of the answer contains the correct response. For example, if a player says "Nixon, Watergate," the moderator will consider only "Nixon." The Moderator reserves the right to request participants to repeat their answer and/or elaborate upon a response on a case-by-case basis.
 - b. Accidental typos, or variances in the pronunciation of Players answers, will be accounted for to the Judges satisfaction. Answers can still be accepted if the Judges feel the Player has understood the answer satisfactorily. If Judges feels the answer does not satisfactorily answer the question, (regardless of further elaboration by the Player) this will be considered an incorrect answer.
 - c. Modifying words before the first noun of a response are considered as one answer with the noun.
 - d. Extraneous information preceding a response is disregarded (e.g., "What is a wombat?" or "They're all Californians"), unless the moderator determines that the extraneous information was given in an unsporting attempt to delay the game, in which case the response is treated as incorrect (in addition to any other penalty for misconduct).



Harmless or inadvertent embellishment of responses will not be penalized, so long as the embellishment does not make the response wrong.

7.9 Common acronyms and abbreviations are often acceptable (e.g., chemical symbols, state postal abbreviations, organizational acronyms), unless they appear in the question, in which case the moderator may prompt the player to expand the acronym or abbreviation.

8.0 Appeals

- 8.1 An "Appeal" is defined as a team's petition to reconsider a decision/judgment on an answer. Success of an appeal shall be defined by a reversal by the judges to said decision/judgment.
- 8.2 All teams will be allowed two appeal per game. Regardless of the outcome of the appeals, no team shall have more than two appeals per game.
- 8.3 Reversals to a decision will only be considered if an appeal has been made by a team.
- 8.4 Appeals can only come from the Team Captain. When operating remotely, individual Players can ask the Team Captain verbally for permission to appeal.
- 8.5 Team Captains can appeal questions directed to their own team or the opposing team.
- 8.6 Appeals must be expressed immediately to the Moderator after a decision and before the next question is read. In the case of the last question of a game, the appeal must come before the moderator announces the final score. At the conclusion of a game no further appeals will be considered.
- 8.7 A team will have 15 seconds immediately after the appeal to state their position. It will be up to the judges' discretion whether to sustain or overturn a decision.
- 8.8 The Judges decision on an Appeal will be final, and further changes after this, including after the completion of the game, will not be considered.

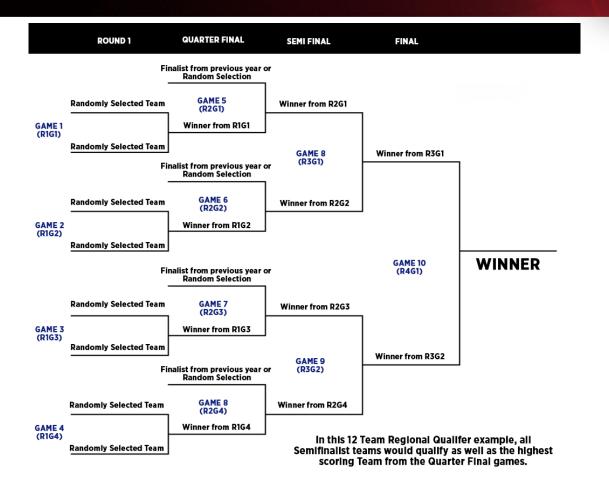
9.0 Bracket Seeding

- 9.1 All PetroBowl winning teams in Regionals and Qualifiers be determined using a single elimination bracket structure.
- 9.2 If deemed suitable, Regional Directors may choose to replace initial knock out Rounds with a "Group Stage". This would sperate teams into separate groups where they participate against all other teams in the same group. The top performing Teams would go straight into the Semi Final games which would operate in a single elimination bracket structure until the winner is determined. Regional groups will indicate which bracket structure they plan to use once the number of teams has been confirmed. The Championship will not use Group Stages.
- 9.3 If a Group Stage is suitable for the region, as determined by the Regional Directors, the number of Groups can vary depending on the number of Teams who participate. The highest scoring Team(s) from each Group will proceed to the single-elimination stage. Players will be informed how many Teams from each group process to the next round once the number of Teams participating in the Regional Qualifier has been confirmed.



- 9.4 Team pairing will primarily be a random selection, unless there are specific reasons this should not be allowed, for example if Teams have already played together in a previous game that year, or if the Bracket does not allow for an even Bracket.
- 9.5 When Brackets do not allow for an even pairing of teams, the selection of teams who have to play additional matches can either be selected randomly, or by advancing previous year's winners if the number of teams is appropriate it is deemed fair to do so by the PetroBowl Taskforce.
- 9.6 If teams have played in the same Regional Qualifier, they will not be paired with each other in Round 1 of the Championship games, and the team pairing will be redrawn. Teams from the same region may play against each other in Round 2 of the Championship.
- 9.7 Multiple Games from the same round can be played concurrently to reduce overall time of the contest, and if equipment and volunteers required are sufficient to do this, and the integrity of the questions are not influenced.
- 9.8 To help teams and volunteers keep track of the contest, particularly when playing remotely, games may be abbreviated with the Round Number and the Game Number for that Round as per the Bracket. For Example, in the first game of the second round can be referred to as R2G1 (Round Two Game 1). If Group stages are used the abbreviation GAG1 (Group A Game 1)
- 9.9 Up to 32 teams will be selected to participate in the Championship, made up of up to 5 teams of each of the 6 Super Regions, which are to be confirmed with SPEI by 1 August 2023. In the event that no teams are selected by the region by the required deadline, the associated PetroBowl region will not be represented at the Championship for that year. Vacant positions will not be offered or redistributed to other regions.
- 9.10 SPEI reserves the right to re-seed teams prior to the competition in the event of a cancellation/disqualification. If there is not appropriate time to redraw games, such as in the event of a "no- show" the morning of the competition, said team shall be removed from the bracket and the team scheduled to play them shall receive a "bye" for that round.

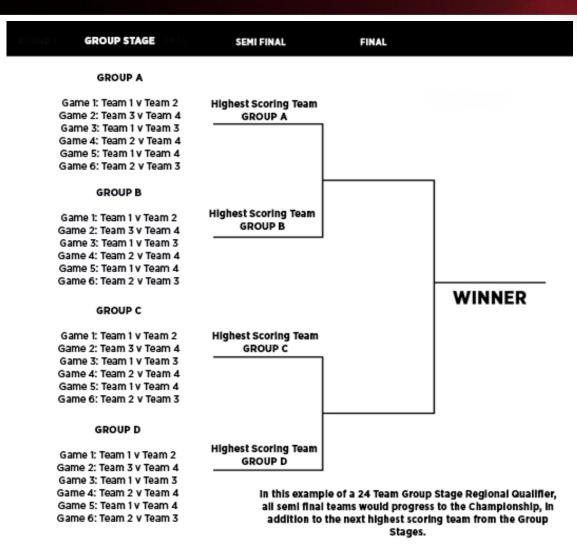
Below are examples of how a 12 Team Single Elimination Regional Qualifier (uneven Bracket) and a 24 Team Group Stage Regional Qualifier should be structured. In this example, the game represents the whole Super Region, and 5 teams would qualify from this contest. If multiple Regional Qualifiers are to be hosted in a Super Region, the number of teams who qualify to the Championship may vary.





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10.0 Tournament Officials

- 10.1 Tournament officials will be recruited as volunteers and selected by the Regional Taskforce or SPEI and the Young Member Engagement Committee. If Volunteers are SPE Members, following the game completion, volunteer details can be passed on to the SPEI to be included in the official SPEI volunteer appreciation program.
- 9.2 All games will have dedicated volunteers including:

Judges:

Each game will have at least three judges. All judges' decisions concerning compliance to the rules and awarding of points will be final unless an appeal is requested. Where possible Judges will have a range of expertise across the industry.

Moderator:

Each game will have a Moderator. There may be two Moderators to share the responsibility. The Moderator(s) will read the questions (in the physical format), consult judges as needed to determine the correctness of answers, award and deduct points, and otherwise enforce the rules of competition. Moderators with confident English-speaking ability will be selected however accents will vary. Teams cannot request specific Moderators.



Scorekeeper:

Each game will have at least one Scorekeeper. The Scorekeeper(s) will keep t0he official score and individual statistics. Games will not be considered final until the Scorekeeper has confirmed the official score.

Timekeeper:

Each game will have one Timekeeper. The Timekeeper will enforce time limits and supervise the game clock.

Platform Administrator:

Each Platform will have a dedicated Zoom administrator who will ensure the correct people are participating the game at any one time and monitor activity for suspicious behaviour.

All volunteers will play a role in monitoring teams are playing by the rules and regulations. Any volunteer may raise concerns for the attention of the Judges.

11.0 Equipment

Virtual Games

- 11.1 Players will be expected to join the Zoom platform using their own equipment. SPE International cannot assist with providing equipment needed.
- 11.2 Suggested equipment includes laptop able to host Zoom Meetings software, microphone, and headphones, reliable internet connection per player.
- 11.3 Each player should source their own equipment, even if they are in the same room or vicinity of the other members of their team. This allows for clarity on who is answering each question.
- 11.4 All players are responsible to ensure their equipment is prepared and ready on the day. Microphone and video checks will take place before each game. Players who are not able to participate with functioning equipment cannot participate in that game.
- 11.5 Players are allowed to use separate devices for the Zoom (video and audio feeds) and PetroBowl Software if they do not wish to swap between screens for any reason during the games. Additional devices cannot be used for any other purpose, including conferring with other teams during the game, recording questions, sourcing answers to questions, etc.
- 11.6 Players who experience equipment failure during a match should raise this with game officials as soon as the current question being asked has been completed. The game will be paused once the question has been completed in order to resolve these issues.
- 11.7 If the player answering the question experiences technical failure during their answer, the Team Captain must allocate another player immediately to answer the question or accept a pass on the question. The question cannot be asked again if the player is able to resolve the issues.
- 11.8 Players must make all efforts to ensure they equipment is functioning prior to the contest and games will begin once players have indicated they are ready. If players are unable to participate using their equipment at the time of their match they will be withdrawn from that game. They will be able to re-join the following match if the issues are resolved.



- 11.9 If no players from a team are able to join due to technical difficulties and are not able to resolve this in time (please see rule 2.4), this will be considered a "no show" from the team and the opposing team will qualify to the next round.
- 11.10 In the event no teams are able to participate in a game, both teams with be withdrawn from the contest.
- 11.11 In the event there is equipment failure from Tournament Officials, the game will be paused until this can be resolved or an alternative Tournament Official can be found. If this happens during a question being asked that question will be revoked from the contest, and no score will be given. An alternative question will be asked to the team who was interrupted when the game is able to restart.

Physical Games

- 11.12 Players will be provided with water, a pen, and paper for physical games.
- 11.13 All efforts will be made to provide buzzer kits for physical games, however if this is not possible due to accessibility or malfunction alternative methods of the selection may be used (i.e. Buzzer software, bells, horns, raised hands).

11.0 Study Resources

Questions are submitted by SPE Members in order to reflect fundamental, topical, and historical facts relevant to the oil and gas industry. All questions are reviewed to ensure that they have a verifiable and trusted source, as well as fit the standardized format of the games.

Below is a suggested (but not all inclusive) list of study materials as possible sources of questions:

Academic: Technical, Fundamentals of Petroleum Engineering such as:

- Content from SPE's PetroWiki (www.petrowiki.org)
- Petroleum Engineering and related (Geology, Reservoir Engineering, etc.) textbooks
- Glossary of Industry Terminology
- http://www.spe.org/spe-app/spe/industry/reference/glossary.htm
- Schlumberger Oilfield Glossary
- http://www.glossary.oilfield.slb.com/Default.cfm

Non-Academic: Industry Statistics, History, Trivia, Current Events such as:

- www.spe.org
- http://www.spe.org/industry/statistics.php
- Journal of Petroleum Technology
- SPE Annual Reports
- Yergin, Daniel, The Prize: The Epic Quest for Oil, Money & Power

Additional Bibliography

Additional sources can also be used if preferentially copyrighted by SPE or provided by a reliable institution. Wikipedia, social media, blogs, and community discussions are not recommended sources for questions. The sources listed below are additional study resources, however they may not cover all questions used in the contest.



Glossaries & Libraries:

Additional non-SPE sources are welcomed for question generation as long as they have a verifiable and reliable source. This can include, but is not exclusive to, national and international governmental bodies, scientific research, non-SPE industry bodies, published books, and other reputable online sources.

Additional Glossaries can include Technical Papers (OnePetro papers published in peer-reviewed journals) as well as information provided by Government & Industry Agencies, Organizations and Websites:

- https://wiki.aapg.org
- https://wiki.seg.org
- http://oilgasglossary.com
- http://www.oil-gasportal.com
- https://ethw.org
- https://www.ihsenergy.ca
- https://iadclexicon.org

DATA SCIENCE & DIGITAL ENGINEERING:

• https://www.dama.org/cpages/body-of-knowledge

DRILLING:

- https://www.iadc.org
- https://www.drillingcontractor.org
- https://www.iwcf.org
- http://www.drillingformulas.com
- https://www.drillingcourse.com

MANAGEMENT:

• https://www.pmi.org/pmbok-guide-standards/foundational/PMBOK

HEALTH, SAFETY, ENVIRONMENTAL, AND SUSTAINABILITY:

- https://unfccc.int
- https://www.eea.europa.eu
- https://www.energy.gov
- https://www.epa.gov
- https://www.fch.europa.eu
- https://www.hse.gov.uk
- https://www.osha.gov
- http://www.unece.org
- https://carbonpricingdashboard.worldbank.org
- https://ghgprotocol.org
- https://methaneguidingprinciples.org/methane-guiding-principles
- https://sdgs.un.org/goals
- https://www.cfainstitute.org/en
- https://www.ggfrdata.org
- https://www.irena.org
- https://www.oxfordenergy.org
- https://www.undp.org
- www.ipieca.org



- https://energycouncil.com
- https://www.dnv.com
- https://www.h2bulletin.com
- https://www.north2.eu/en
- https://www.ogci.com
- https://www.planete-energies.com/en
- https://www.spglobal.com/platts/en
- https://www.thinkgeoenergy.com

NON-TECHNICAL:

- SPE (SPE.org, History of SPE, History of Petroleum Technology, Petroleum Reserves/Resources Definition, SPE Magazines, SPE Annual Report)
- BP Statistical Review of World Energy
- Daniel Yergin's books after The Prize, from 1991 (The Quest, The New Map)
- Major International Oil Companies (IOCs) and National Oil Companies (NOCs) websites (focusing on their history, CEO, headquarter, significant projects, not immersing too deep!)
- https://www.opec.org/opec_web/en
- https://www.eia.gov
- https://www.uefoundation.org
- https://aimehq.org
- https://www.asme.org
- https://www.astm.org
- https://www.iogp.org
- https://www.offshore-energy.biz
- https://www.offshore-mag.com
- https://www.offshore-technology.com
- https://www.rrc.texas.gov
- https://aoghs.org
- https://galvanizeit.org
- https://www.lngfacts.org
- https://www.norskpetroleum.no/en

12.0 Ethics and Conduct

- 12.1 All players, institutional representatives, and other persons associated with a team are bound by the SPE Code of Conduct to behave responsibly and ethically. This includes, but is not limited to: treating all participants, attendees, and officials with courtesy, not receiving or giving impermissible assistance, not creating the temptation for another to cheat, abiding by all decisions of the tournament officials, not colluding with another person to "fix" a match result, not intentionally "throwing" a match, honestly reporting details of game situations to tournament officials, and promptly reporting violations of this honour code to a tournament official.
 - a. Participating teams and audience shall not write down or record any questions and answers.
 - b. For more on SPE's Code of Conduct, please refer to <u>http://www.spe.org/about/professional-code-of-conduct.php</u>
- 12.2 Any tournament official may find that a player, coach, institutional representative, or other person associated with a team during the tournament has committed misconduct. Misconduct includes disruptive behaviour, unethical behaviour, any violation of the honour code, or other un-sportsman like conduct. Officials may interpret these categories at their discretion.



12.3 Major infractions and/or repeated infractions may result in ejection for an individual and/or disqualification for a team at the discretion of tournament officials.

12.0 Rule Changes

PetroBowl Contest rules are subject to change and made at the discretion of SPEI if deemed necessary. Any rules changes, clarifications, and/or agenda will be announced to all participating student chapters in advance of the competition.

For any questions or concerns concerning the PetroBowl contest please contact SPE at <u>PetroBowl@spe.org</u>