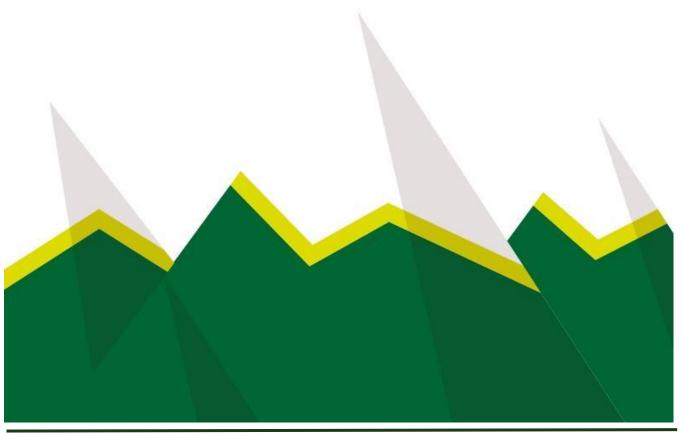


# ENGINEERING GAMES 2019

REACHING NEW HEIGHTS

## **Competition Booklet**







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# **2019 Edition Novelties**





This section highlights any important novelty for the 29th edition of the Quebec Engineering Games. A brief description of each novelty and any alterations to the competitions are presented below. For more information on these modifications, please refer to the section of interest.

#### **Entrepreneurship competition**

The entrepreneurship competition is a novelty of the 29th edition of the Quebec Engineering Games. For this challenge, participants will demonstrate their presentation skills and analytical skills to satisfy market needs as well as convince a panel of judges in a "Dragon's Den" type of presentation. This challenge will emphasize the engineering student's entrepreneurial skills and will allow him or her to demonstrate their capacity to resolve complex issues.

This competition is worth 8% of the final score.

#### Consulting engineering competition

This year, the consulting engineering competition will take place in two separate periods of four hours. The first period is used for each delegation to work on the issue presented to them. The second period will then allow each team to present their solution in front of an expert panel of judges.

There is also an additional novelty for the consulting engineering competition. The theme of the competition will be given to each delegation in the month of november 2018 to allow participants to familiarize themselves with said theme.

### "La Majeure"

This year, the "Majeure" competition will take place in two periods. The first period is used for each delegation to work on the issue presented to them. The second period will allow each delegation to test their solution.





# **The Competitions**





The 2019 Engineering Games mark the 29th edition of this major provincial competition organized in Sherbrooke with "Reaching new heights" as the theme. As you might already know, the Engineering Games represent the largest gathering of engineering students in Canada. The games gather around 425 students from twelve Quebec and Ontario Universities who represent each of their universities throughout the six sections of the competition:

- · The robotic machine
- The academic competitions
- The cultural competitions
- Sports
- The entrepreneurship competition
- · Participation as well as team spirit

The competitions aim to bring these future professionals in the making to extend their skills in various categories such as academics, sports, social and cultural.

#### The Machine

The Machine is a robotics competition whose preparation is done in the fall semester leading up to the Engineering Games. The concept as well as the objective of the competition change each year allowing the universities to overcome various challenges throughout the years. The competition itself, having each university present their own unique machine and compete against the others, will take place the last day of the Games in the Gilles-Lefebvre hall of the Orford arts centre. This competition is worth 18% of the final score.

### **Academic competitions**

The academic competitions are composed of six challenges relating to the six most popular engineering disciplines in Quebec. These challenges test the capacities of the participants on the fundamental elements of engineering with theoretical as well as practical examinations, in teams, for each branch of engineering. Additionally, there are three competitions which integrate all branches of engineering. These competitions are "la Majeure", the entrepreneurship competition, as well as the consulting engineering competition.

This section is worth 44% of the final score, meaning that these competitions have the most weight the total score.





#### **Cultural competitions**

The cultural competitions allow the students to stand out in a complementary field of engineering which gives them the opportunity to develop useful skills for the professional world. These competitions include trivia, debates, as well as improvisation.

This section is worth 15% of the final score.

#### **Sports**

The sports competitions allow the engineering students to test their physical endurance as well as build their team spirit. The entire day devoted to these competitions is a tournament, which includes five types of sports that the delegations will face each other in.

This section is worth 10% of the final score.

#### Participation & Team spirit

This final, yet important, section of the competition is participation. The Engineering Games favor and promote team spirit, fair play and respect between each delegation. This section also allows to reward those who demonstrate creativity and originality. This section therefore includes the general attitude of the delegations, the presentation of each theme, participation as well as entertainment.

Therefore, this section is worth 13% of the final score of the Games.





# The Machine





#### **Schedule**

Monday, January 7th 2019, 1:00 PM



#### **Participants**

Maximum of four delegates on stage

#### Where?

This year, the machine competition will take place at the Gilles-Lefebvre hall of the Orford arts centre in the afternoon of January 7th, 2019.

#### Context

The machine competition is, without a doubt, the most challenging competition of the Engineering Games. It is the only competition for which the students work on during the entire fall semester leading up to the Games. The rules booklet is provided to each delegation four months before the Engineering Games. This booklet describes the challenge of the competition, the environment in which each machine will perform, as well as the conception restrictions imposed on each team. The participants must follow this booklet in order to create a robot which can overcome the challenge faced ahead of them. During the Games, the members of each delegation participating in the machine competition will have time slots allocated to them to make final adjustments to their machine as well as do practice runs on the machine track. The machine must be able to meet the several challenges of the competition, in a allowed amount of time, by accomplishing various tasks such as moving objects, avoiding obstacles, transforming energy, and such. On top of the physical challenge itself, the teams must demonstrate that they have the best performing machine by presenting their concept orally, as well as creating a video introducing their team, university, and, of course, their machine.

#### Rules:

All rules in regards to the machine competition can be found in the "cahier de la machine EN", which is available on the Engineering Games website.





# **Academic competitions**





#### **Schedule**

Saturday, January 5th, from 8:00 AM to 5:30 PM

#### **Participants**

The entire delegation.

#### Competitions for each discipline

The academic competitions include a theoretical examination as well as a practical examination. Each delegation divides their delegates in the six engineering disciplines and must all collaborate to simultaneously answer theoretical examination questions, with the use of textbooks, as well as accomplish a practical examination per discipline. These academic competitions therefore solicit the student's theoretical knowledge, as well as their technical expertise. Upon the arrival of the examinations, the participants will have twenty (20) minutes to go over the theoretical and practical sections of each examination to divide teams according to their skill set. Once the examinations begin, participants will not be allowed to switch from one section to another. For example, if a delegate begins by answering theoretical questions, he or she will not be allowed to switch into the practical examination after the first twenty minutes have passed, and vice-versa. There is a limit of seven participants per examination of each discipline allowed.

The six competitions will cover the following disciplines:

- Civil engineering
- · Chemical engineering
- Electrical engineering
- Industrial engineering
- Software engineering
- Mechanical engineering

### Consulting engineering competition

The consulting engineering competitions gives the participants the chance to live the consulting engineering experience and consists of one case study. Each delegation mandates only four participants for this competition, ideally from various branches of engineering, to come up with a solution to a complex engineering issue which will include various aspects such as technical, social, financial and environmental.



### The "Majeure" competition

This competition aims to test the knowledge acquired in the six most taught branches of engineering, such as chemical engineering, civil engineering, electrical engineering, industrial engineering, software engineering as well as mechanical engineering. During this competition, the ability of each team to optimise, demonstrate their ingenuity, work together to solve complex issues and to present the considered solutions will be evaluated.



#### Civil engineering

#### **Schedule**

Saturday, January 5th, 8:00 AM to 12:00 PM

#### **Participants**

Maximum of seven participants

#### **Theoretical section**

The objective of this competition is to test the theoretical knowledge acquirement in the four years of a civil engineering bachelor's degree. This examination is open book, meaning that any physical (paper) documentation is allowed.

#### Material to be provided from the delegations:

- Scrap paper, pencils/markers, erasers & a non-programmable calculator;
- · Course notes as well as textbooks.

#### Material provided from the organizing committee:

None

#### **Practical section**

The objective of this competition is to test any technical and practical knowledge of the civil engineering student. Teams will be given a problematic, a context and a specific mandate et will have to construct or come up with a solution and then present it to a panel of judges.

#### Material to be provided from the delegations:

- · Scissors;
- Hot glue gun and hot glue sticks;
- Glasses, gloves and safety shoes (per person);
- · Measuring gallon.

#### Material provided from the organizing committee :



#### **Chemical engineering**

#### **Schedule**

Saturday, January 5th, 8:00 AM to 12:00 PM

#### **Participants**

Maximum of seven participants



#### **Theoretical section**

The objective of this competition is to test the theoretical knowledge acquirement in the four years of a chemical engineering bachelor's degree. This examination is open book, meaning that any physical (paper) documentation is allowed.

#### Material to be provided from the delegations:

- Scrap paper, pencils/markers, erasers & a non-programmable calculator;
- Course notes as well as textbooks.

#### Material provided from the organizing committee:

None

#### **Practical section**

The objective of this competition is to test any technical and practical knowledge of the chemical engineering student. Teams will be given a problematic, a context and a specific mandate et will have to construct or come up with a solution and then present it to a panel of judges.

#### Material to be provided from the delegations:

- Safety glasses (one pair per person);
- Lab coat (one per person);
- Textbooks, notes, calculator and crayons.

#### Material provided from the organizing committee :





#### **Electrical engineering**

#### **Schedule**

Saturday, January 5th, 8:00 AM to 12:00 PM

#### **Participants**

Maximum of seven participants



#### **Theoretical section**

The objective of this competition is to test the theoretical knowledge acquirement in the four years of an electrical engineering bachelor's degree. This examination is open book, meaning that any physical (paper) documentation is allowed.

#### Material to be provided from the delegations:

- Scrap paper, pencils/markers, erasers & a non-programmable calculator;
- Course notes as well as textbooks.

#### Material provided from the organizing committee:

None

#### **Practical section**

The objective of this competition is to test any technical and practical knowledge of the electrical engineering student. Teams will be given a problematic, a context and a specific mandate et will have to construct or come up with a solution and then present it to a panel of judges.

#### Material to be provided from the delegations:

- · Breadboard;
- · Soldering kit.

#### Material provided from the organizing committee :





#### **Industrial engineering**

#### **Schedule**

Saturday, January 5th, 8:00 AM to 12:00 PM

#### **Participants**

Maximum of seven participants

#### **Theoretical section**

The objective of this competition is to test the theoretical knowledge acquirement in the four years of an industrial engineering bachelor's degree. This examination is open book, meaning that any physical (paper) documentation is allowed.

#### Material to be provided from the delegations:

- Scrap paper, pencils/markers, erasers & a non-programmable calculator;
- Course notes as well as textbooks.

#### Material provided from the organizing committee:

None

#### **Practical section**

The objective of this competition is to test any technical and practical knowledge of the industrial engineering student. Teams will be given a problematic, a context and a specific mandate et will have to construct or come up with a solution and then present it to a panel of judges.

#### Material to be provided from the delegations:

- USB key
- Oral presentation tool (Ex.: PowerPoint) including your delegation logo or theme.

#### Material provided from the organizing committee :

- Computer with internet access
- \* Only one USB key per team. It must only contain the oral presentation. The key must be submitted at the arrival of the oral presentation to the person in charge to validate its contents.



#### Software engineering

#### **Schedule**

Saturday, January 5th, 8:00 AM to 12:00 PM

#### **Participants**

Maximum of seven participants



#### **Theoretical section**

The objective of this competition is to test the theoretical knowledge acquirement in the four years of a software engineering bachelor's degree. No documentation is allowed for this competition.

#### Material to be provided from the delegations:

• Scrap paper, pencils/markers, erasers & a non-programmable calculator;

#### Material provided from the organizing committee:

None

#### **Practical section**

The objective of this competition is to test any technical and practical knowledge of the software engineering student. Teams will be given a problematic, a context and a specific mandate et will have to construct or come up with a solution and then present it to a panel of judges.

#### Material to be provided from the delegations:

Paper/pencils

#### Material provided from the organizing committee :

- Computer with internet access using Windows or Linux
- Can code in C/C++, C#, Java or Python





#### **Mechanical engineering**

#### **Schedule**

Saturday, January 5th, 8:00 AM to 12:00 PM

#### **Participants**

Maximum of seven participants

#### **Theoretical section**

The objective of this competition is to test the theoretical knowledge acquirement in the four years of a mechanical engineering bachelor's degree. This examination is open book, meaning that any physical (paper) documentation is allowed.

#### Material to be provided from the delegations:

- Scrap paper, pencils/markers, erasers & a non-programmable calculator;
- · Course notes as well as textbooks.

#### Material provided from the organizing committee:

None

#### **Practical section**

The objective of this competition is to test any technical and practical knowledge of the mechanical engineering student. Teams will be given a problematic, a context and a specific mandate et will have to construct or come up with a solution and then present it to a panel of judges.

#### Material to be provided from the delegations:

- Non-programmable calculator, scrap paper and crayons;
- Ruler, set square and scale protractor;
- Hot glue gun/glue sticks;
- Scissors, cutter, exacto, small hammer, small vice, dremel or drill;
- Safety goggles.

#### Material provided from the organizing committee:





#### **Consulting engineering**

#### Schedule

Saturday, January 5th, 8:00 AM to 12:00 P (Problem solving)
Saturday, January 5th, 1:30 PM to 5:30 PM (Presentation in front of judges)



#### **Participants**

Maximum of four participants.

#### **Context**

Consulting engineering is an emblematic branch of engineering on a world scale. This competition will challenge creativity, the ability to solve complex issues, the ease of answering demands, as well as the oral presentation skills of the future engineers. This multidisciplinary competition favorises the participation of students with different engineering backgrounds.

The theme of the challenge will be revealed on Monday, November 26th 2018. It is highly recommended for each delegation to prepare a USB key with PDF and PPT (or other presentation templates) templates relating to the theme. This USB key must be submitted to a member of the organizing committee upon arrival to the hotel on Friday, January 4th 2019 to verify its contents. Any document deemed non-conforming will be removed from the USB key. The USB key will be given to the participant during the first half of consulting engineering competition.

#### Material to be provided from the delegations:

- Scrap paper, pencils, eraser;
- Laptops;
- USB key including:
  - Presentation template (ex: PPT) with your school's colors;
  - Documentation in relation to the theme.

#### Material provided from the organizing committee :





#### The "Majeure"

#### **Schedule**

Saturday, January 5th, 1:00 PM to 5:30 PM (*Problem solving*)
Saturday, January 5th, 8:00 PM to 10:30 PM (*Prototype testing*)



#### **Participants**

Maximum of six participants. The team should ideally be composed of delegates having experience in the following disciplines:

- Civil engineering
- · Chemical engineering
- Electrical engineering
- Industrial engineering
- Software engineering
- Mechanical engineering

The organizing committee recommends building a team with one member from each engineering discipline mentioned above. However, the competition was constructed keeping in mind certain universities do not have students in all of these programs.

#### **Context**

The "Majeure" competition will begin at 12:30 PM and will end at 5:30 PM. The participants will have a total of five hours to resolve a multidisciplinary issue, create the conception and make calculations, and construct the solution to then present it to a panel of judges and test it. This competition will challenge the theoretical and practical knowledge represented in the academic challenges.





#### Material to be provided from the delegations:

- Scrap paper, pencils and eraser;
- Non-programmable calculator;
- Soldering iron + tin wire;
- Hot glue gun;
- Laptop with the following software: PPT, avec les logiciels suivants : Powerpoint, Arduino IDE;
- Any tool deemed necessary to the conception of an electrical and mechanical prototype
- Safety goggles (one pair per person).

#### Material provided by the organizing committee:

- Any element necessary to the competition;
- Working area, electricity laboratory style and project area.

#### **Arduino software**

Download on your computers the Arduino IDE available on the following link (https://www.arduino.cc/en/Main/Software) and other software deemed necessary to the Arduino programming.



# **Cultural competitions**





#### **Schedule**

Saturday january 5th from 1:00 PM to 5:00 PM (Preliminaries and finals for trivia)

Sunday january 6th from 8:00 PM to 10:00 PM (Improvisation finals)

Monday january 7th from 9:00 AM to 11:00 AM (Debates finals)

#### Context

The cultural competitions allow engineering students to distinguish themselves in a complementary field of engineering giving the chance for students to develop useful capacities in a professional field.

The competitions include:

- Debates
- Trivia
- Improvisation

Each delegation will have to select their participants in advance and no changes can be made after signing up, except in certain circumstances.





#### **Debates**

#### **Participants**

Maximum of two participants per delegation.

#### <u>Généralités</u>

Debates exist in various forms. Some formats are strict and picky, others are freer and accessible and to the general public. In an engineering context, where most debates will be held informally and openly, some flexibility will be allowed to the usual structure of debate competitions. The debates here consist in the application of analysis techniques, popularization and argumentation in a context comprehensible to all individuals from the engineering field and from a very rapid reflection and criticism. Since the purpose is to evaluate the ability to reason quickly and to demonstrate a capacity for forthright repartee, the participants have only a very short time to prepare their knowledge of the subject and the debate itself. Participants will therefore be assessed on the relevance of their arguments, the clarity of their ideas, their capacity for repartee, their neat and professional presentation, their ingenuity, their originality, the structure of their argumentation and their eloquence. The debate will be between two teams, the proposition and the opposition. This document will therefore cover the logistics of the competition, the content such as schedule, procedural points, decorum and evaluation - and the place of the debates in the Engineering Games

#### Number of debators

The participants must compete in teams of two. The participants must be in the same delegation at the Engineering Games.

#### Allowed material

Supportive materials such as papers, pencils and stopwatches are permitted at the discretion of the president and the judges. It is forbidden to use equipment that is not available to all the debaters. The use of such equipment will turn out as a penalty, which can go up to disqualification.





#### Language

Resolutions will be presented in both official languages of Canada: French and English. Each participant may choose to speak in the language of his choice, but he will have to stick to the same language throughout his speech. It is the responsibility of the participants to understand both languages. The organizing committee will ensure that the judges and the president understand both languages. Each team will have the right to request a translation from the president when a question is asked, but only at that time. The time needed for translation will not be taken into account by the timekeeper.

#### **Organization**

#### Director of the competition

The director is responsible for all the organization of the debates competition. The director is responsible to pick out the presidents, the judges and the timekeepers. He writes all the propositions of the debates and sets up the format and timetable of the tournament. All the final decisions about the competition belong to him, but he cannot under any circumstances play a decisive role in the outcome of a debate. In addition, it is primordial that the director have a credible experience in debates.

#### President

The president is the expert in charge of the interpretation and application of procedures and rules for debate. He must be an impartial referee and ensure that the judges have a good understanding of the debates' rules. The president is the person in charge of the respect of the decorum and the debates' rules. He grants the rights to speak and ensure the respect of the time constraints. In addition, he is responsible for giving the decision in relation to the procedure points requested by the debaters. It is important to note that the president never brings a procedural point on its own initiative. Therefore, the procedure points not taken up by the debaters will not be included in the evaluation of the debate by the judges. Any decision taken by the president is final and without appeal.

#### **Judges**

An odd number of judges is required to evaluate the argumentation, the communication talent and the team spirit of the competitors. It is necessary for judges to possess the level of general knowledge of an average engineering student, but it is not necessary for him to possess technical knowledge related to the topics of discussion. However, it is preferable that judges have some prior experience in debates, since it will be their responsibility to decide which team wins or loses. The credibility of the competition is therefore based on the quality of their judgment.





#### Timekeeper

The timekeeper is responsible for ensuring that competitors respect the time that is allowed to them. He will inform the debaters of the remaining time by means of signs and shall also notify the president of the remaining time. It is important to note that the timekeeper will not intervene in any kind of way in the debate. The president is responsible for enforcing the time indicated by the timekeeper.

Signals of the timekeeper during the debates:

- When 30 seconds have elapsed, the timekeeper will raise an open hand which means the beginning of the question period;
- When 1 minute has elapsed (and therefore only one minute remains in the speech), the timekeeper will raise his index to signify the remaining time;
- When there is only 30 seconds left in the speech, the timekeeper will raise his closed fist which means the end of the question period;
- When there is only 15 seconds left in the speech, the timekeeper will bring his arm in a 90 degrees angle and gradually lower its vertical arm in the manner of a needle of a clock. When his arm is completely down, time is up. If a debater knocked on the table during these 15 seconds, a "grace period" of 15 seconds is given to the debater. The timekeeper shall therefore do the same procedure during the last 15 seconds of that period.

#### Rules and elements of the debate

#### Elements of the debate

- One team will represent the proposition, the other will represent the opposition. These positions are randomly attributed before revealing the motion, so that the subject does not influence the position of the teams.
- An argumentation plan must be stated by the first speaker of each team in his opening speech. All elements in the plan must be brought up in his talking time. It is not possible to add arguments that were not presented in the initial plan.
- All the arguments of a team must be made during its first two speeches. The parties cannot bring up a new facet in their argumentation during the conclusion. To open a new argument which the opposing party will never have the opportunity to debate would seriously break the spirit of the debates. On the other hand, parties are free to add new examples and illustrations or to refute and reconstruct the arguments brought by the other party. It is possible to bring a new element if and only if it amplifies or is directly opposed to an idea previously expressed.





• Each team should ask at least one question to the opposing team during a debate. Questions cannot be asked in the first and last 30 seconds of a speech and they should not take more than 15 seconds, otherwise the president will cut the speaker and the debate will continue without taking the question into account.

#### Decorum

- Debaters must speak at all times to the president.
- Participants must show courtesy and respect for judges and the president, as well as their opponents. It is not discourteous for a speaker to describe the confusion, error, lack of seriousness, inadequate words or wrong judgment of the opposing team, as long as these remarks do not use rudeness, swearing, abusive or gratuitous qualifications, expressions of a discriminatory nature or attacking the person in his integrity or his appearance.
- Members of a team wishing to communicate with one another should preferably do so in writing. They may, however, occasionally exchange a few whispers if they are not intended to disturb the present speaker. However, it should be noted that brief exchanges used sparingly are permitted; they should be aimed at giving life to the debate without disrespecting the opponent speakers.
- Participants can and should ask questions of the opposing speakers. To demonstrate their willingness to ask a question, the participant must stand up and wait for the president to give him the right to ask his question with a gesture of the hand. If the speaker who is doing his speech does not want to take the question, he has to signify it with a sign of hand or a verbal response to that effect. It should be noted that on the third attempt, the speaker is obligated to accept the question. The president will ensure compliance with this rule. The time taken for the question to be asked is not taken into account by the timekeeper. On the other hand, the time taken by the speaker to reply to the question is taken into account by the timekeeper.
- Participants cannot applaud during a debate. They may, however, show contentment, support or joy in the expression of ideas by beating their desk with one hand, which is the custom in a parliamentary chamber, or by expressing interjections. The spectators are invited to applaud silently by raising their hands and by making them tremble.
- Physical contact between debaters will be limited to handshakes or other customary support gesture before and after the debate.
- A team attempting in a clear and unequivocal way to distract the opposing speaker will be subject to severe penalties on the evaluation grid.





#### Points of procedure

To signify a procedural error, a member of the opposing team must stand up, say "point of procedure", wait for the president to grant him the right to speak and then clearly indicate the nature of the error to the president. The acceptance or the dismissal of the point of procedure is the sole responsibility of the president and his decision is final, without appeal. Please note that time is stopped during a procedural point and will resume when the president gives the right to speak to a debater.

The following is a list of the admissible points of procedure:

- Case of truism: This point of procedure is undoubtedly the one that can overturn a debate. A case of truism occurs when the proposal is redefined in such a way that a debate cannot take place since it lays down a fact or a tautology. To raise this point of procedure, the team that wants to bring it must wait until the end of the speaker's speech which committed the truism and then report it to the president. If accepted, the truism case will give power to the opposing team to redefine the proposal and thus give the opportunity to completely invalidate the speech already pronounced. If it is refused, the debate will continue with the redefinition that was introduced.
- Specific knowledge (in the redefinition): In order to ensure a debate of quality and to give a chance to all the debaters, the debate must be on a subject which is accessible to an average engineering student. Therefore, if an aspect of redefinition involves knowledge that an average engineering student does not have, there is a case of specific knowledge. To raise this point of procedure, the team that wants to bring it must way until the end of the speech of the speaker who committed the specific knowledge and then report it to the President. If accepted, it will empower the opposing team to redefine the terms of the specific knowledge and thus it will provide the opportunity to invalidate this portion of the redefinition. If it is denied, the debate will continue with the redefinition that was introduced.
- Specific knowledge (in the argument): If an aspect of an argument calls for a knowledge that an average engineering student does not have, there is a case of specific knowledge. To raise this procedural point, the team must report it immediately to the president, who will stop the debate. If the point is accepted, the president will ask the speaker to withdraw or modify the relevant argument and he will ask the judges not to take it into account. If it is refused, the debate will continue, taking into account the argument made.
- Debater directly addressing an opposing debater: Like all debaters shall speak directly to the president at all time, a debater speaking directly to another debater is a breach of decorum. The debater who wants to bring this point will do so immediately and the president will correct the situation if necessary.



- Inaccurate quote: If a debater is incorrectly quoted by another speaker, he may immediately report it to the president. If the procedural point is accepted, the president shall ask the speaker to withdraw or amend the relevant citation and he will ask the judges not to take into account the initial citation. If it is refused, the debate shall be continued taking into account the initial quote.
- New argument in the conclusion: Since the spirit of the debate implies there is an exchange between the two teams, it is formally forbidden to bring a new argument in the concluding speech that was not brought up in the debate. To raise this point of procedure, the opposing team must immediately report it to the president, who will stop the debate. If the point is accepted, the president will ask the speaker to withdraw his argument and he will ask the judges to ignore it. If it is refused, the debate will continue taking into account the argument.
- Introduction of parts of a plan by the second speaker: The responsibility to put out a plan of argumentation rests with the first speaker. Thus, if a second speaker approaches a subject of argumentation which was not brought up beforehand by the first speaker, there is a fault. In order to raise this procedural point, the opposing team must immediately report it to the president, who will stop the debate. If the point is accepted, the president will ask the speaker to withdraw the relevant argument and he will ask the judges to disregard it. If it is refused, the debate will continue taking into account the argument made.
- Unprofessional or offensive behavior: If a speaker demonstrates unprofessional behavior by being vulgar, displaced or simply lacking class, there is a clear lack of decorum. In this situation, the president will ask the speaker to correct the situation. If he refuses, he may cause his team to be disqualified from the competition.

#### Resolutions

The director of the competition will decide the nature of the resolutions. They will touch points on which a regular student in engineering should be able to defend an opinion without any preparation. The resolutions will not include truisms (truths of evidence) and will avoid the use of words of absolute nature such as "all", "everyone" and "always". (Ex: "Be it resolved that all engineers find mathematics easy" is not a good resolution as there are always exceptions.) Once the 2 teams have read the resolution, they will have 2 minutes to prepare the debate. The nature of resolutions can be very serious as very wacky. All resolutions and their translations will be validated by the director of the competition and the presidents before the competition.



#### Structure of the debates and roles

#### Structure of the debates

#### Preparation

Position draw: <30 seconds

Unveiling of subject: <30 seconds

Preparation of the argument: 2 minutes

#### Arguments

First speaker of the proposition: 2 minutes

First speaker of the opposition: 2 minutes

Second speaker of the proposition: 2 minutes

Second speaker of the opposition: 2 minutes

#### Conclusion

First speaker of the opposition: 1 minute

First speaker of the proposition: 1 minute

#### **Judgment**

Individual decision-making by each judge: 2 minutes

TOTAL: 15 minutes

#### Role of the proposition

The proposition must redefine the motion, that is, reduce the resolution so that the debate is concentrated on a single major topic. It is important for the proposition to avoid converting resolutions in truisms (see section on procedures). The proposal should also avoid debates on topics involving specific knowledge.

#### Advantages

- The proposition can redefine the resolution as it sees fit, without drastically changing the meaning of the terms (for example, a table cannot become an elephant). This redefinition prevents a good preparation of the opposition.
- The proposition opens and closes the debate, giving it the first and last words.

#### Disadvantages

• The proposition has the burden of proof. This means that it must demonstrate to the judges that the proposition is better than the status quo.

1st speaker: The first speaker of the proposition opens the debate. He sets out the subject, redefinitions, exposes the argumentation plan and sets out the first arguments. He is also the one that closes the debate.





2nd speaker: The role of the second speaker is to refocus the debate and strengthen the position of his team. He must complete his team's argumentation plan and refute the arguments of the opposition.

#### Role of the opposition

The opposition must contradict the resolution by all means. They must rise a reasonable doubt from the judges that the resolution is worse than the status quo.

#### Advantages

- The opposition does not need to demonstrate the merit of their own position; they only need to destroy the merit of the opposing position. They must show that the motion has more disadvantages or fewer advantages than the status quo.
- The opposition has the speech time of the first speaker of the proposal to refine their arguments before entering the scene.

Disadvantages • The redefinition made by the proposition can seriously invalidate the preparation of the opposition.

1st speaker: The first speaker of the opposition outlines the position of his team on the subject. He must present his team's argumentation plan, bring his arguments and refute the arguments already made. It must also close the opposition's vision on the debate.

2nd speaker: The role of the second speaker is to refocus the debate and strengthen the position of his team. He must complete his team's case plan and refute the arguments of proposition.

#### Structure of the competition

#### **Qualification rounds**

Presentation meeting

- Presentation of the director of the competition, presidents, judges and timekeepers
- · Review of the rules

Qualification rounds

A random draw will be made to choose the teams that will compete against each other. Each team will play 3 games during the qualification rounds. Following these qualifying matches, the 8 Best teams will be selected to participate in the playoff rounds. The following criteria, presented in order of priority, will be used to determine the ranking of teams:

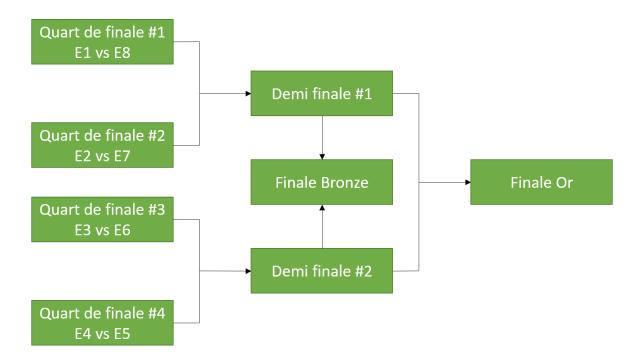
- The number of matches won
- The number of judges in favor of the win
- The average score
- The number of procedural points against the team





#### Elimination rounds

The top 8 teams will compete in the elimination rounds according to the following arrangement:



The order of the first four positions will only be known at the banquet. Any team declining their participation will offer the chance to all teams under them in the ranking to win a spot.

#### **Evaluation and judgement**

#### **Judgement**

The debate is judged on the team that best convinces the judges. Each judge will decide individually the winner of the debate and give his vote to the president. He will count the votes and announce the winner. The judge may vote either for the proposition or for the opposition and cannot vote for a tie. The verdict of the match is final. Moreover, the president and the competition director have no power over the judgment issued by the judges.

#### Feedback

At the end of each preliminary debate and following the announcement of the winning team, the judges can give feedback to competitors in writing, on the evaluation sheet they will have. These forms will be returned to the teams as soon as they are completed and photocopied. This feedback will not be made during the elimination rounds.



#### Evaluation criteria

The assessment grid used by the judges to determine the winning team is shown below. The team with the most points must be declared victorious by the judge.

Barème - Débats Oratoires					
Proposition:		Opposition:			
Qu'il soit résolu que					
Arguments proposition	Contre-arguments oppositio	<u>n</u>	Arguments opposition	Contre-arguments proposition	
<b>→</b>	$\Rightarrow$		$\Rightarrow$	<b> →</b>	
<b>†</b>	$\Rightarrow$		$\Rightarrow$	<b>→</b>	
Évaluation proposition		$\overline{}$	Évaluation opposition		
Argumentaire Diversité et nombre des idées Force des arguments Structure de l'argumentaire Originalité	0 1 2 3 4 5 6 7 8 9 10 (X 6	)	Argumentaire Diversité et nombre des idées Force des arguments Structure de l'argumentaire Originalité	0 1 2 3 4 5 6 7 8 9 10(X6)	
Cohésion de l'équipe	0 1 2 3 4 5 6 7 8 9 10 (X 1	)	Cohésion de l'équipe	0 1 2 3 4 5 6 7 8 9 10 (X1)	
Vocabulaire et élocution	0 1 2 3 4 5 6 7 8 9 10 (X3	)	Vocabulaire et élocution	0 1 2 3 4 5 6 7 8 9 10 (X3)	
Total			Total		
Pénalités			Pénalités		
Points de procédure accepté contre	0 1 2 3 4 5 6 7 8 9 10 (X5	)	Points de procédure accepté contre	0 1 2 3 4 5 6 7 8 9 10 (X5)	
Note finale proposition	Évaluation Pénalités	-	Note finale opposition	Évaluation = Pénalités -	
Grand total		=	Grand total	=	



#### **Trivia**

#### **Participants**

Maximum of four participants per delegation.

#### **Context**

The trivia competition is strongly inspired by the CBC television game show "Budding Genius" where two teams of four players try to respond as quickly as possible to various questions of general culture. Combining general knowledge, culture and speed of the thumb, this activity continues today mainly to a school level, but also through many civil leagues. This competition will take place during half a day, where each match is of a maximum duration of 15 minutes with a break of 10 minutes allocated between each confrontation to allow travel time and team changes.

#### **Teams**

Each delegation must provide a team of four members. One of the members acts as captain of the team. He must be present at the captains' meeting before the start of the tournament and will be the only person who can challenge the validity of a response (see rules).

#### Structure of the competition

The competition will include a preliminary phase where the teams will be separated in two groups to establish an initial ranking. Thereafter, the two (2) best teams of each group will enter the elimination round.

#### Preliminary round (round robin)

A random draw will be conducted to select teams from each group. There are two groups, consisting respectively of five teams and six teams each. Each team will play four games during this round in robin round format, which means they will play once against each team of their group. At the end of the preliminary round, the top two teams will advance to the elimination round.

Groupe A 5 équipes

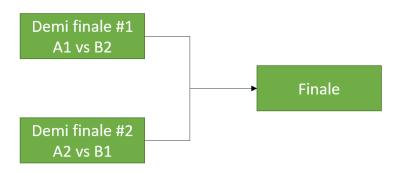
Groupe B 6 équipes





#### Elimination round

The elimination round begins directly in the semi-finals, where the first team of each group faces the second team of the other group. The two losing teams of semi-finals will compete in the bronze final and the two winning teams will compete for the grand finale.



#### **Rules**

- **1. Number of players:** If a team has less than 3 players at the beginning of the match, they lose the match by forfeit. For teams with 3 players, the question involving the absent player is addressed only to his opponent.
- **2. Delay:** A break of 10 minutes is allocated between each match for travel time and team changes. After this delay, the late teams lose by forfeit.
- **3. Substitution or addition of players:** No substitution or addition of players is allowed after the beginning of the match.
- **4. Player Identification:** Each player must legibly write his first name and the first letters of his family names (eg Judith M.-B.) on the support available to identify themselves.
- **5. Penalty for early wrong answer (minus 10 point rule):** For all questions (unless mentioned otherwise), a player who dares to respond before the end of the statement of the question and gives an incorrect answer will get a minus 10 point penalty for his team.
- **6. Knowing how to play:** The smooth running of the match and the "knowing how to play" require that the players wait to be named before answering. However, a response from a player who does not expected to be named by the reader will not be denied. Conversely, a player has the right to wait to be named by the reader before answering. If the player who answers is not the same as the one having the right to speak, the reply is denied and a reply is permitted (if applicable).
- **7. Right of consultation:** In questions with rights of consultation, as soon as a player presses on its button, any consultation becomes prohibited.



- **8. Player Response:** If a player gives more than one answer, only the first answer will be considered, even if it is incomplete. Also, if a player surrounds the correct answer of wrong elements, the answer will be rejected.
- **9. Names of Individuals:** When the reply is a person, the family name only is accepted as a response unless otherwise stated. If a player dares to give a first name and that it is erroneous, the answer is refused.
- **10.Game language :** The questions will be asked in French and no English translation will be provided in order to assure the fluidity of the games. The answers can be given in French or English.
- **11. Enumeration:** When more than one item is required in the answer, the points will be granted only if all elements have been given correctly.
- **12. Authorized Material:** For all questions, players are entitled to use blank paper and a pen, which will be made available to them.
- **13. Coaches and public:** A coach and any member of the public may not enter in communication with players during a match. In the event that there is an answer blown by the public, the question will be canceled and replaced.
- **14. Tie and prolongation:** At the end of a match, if the result is equal between the two teams, 5 "quick" questions will be asked. If the tie persists, other questions of this type will be asked until a team gets a good answer. This team will then win the game.
- **15. End of Game:** A match lasts a maximum of 15 minutes. The chronometer begins at the time indicated on the schedule. After 15 minutes, the match ends and the points are as they are.
- **16. Appeal:** In case of an appeal over the issue of a match (missed reply, wrong player answering a question, blown answer, etc.), the judge of the game has the last word. The captain will be responsible for forwarding his appeal to the judge during the game, in a respectful manner. The verdict will be given immediately by the judge. In the event of an appeal of the validity of a reply, the captain may give his appeal to the person in charge of the competition. To do this, the captains of both teams must present in order to confirm the facts and be informed of the result. Any appeal which does not concern the validity of the question will be rejected at this step.
- **17. Formalization of results:** After a match, the captains of the two teams must sign the score sheet to seal the outcome of the match.



# Types of questions

- **1. Face-off:** This type of question allows to set the atmosphere, present the players and test the buttons (triggers). The reader asks an individual question to each player, in turns. Before responding, the player must press their button. No consultation or right to reply. Five points per correct answer. The 10-point penalty does not apply here.
- **2. Vis-à-vis:** These are questions of speed asked to a player in each team (player # 1 vs player # 1 and so on). The first player to get the right to answer gets twenty points if he gives the right answer. If he misses, a right to reply is given to the opponent for ten points. The 10-point penalty applies.
- **3. Collective:** Questions asked to both teams, without consultation. The first player who presses its trigger has the right to speak. If the answer is false or if the player cannot respond, a right of reply is granted to the opposing team, always without consultation. A good answer is worth ten points. The 10-point penalty applies.
- **4. Identification by clues:** A series of three questions with consultation to identify a person, a thing, a place, an event, etc. Each question provides a clue, in decreasing order of difficulty. If a player gives the right answer after the first clue, he obtains forty points. The correct answer is worth twenty points after the second clue and ten points after the last clue. The right of reply is possible at each clue, but a team can give only one answer per clue. The 10-point penalty applies.
- **5. Quick questions:** Short questions asked quickly. A good answer is worth 10 points. The 10-point penalty applies.
- **6. Antidote questions:** Questions on the french language. Questions will be asked to both teams, without consultation. The first player to press the trigger has the right to speak. If the answer is wrong ou the player cannot answer, the other team may reply, always without consultation. A correct answer is worth 10 points. A penalty of 10 points can apply. The Antidote questions are sponsored by Druide Informatiques Inc.

# **Improvisation**

# **Participants**

Maximum of four participants per delegation.

The team must include at least one woman.

# **Summary**

Improvisation matches were invented in Quebec in the late 1970s by the Robert Gravel and Yvon Leduc duo. An improvisation match brings together two teams seeking to perform an improvised performance in a concept inspired by the hockey game.

## **Duration**

- Qualifying matches last 15 minutes and include 3 improvisations.
- The semifinals and bronze final have a duration of 30 minutes and include 5 improvisations.
- The final is 45 minutes long and includes 7 improvisations.

# Composition of the teams

Each team is composed of 4 players and must have a minimum of one player of each sex. A team with an incomplete alignment will automatically receive a penalty for an illegal number of players at the start of the match.

# Structure of the competition

# 1. Announcement of the improvisation card

The referee reads the improvisation card aloud: the nature, the theme, the number of players, the category and the duration of the match.

# 2. Concertation

The players and the coach of each team have 30 seconds to concert and take place on the ice rink. The referee signals the start of the improvisation with a whistle.

# 3. Distribution of points

# 3.1. Points awarded by votes

After each improvisation, the referee asks the public and the two judges to vote for the best improvisation. Public vote counts for one vote (determined by the majority of the votes) and the vote of each judge counts also for one vote. The team who accumulated the most votes (out of 3) wins the point. If less than 10 spectators are present during a match, the public vote will be replaced by a vote from the referee. The referee has the power to request a recount of the public



votes to his line judges. No recount request from a team will be permitted. If there is a tie, one point is awarded to each team.

# 3.2. Points obtained by penalty points

The penalized team receives one or two penalty points depending on the nature of the infraction (minor or major). The minor penalty, unlike the major penalty, does not deliberately destroy the game. The accumulation of 3 penalty points by a team automatically gives a point to the opposing team.

# 3.3. Explanations

After a penalty, the team captain has the right to request an explanation from the referee. If it's the captain that is receiving the penalty, he will be replaced by the assistant captain.

# **Decorum**

## Referee

The referee is the absolute master of the game. At any time, he may impose a penalty on a player or on a team for any infraction harming the quality of the game. His decisions are final.

# Captain

The captain of a team may request explanations from the referee regarding his decisions following the announcement of the penalties. He is entitled to a question and a reply. Brevity and politeness is a must. In case of any abuse, the referee may impose an additional penalty.

# Coach

A team may have a coach present on the bench. He may be a member of the delegation or a godparent, but may not be a player who has been expelled from a previous game.

# Substitute

A substitute player may accompany the team and replace a player between two games.

#### Game area

The match space is delimited by the bands that make up the ice rink. To be part of the ongoing improvisation, the player must physically enter the rink. A player who has done an intervention and who wishes to withdraw from the match must remain within the bands and maintain a neutral position (the small ball). For a short off-field intervention, the player may remain on the bench.

# The neutral position

After being in the neutral position, the player can return to the current improvisation with a character he has already played during this one or with a new character. He cannot in any case communicate with the players on the bench.





## Communication on the bench

In mixed improvisation, the players and the coach can communicate with each other. In compared improvisation, the team that is not playing cannot communicate. An illegal procedure penalty will be given if verbal or non-verbal communication is used.

#### Dress code

Each player shall wear black pants, a non-attracting shirt and shoes. The shirt may represent the university or theme of the team and must be the same, or at least the same color, for the entire team. It is strongly recommended to tie long hair, to not wear any jewelry or watch and to not chew gum.

# **Penalties**

- **1. Illegal accessory:** a player uses an accessory other than his or her sports shoes, pants, shirt or hockey jersey (watch, glasses, long hair, etc.).
- **2. Cabotinage:** a player tries to attract the favor of the public by saying jokes outside the context of the improvisation. Free references to sexual elements or inappropriate elements are also considered as cabotinage.
- **3. Cliché:** A player plays a scene or story that has already been seen elsewhere. Abusive reuse of a character already seen during the tournament is also a cliché.
- **4. Confusion:** a team or player loses the thread of the story. History is no longer meaningful and its development is disturbed.
- **5. Stalling:** A player loses concentration and comes out of his character.
- **6. Lack of listening:** a player forgets elements of the story like the names of the characters or where it is located.
- **7. Illegal number of players:** the team sends more (or fewer) players than request.
- **8. Failure to respect the theme or the category:** the team plays without worrying about the theme or the category given by the referee.
- **9. Character Refusal**: A player forgets his character on the way.
- **10. Game delay:** a team is slow to start an improvisation at the whistle signaling the end of the coccus, a player prevents the situation from advancing, the course of the game is slowed down by untimely intervention or a captain stretches his requests for explanations.
- **11. Roughness:** A player refuses to cooperate with other players, imposes a character or ideas to another player, or physically hurts a player.





- **12. Illegal procedure:** a caucus extends beyond the allowed time; there are communication between the bench and the players involved; there is discussion on the bench of the team that does not play.
- **13. Misconduct (major penalty):** a player harms in a major way the performance or engages in unsportsmanlike behavior. Since this is a major penalty, the player is automatically expelled.
- **14. Expulsion:** Any player who has collected two minor penalties or a major penalty during the same game will be expelled until his next game. Expulsion erases penalty points of the player if they have not already been counted.

# **Categories**

- **1. Free:** The players can draw inspiration from what they want to create their improvisation. They must remain within the physical limits of the rink.
- **2.** In the way of: The players are inspired by the chosen subject (horror film, american soap, tale for children, etc.) to make an improvisation in their own way.
- **3. Accessory imposed:** The players use the accessory imposed by the referee. The use of the object must be different from that of real life.
- **4. Sung:** Players sing. The air of the song can come from an existing work.
- **5. Exaggeration:** The improvisation takes place in three stages. First, a normal improvisation is played. A second improvisation slightly exaggerates the history of the first improvisation. Finally, a third improvisation EXAGERATES VERY MUCH the first story.
- **6. Shooting:** A player receives the title of his improvisation just before playing it
- **7. US doubling:** The players double the voice of other players on the rink; the players on the ice are not allowed to speak.
- **8. Narration:** A player tells the story to the audience; the other players make the history under the orders of the narrator, but they can also speak.
- **9. Pursuit**: A team starts the improvisation. At the whistle, the team freezes to let the story to the other team.
- **10. Quick change:** When the referee whistles, the players must resume their last sentence and change it completely.
- **11. Regression:** The same improvisation is played in 2 minutes, 1 minute and 30 seconds.
- **12. Rhymed:** Players make rhymes (or make serious efforts to achieve them).
- **13. Video:** The referee imposes a song or a musical piece on the players.
- **14. Videoway:** Three improvisations in duo are played alternately (V1, V2 and V3). The goal is to create different sketches according to the imposed situation.





- **15. Zapping:** When the referee whistles, the players must be inspired by their position and start again a new improvisation.
- **16. Category of the referee:** The referee may impose on the players a category rarer than those already defined. This category will be explained to the teams.

# **Tournament**

## Qualifications

During qualification rounds, the ten delegations will be drawn by lot in two pools and each delegation will play three games (these games will also be drawn by lot). The two best teams from each pool will advance to the semifinals on the next day. Classification will be made according to the wins, the differential (number of improvisations won) and the received penalties.

- A win is worth 2 points
- An overtime defeat is worth 1 point
- A defeat in regular time or by forfeit gives no point

In the event of a tie, there will be six shootout improvisations (three on each side) to decide the winner.

#### **Finals**

There will be four games during the finals: two semi-finals, one bronze final and one grand finale. In the event of a tie, there will also be shoot-out improvisations to decide the winner.



# **Sports**





# Context

The sports competitions will take place all day on January 6th 2019 and will be composed of five tournaments occurring simultaneously. Each delegation will distribute their delegates in the different sports proposed. The five sports proposed are the following:

- Éboulement sur la Montagne
- Fuyez l'Avalanche
- L'Énigme du Vénérable du Sommet
- Tchouckball dans le Fjord
- · La Ruée vers l'Or

# Health, security and hygiene:

- Clothes and sports shoes must be worn for all indoor sports.
- A bathing suit as well as a swim cap must be worn for the pool sport.
- A full snow suit must be worn for the outdoor sport.
- Long hair must be tied up.
- · Jewelry can not be worn.
- It is forbidden to eat or smoke on all sports grounds.

# Behaviour and sportsmanship:

- Participants must present themselves in a proper physical and psychological state.
- Alleys and hallways must always be free of access in case of any evacuation required.
- Leave any material not essential to the tournament in locker rooms.
- Participants must listen to any instructions received from the volunteers.
- Participants must respect any decisions made by the referees, which will always be the final call.

# **Tournament flow:**

The tournaments will have preliminary rounds followed by simple eliminations. Every team will play a minimum of three games and the order of initial games will be chosen randomly. Then, a ranking will be made "a la fiche" with a differential of points until there are three positions on the podium.

\*\*The sports rules are subject to change without prior notice. The delegations will be warned in case of any major modifications.





# **Interior sport #1**

# Éboulement sur la Montagne

# **Teams**

Four teams of six delegates.

# **Objective**

A team serves the ball to one of the opposing teams appointed beforehand such that they can not acquire the ball until it has touched the ground. For the appointed team, upon reception, the goal is to get the ball before it touches the ground. The players from the unappointed teams can be eliminated from the dodgeball.

# **Field**

The game will be played in a regular gymnasium.

# **Duration**

Two periods of ten minutes.

# Rules (non exhaustive)

- The team serving decides which team will have to receive the ball. The server, before hitting, yells "Omnikin" followed by the name of the university to receive.
- The ball can be hit with the use of one or two arms et must have a horizontal or ascending trajectory. The ball must fall at least at a 1.8 meter distance from where it was thrown.
- The receiving team must control the ball before it touches the ground. This control can
  be done with the use of any part of the body without locking the ball with arms nor hold it
  by the enclosure.
- If, at the moment of reception, one player touches the ball, they are allowed to move. As soon as more than one player touch the ball, they must execute a hit at that area.
- During the hit of the ball, all remaining players in the team, except the server, must touch the ball.



- The players of the three teams not in possession of the Omnikin ball can eliminate each
  other with the soft balls. During the hit of the Omnikin ball, the team receiving the ball is
  immunized from the soft balls and the team hitting the ball has a 5 second immunity after
  the hit. If the soft ball touches an immunized player, the game continues without any
  consequences.
- The players eliminated by the soft balls will sit on the bench. A maximum of 4 players per team can be eliminated.
- If a player catches a soft ball, a player from their team can return in the game.

# **Points**

- If the receiving team does not catch the ball, every other team receives a point.
- If the serving team or the server themselves commit a fault, every other team receives a
  point.
- When a player eliminates a player from other team with the soft ball, the attacking team receives a point.

# **Faults**

There is a fault when:

- The server hits the ball directly out of bounds, aims the ceiling or any other object in the room.
- The ball is served in a descending trajectory.
- The ball is served, but does not respect the 1.8 meter minimum distance.
- A player serves the ball two times in a row.
- A hit ball was not supported by all the other team players during the hit.



# **Interior sport #2**

# Fuyez l'Avalanche

# **Teams**

Two teams of ten delegates.

# **Objective**

The players from one team are placed in hula hoops and have three balls in their possession. The other team finds itself on one extremity of the room and after the referee's signal, they must cross the room without being touched by the balls. The amount of crossings tempted by the last player are counted.

# **Field**

The game takes place in a regular gymnasium.

# **Rules**

- The players from one team are placed in hula hoops and have three balls in their possession.
- The players from the other team are on one extremity of the field.
- After the referee's signal, the players at the extremity run to the other extremity by trying to dodge the balls. If they get touched, they get eliminated.
- To throw the ball, the players must have both feet in the hula hoop.
- The balls cannot touch the ground before touching an adversary.
- If a player from the team in the hoops gets out of the hoop to retrieve a ball, they must do at least one pass to one of their teammates before touching a player from the opposing team.
- As soon as the last player from the running team reaches the other side of the field and crosses the line, the referee will whistle to warn the other payers that they can now attempt to reach the other side of the field.
- As soon as all the running players are eliminated, the teams roles are reversed.
- The number of crossings of the last player on each team are counted. The team with the
  most crossings wins. In the case of a tie, the team that took the least amount of time to
  cross wins.





# Interior sport #3

# L'Énigme du Vénérable du Sommet

# **Teams**

Two teams of ten delegates.

# **Objective**

The sport will be revealed the morning of sports day.

# <u>Field</u>

The game will take place in a regular gymnasium.

# **Rules**

The rules will be revealed the morning of sports day.

# Water sport

# Tchoukball dans le Fjord

# **Teams**

Two teams of six delegates.

# **Objective**

The teams must bounce the ball on one or the other trampolines to make it fall in the water so that it is out of reach of the players on the other team.

# <u>Field</u>

The shallow end of the pool.

# **Game time**

A game will last 12 minutes.

# Rules

- The player who has possession of the ball cannot move more than a radius of 1m around them
- The player can keep the ball for a maximum of three seconds before passing it or shooting it
- The player can only shoot on the trampoline assigned to its team
- While shooting on the trampoline, the ball must bounce and fall in the pool outside of the zone of the trampoline
- The players can intercept the ball when it is thrown from the other team, but cannot take it out of the hands of an opposing player
- While getting back into play after a fault, the team must as least make one pass before throwing the ball in the direction of the trampoline



# **Points**

# I score if:

• I shoot on the trampoline and the ball bounces in the play zone of the pool without the opposing team taking possession of the ball

# I give a point if:

• I miss the frame or I shoot on the frame, and the ball bounces out of the pool

There are no points, but a fault if:

- I shoot on the trampoline and the ball bounces into the pool out of the play zone
- I hit the post and the ball bounces on the surface of the water
- The ball is back in possession or touched by a player from the same team after being bounced on the trampoline

A player removes the ball from the hands of the opposing player

For each fault, the ball is back into play by the opposing team where the player threw the ball before committing the fault.



# **Outdoor sport**

# La Ruée vers l'Or

# **Teams**

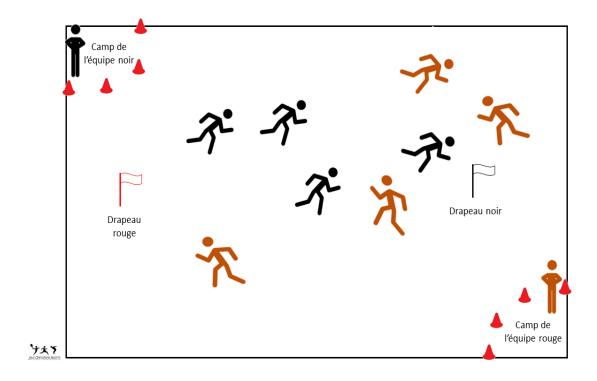
Two teams of eight delegates.

# **Objective**

Two teams will confront each other attempting to get their flag and bring it back to their camp.

# <u>Field</u>

The two camps are seperated at a distance of 20 meters.



# Rules

- Each player places their tissue bands on their hips visibly to allow the other team to be able to remove them.
- Each team begins the game in their camp. At the signal, the delegates must collect their flag and bring it back to their camp without having their tissue bands removed.



- A player can remove one tissue band at a time from the other team. Once the tissue band
  is removed, the player removing it raises it in the air so that all can see and brings it back
  to their camp. Once a player has a tissue band in their possession, they cannot have their
  tissue bands removed. A player bringing back a tissue band to their camp can bring one
  of their players back to life.
- Once a player has their tissue band removed, they must return to their camp and wait for one of their teammates to bring them one. If there are already tissue bands in stock at the camp, they can use one.
- To take the flag, the player must have their tissue bands on them.
- Once a player has their flag in their possession, they must run back to their camp to win.
   If a player from the opposing team removes a tissue band while they have the flag, that team wins.





# Entrepreneurship competition





# Schedule:

Saturday January 5th in the afternoon

# Participants:

Maximum of three delegates for the presentation.

# Context:

The entrepreneurship competition is a new challenge which will bring its participants to put into practice related competencies and important in an innovative field. It is one of the two competitions that requires a strong preparation leading up to the engineering games.

The challenge, which is divided into three sections, consists of the development and the production of a prototype that satisfies a predefined problematic, the redaction of a business plan to justify the choice of product, its viability, and its implementation in the point of view of an emerging enterprise, as well as the preparation of a short pitch to convince the judges that it is the best solution to the problematic.

The participants must finish the prototype as well as the business plan before their arrival to the Engineering Games. The sales pitch will take place in front of a group of three to five judges which will then select the five best products to then give the chance to these universities to then present in front of the participants during the last day.

The theme of this challenge will be revealed on wednesday, october 17th 2018. The entirety of documents must be submitted with a USB key upon arrival to the hotel. A presentation must also be prepared and included in the USB key.

The USB key mentioned above must be submitted to the representative of the organizing committee upon arrival to the hotel on friday january 4th 2019 to take note of its contents. The USB key will be given to the participants during their presentation in front of the judges.

# Rules:

All rules of the entrepreneurship competition can be found in the entrepreneurship competition booklet which is available on the Engineering Games website.





# **Grading**





	Electrical	/4
ACADEMICS	Software	/4
	Industrial	/4
	Mechanical	/4
	Chemical	/4
	Civil	/4
	Consulting	/6
	Majeure	/6
	ACADEMIC SUMMARY	/36
SPORTS	Indoor #1	/2
	Indoor #2	/2
	Surprise	/2
	Pool	/2
	Outdoor	/2
	SPORTS SUMMARY	/10
CULTURAL	Debates	/5
	Trivia	/5
	Improvisation	/5
	CULTURAL SUMMARY	/15
ENTREPRENEURSHIP	Entrepreneurship competition	/8
	ENTREPRENEURSHIP SUMMARY	/8
MACHINE	Robotic machine	/18
	MACHINE SUMMARY	/18
PARTICIPATION	Opening night	/2
	Delegation theme	/1
	"Nuit de l'exploit"	/1
	Godparents	/1
	Eng games spirit (top 3)	/2
	Participation	/2
	Sustainability	/2
	Charity	/2
	PARTICIPATION SUMMARY	/13
	TOTAL/100	0





# **Organizing Committee**





The organizing committee of the 2019 Quebec engineering games would like to thank the attention brought by you to this document. We are thrilled to have you take part of this epic adventure of this memorable 29th edition of the Quebec Engineering Games.

For any questions or comments regarding this document, please do not hesitate to contact the Vice President, Competition.

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# **Change made during Revision 1**

<i>pp.</i> 9	Added the logo of the official partner of The Machine competition.
pp. 14	Added the logo of the official partner of chemical engineering competition.
pp. 15	Added the logo of the official partner of electrical engineering competition.
pp. 17	Added the logo of the official partner of software engineering competition.
pp. 19	Added the logo of the official partner of consulting engineering competition.
pp. 20	Added the logo of the official partner of The "Majeure" competition.
pp. 36	Modification of the rule 10 of Trivia at the request of the competition
	director.
pp. 44	Changed the pool sports name.
pp. 49	Replacement of the pool sport.



