



Competitions booklet

Engineering games 2016

ÉTS

Le génie pour l'industrie

Revisions

Revision	Date	Changes
Initial version	2015-11-04	

*In case of discrepancy between the English and the French version, the French version prevails

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Academic competitions

Monday, January 4, 2016 (AM)

This year, 7 academic competitions will test the technical abilities and theoretical knowledge of the contestants in different disciplines. The contestants will have to show their ability to solve problems.

The 6 following academic competitions are divided in two sections; a theoretical exam and a practical challenge. When they arrive in the class room, the 6 or 7 competitors will have 20 minutes to divide their team in 2. The first team will complete the theoretical exam and the second one will complete the practical challenge. A maximum of 4 contestants is authorized in each section of the academic competitions.

- Chemical engineering
- Civil engineering
- Electrical engineering
- Industrial engineering
- Computer engineering
- Mechanical engineering

The consulting engineering competition includes one questionnaire/challenge. A maximum of 4 contestants is allowed for this competition.

The classrooms and the schedules of each competitions will be registered in the participant booklet which will be given to the contestants at their arrival on Sunday, January 3 2016.





Chemical Engineering

7 contestants maximum

Theoretical part

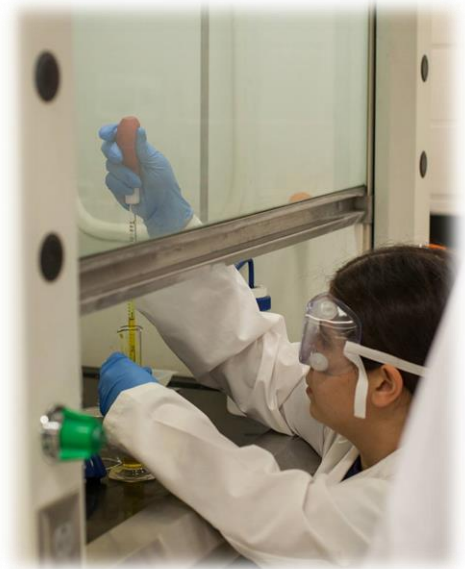
The theoretical exam will test the knowledge acquired throughout the bachelor's degree in chemical engineering. Any paper documentation will be permitted during the exam. Electronic devices are prohibited (cell phones, tablets and computers).

Required material:

- Paper, pencils and eraser
- Non-Programmable Calculator
- Reference manuals and notes

Provided material:

- Exam booklet
- Answering booklet



Practical part

The practical part of this competition will test the ingenuity of the contestants in the application of a protocol in the chemical engineering field.

Required material:

- Paper, pencils and eraser
- Written documentation;
- Safety glasses
- Lab coat

Provided material:

- Lab equipment required;
- Specifications booklet
- Any supplies required



Civil Engineering

7 contestants maximum



Theoretical part

The theoretical exam will test the knowledge acquired throughout the bachelor's degree in civil engineering. Any paper documentation will be permitted during the exam. Electronic devices are prohibited (cell phones and computers).

Required material:

- Paper, pencils and eraser
- Non-Programmable Calculator
- Reference manuals and notes

Provided material:

- Exam booklet
- Answering booklet

Practical part

The practical part of this competition will test the ingenuity of the contestants in the design and build of a prototype in the Civil or Construction engineering field.

Required material:

- Paper, pencils and eraser
- Non-Programmable Calculator
- Safety glasses (obligatoire)
- Ruler
- Measuring tape
- Olfa knife
- Paper scissors
- Metal scissors
- Manual Saw
- Clamps

Provided material:

- Specifications booklet
- Any single use material required





Electrical Engineering

7 contestants maximum



Theoretical part

The theoretical exam will test the knowledge acquired throughout the bachelor's degree in electrical engineering. Any paper documentation will be permitted during the exam. Electronic devices are prohibited.

Required material:

- Paper, pencils and eraser
- Non-Programmable Calculator
- Reference manuals and notes

Provided material:

- Exam booklet
- Answering booklet

Practical part

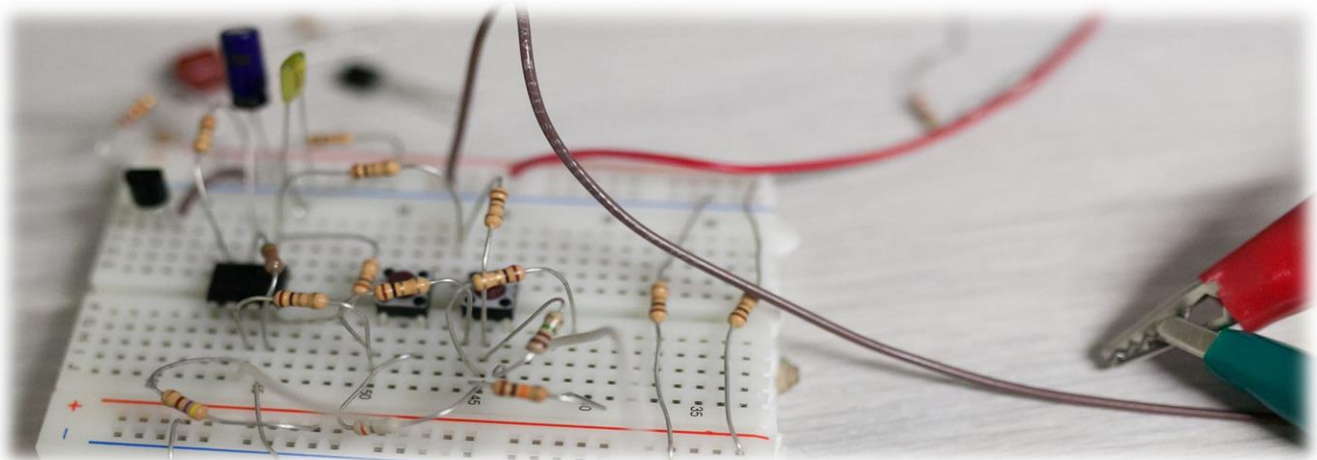
The practical part of this competition will test the ingenuity of the contestants in the design and build of a prototype in the electrical engineering field.

Required material:

- Paper, pencils and eraser
- Written documentation
- Calculator (programmable or not)
- Pliers;
- Screwdriver
- Multimeter
- Breadboard

Provided material:

- Measuring tools (Oscilloscope)
- Specifications booklet
- Any single use material required





Industrial Engineering

7 contestants maximum

Theoretical part

The theoretical exam will test the knowledge acquired throughout the bachelor's degree in industrial engineering. Any paper documentation will be permitted during the exam. Electronic devices are prohibited (cellular).

Required material:

- Paper, pencils and eraser
- Non-Programmable Calculator
- Reference manuals and notes

Provided material:

- Exam booklet
- Answering booklet

Practical part

The practical part of this competition will test the ingenuity of the contestants in the resolution of a realistic problematic. The challenge includes an oral presentation of the found solution.

Required material:

- Paper, pencils and eraser
- Non-Programmable Calculator
- Reference manuals and notes
- USB key

Provided material:

- Computer
 - Internet access
 - Microsoft Office 2010;
- Specifications booklet
- Any single use material required



Computer Engineering

7 contestants maximum



Theoretical part

The theoretical exam will test the knowledge acquired throughout the bachelor's degree in computer engineering. Any paper documentation will be permitted during the exam. Electronic devices are prohibited.

Required material:

- Paper, pencils and eraser
- Non-Programmable Calculator
- Reference manuals and notes

Provided material:

- Exam booklet
- Answering booklet

Practical part

The practical part of this competition will test the ingenuity of the contestants in the design and build of a prototype in the computer engineering field.

Required material:

- Paper, pencils and eraser

Provided material:

- Computer
 - Xubuntu 14.04;
 - C.C++, C#, Go, Haskell, Java, Node.js, PHP, Python, »Ruby et Rust;
 - Internet access
- Specifications booklet
- Any other material required



Mechanical Engineering

7 contestants maximum



Theoretical part

The theoretical exam will test the knowledge acquired throughout the bachelor's degree in mechanical engineering. Any paper documentation will be permitted during the exam. Electronic devices are prohibited (cellular and computers).

Required material:

- Paper, pencils and eraser
- Non-Programmable Calculator
- Reference manuals and notes

Provided material

- Exam booklet
- Answering booklet

Practical part

The practical part of this competition will test the ingenuity of the contestants in the design and build of a prototype in the Mechanical engineering field.

Required material:

- Safety glasses (mandatory)
- Paper, pencils and eraser
- Non-Programmable Calculator
- Ruler
- Measuring tape
- Screwdrivers
- Olfa knife
- Paper scissors
- Metal scissors
- Drill
- Drill bits
- Manual saw
- Pliers
- Clamps

Provided material:

- Specifications booklet
- Any single use material required



Consulting Engineering

4 contestants maximum



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This competition's goal is to test the consulting engineering skills of the participants. All documentation is permitted for this competition. Electronic devices are prohibited.

Required material

- Paper, pencils and eraser
- USB Key¹
- Non-Programmable Calculator
- Reference manuals and notes

Provided material:

- Specifications booklet
- Computer
 - Internet access
 - Microsoft word

¹ The USB keys have to be given to the organising committee for verification upon arrival on Sunday, January 3, 2016.

Only one USB key by team will be allowed

Any other USB key will be allowed in the classroom where the competition will take place.

The USB key can only contain a template for the oral presentation. Any other document will be deleted.





La Majeure
Monday, January 4, 2016 (PM)
4 contestants maximum



This competition combines the results of the practical challenge of the following disciplines:

- Civil Engineering
- Electrical Engineering
- Computer Engineering
- Mechanical Engineering

This competition will test the ability of the participants to coordinate the different projects to create a whole new prototype.

Required material:

- Paper, pencils and eraser
- Reference manuals and notes from every academic competition concerned
- All the material required for the other academic competition

Provided material:

- Unveiled during the competition.



Jeudi Surprise (general knowledge competition)

Monday, January 4, 2016 (Evening)

The *Jeudi Surprise* or general knowledge competition is a competition divided in many challenges following this year theme. The goal of this competition is to test the general knowledge of the contestants excluding any knowledge concerning engineering. Every member of the delegations will participate to this competition in some way. This year, the competition includes multidisciplinary challenges that will bring the participants to the time when they were younger. Every details of this competition will be unveiled in the participant booklet.



Budding geniuses

Monday, January 4, 2016 (PM)

4 contestants maximum

Context

Budding geniuses' trivia is a general knowledge trivia quiz game created by Radio-Canada in the 70's. This competition will take place on the afternoon of the academics day. Each match will last 15 minutes and there will be 10 minutes periods to allow teams to travel between matches in the different classrooms. (You will find all the rules in annex.)



Flow of the competition

The competition is divided in 5 sections:

- Preliminary rounds (every teams)
- Quarter finals (8 teams);
- Semi-finals (4 teams);
- Bronze final (2 teams – 3rd et 4th places);
- Finale (2 teams – 1st and 2nd places).

Preliminary rounds

Teams who will play against each other will be drawn at random. Each team will play 4 games during this stage. These 4 games determine who will face who in the quarter finals. The 2 losing teams of the semi-finals will then meet in the bronze final and the 2 winning teams will face in the grand finale.

The order of the 8 teams in the quarter finals is calculated from their amount of wins and the average point lead all 4 matches.

Debates

**Monday, January 4, 2016 (PM) and Wednesday,
January 6, 2016 (AM)**
2 contestants maximum



Context

Engineering games debates are the application of analysis techniques, vulgarisation and argumentation in a context understood by anyone in engineering. Since the goal is to evaluate the quick reasoning and liveliness of contestants, they will have very limited time to prepare once the debate subject is known. The teams of 2 per delegation will compete in a face to face manner before a panel of judges and will be either proposition or opposition. The specific rules and specifications for this competition are at the very end of this document.



Improvisation

Monday, January 4, 2016 (PM) and Tuesday, January 5, 2016 (evening)

4 contestants maximum

Improvisation was invented in Quebec by the Gravel/Leduc duo in the late 70's. It reunites 2 teams competing in improvised theatricals in a concept inspired from hockey. The game consists of battles between the two teams of 4 players including at least 1 woman (+ a coach). A referee and 2 linesmen are designated to ensure the rules are followed.

The tournament

The up to eleven participating teams will be divided into 4 pools. The placement matches held on the afternoon of the academics day will determine which best 2 teams per pool will compete in the quarter finals. All matches will follow the rules in the present booklet. The tournament is divided in quarter finals, semi-finals, bronze final and final. The bronze final and final have a duration of 45 minutes instead of 30 minutes for other matches. The podium shall be announced at the closing banquet.



Sports

Tuesday, January 5, 2016 (AM & PM)

Generalities

This year again 5 sports will be played during the engineering games. Sports day will occur at *Centre récréatif Gadbois*. Sports day is an occasion for participants to show their skills in a field not closely related to engineering. The original sport created for the event are no ordinary sports, they have been modified in order to test our participants adaptability, which is an important competence for any engineer. The sports will occur in 5 different locations:

- Simple gymnasium
- Skating rink
- Pool
- Double gymnasium



Health, security and hygiene

Inside all sport location previously listed, it is forbidden to:

- Eat
- Smoke
- Wear jewellery
- Drink alcohol
- Have long hair not attached in a ponytail

Behaviour

The participants need to:

- Be in a acceptable physical and psychological state
- Let any materials non-essential outside the sport location
- Let the alley free at all time in case of evacuation
- Respect the security rules explain by the volunteers
- Respect the decisions taken by the referees.

Qualification matches

Every team will play 3 matches predetermined in the participant's booklet. If a team plays more than 3 matches, only the 3 first matches will count. Only the 8 best teams will play in the quarter finals.





Dodge ball Eng. Games Edition

6 to 8 contestants required

In elementary school, one of the most efficient way to separate the strong from the weak is undoubtedly a good game of dodge ball. I imagine that for some of you, you hated this game, while for others you loved it. So it goes without saying that you must undergo again the rite of passage in the big leagues. However, with some small changes.

Equipment

Sports clothes (sport shoes are mandatory)

Purpose

The goal of the game is to eliminate the six or eight players of the opposing team.

Start

- Players from each team are in their respective side of the field.
- 2 balls are deposited in the middle.

How it works

- The referee gives the start signal.
- If a player is touched by a ball, he goes on the side of the field.
- If a player catches the ball, then a player of his team that is out of play can join the game.
- The game ends if all members of a team is eliminated OR if 5 minutes have elapsed. In this case, the team with the most players on the field, wins.
- You can use your partner as shields.
- You must be visible at all times! (You'll know why)
- Friendly fire counts.

Important rules

- Do not intentionally damage the balls.
- Do not hustle the other players.
- Do not challenge the decision of the referee.
- Have fun and be respectful.

Penalties

If one of the rules is not respected, the referee has the right to apply a penalty which can go up to the disqualification of the offending team for the ongoing activity.





Eng Games, Battle Mode

6 to 8 contestants required

To continue with the tradition, this sport will remain a secret until the day of the competition.

But still? In our youth many things could break friendships. Like for example, when a friend moves out of town, meetups at 3 o'clock at the bike rack, lying to your friends, or even video games...

Equipment

Sports clothes (sport shoes are mandatory)



Extreme Curling

6 to 8 contestants required

At the Olympic Games, team Canada is known to be one of the best in curling. So it is logical to select this sports as one of the eng. games sports in an upgraded version. Precision and focus will be very useful for the participants of this discipline.

Equipment

Sports clothing (pants are highly recommended, sport shoes or boots are mandatory)

Purpose

The team that scores 20 points wins.

Start

- The players of each teams are at both ends of the skating rink.
- A draw will determine which team will start the game.

How it works

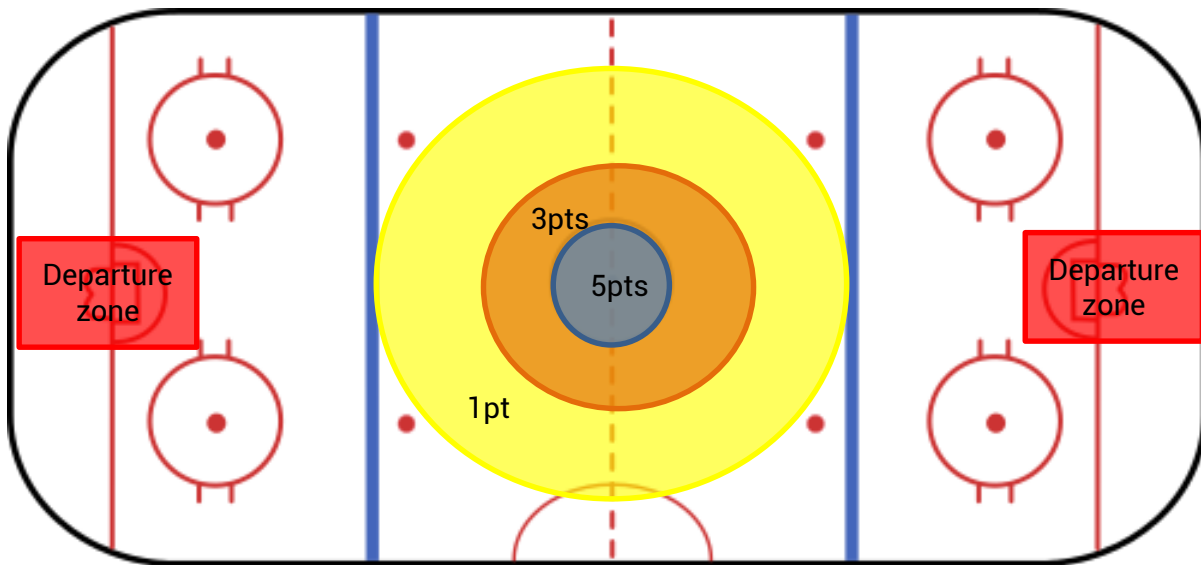
- Each team has one thrower, 2 broom guys, and 5 stones (player sitting on a saucer).
- The thrower go to the start position with the first stones and the broom guys are place behind them.
- The referee says the start signal and the thrower pushes the stone towards the target at the centre of the field.
- Once the stone is launched, sweepers control its speed by sweeping in front of it. Each teams throw one rock at a time.
- Once all the stones are thrown, the referee count the points.

Important rules

- Stones are not allowed to use their body part except to hold on to the saucer.
- A thrown stone can hit a stone who is already on the field.
- Only the thrower can push the stones.
- The broom guys can only use their broom to control the stone's speed. Their broom shall not touch the stones.
- Do not break the saucer voluntarily.

Penalties

If one of the rules is not respected, the referee has the right to apply a penalty which can go up to the disqualification of the offending team for the ongoing activity.





Numbers! (Pool edition)

6 to 8 contestants required

Let the 26th Engineering Games begin! May the odds be in your favor.

Equipment

Swimsuit and bathing cap are mandatory.

Purpose

The team that scores a maximum of points in 5 minutes.

Start

- All the players are assigned a number from 1 to N, where N is the number of participants in the team.
- All players of a team are aligned on one side of the pool.
- The same goes for the opposing team, but in reverse order.

How it works

- The referee throws a ball in the center while saying a number from 1 to N.
- Players with the number said by the referee has to fetch the ball.
- The player that takes the ball on his side of the pool, earns a point for his team.
- The referee may tell more than one number to get the ball. (Ex 1 + 3) Then the players wearing the number 1 and 3 must pick up the ball.
- In cases where there are more than 2 players in the water, then players can bring a player of the opposing team to his side of the pool and win the amount of points that player is assigned to.
- If the referee throws the ball and says "Numbers", than everyone jumps in the pool to get the ball... or an opponent
- After each round, players return to their side of the pool and the ball goes to the referee.

Important rules

- You must respect the code of conduct of the pool at all times.
- No one throws water in the face of an opponent.
- Do not push the referee in the water, unless there is consent.
- Do not challenge the decision of the referee.
- It is prohibited to drown an opponent.
- Have fun and be respectful.

Penalties

If one of the rules is not respected, the referee has the right to apply a penalty which can go up to the disqualification of the offending team for the ongoing activity.

If someone tries to drown an individual, that person is excluded and his team disqualified.



Diamond Ball

6 to 8 contestants required

Equipment

Sports clothes (sport shoes are mandatory).

Purpose

The attacking team must successfully escape with the ball by carrying it up the other side of their bottom line.

Start

- The "policemen" are behind their bottom line.
- The "thieves" are behind their bottom line.
- The referee gives the signal for the start of the game.

How it works

- The "thieves" go forward to get the ball (the diamond), and if a player touches the ball, he has to bring it on the other side of his goal line without getting touched by a "policeman".
- If a "thief" is touched, it is eliminated and goes to the side.
- If a "policeman" leaves his line and puts both feet in the game, he must touch a thief, if not he is eliminated.
- If all the "thieves" are eliminated, or when they are touched with the ball in hand, or if the ball touches the ground, the game is won by the "policemen". Then the roles are reversed and we start a new game.
- If the "thieves" manage to escape with the ball and cross their goal line (without getting touched) they win the game. Then roles are reversed and we start a new game.
- The "thieves" and "policemen" out of play will sit on the side of the court.

Important rules

- Do not hustle an opponent.
- Do not damage the cone or ball.
- Do not hold another player.
- Do not challenge the decision of the referee.
- Have fun and be respectful.

Penalties

If one of the rules is not respected, the referee has the right to apply a penalty which can go up to the disqualification of the offending team for the ongoing activity.

Annex A: Budding geniuses rules

- 1. Team with less than 3 players:** If a team shows up with less than 3 players, it loses automatically.
- 2. Late arrivals:** A 10 minutes break is provided between each match for teams to travel between classrooms. After this delay, the missing team losses automatically. For the face to face and criss-cross questions, the question for the missing player only be answered by his opponent
- 3. Substitution or adding players:** No trades or joining of new players is permitted once the match has begun.
- 4. Penalty for hasty wrong:** Unless otherwise mentioned, answering wrongly a question before it has been read in full is worthy of a 10 points penalty.
- 5. Sportsmanship:** Players must wait to be named before they answer. An answer said without a player being named will not be refused if he was indeed first to buzz. A player can also wait to be named by the reader before he gives his answer. If the player who responds did not buzz first, that answer is rejected and a reply is authorized if applicable.
- 6. Consultation:** While in questions with consultation, once the buzzer has been pressed, no more conversation is allowed.
- 7. Players Answer:** If a player gives 2 answers, only the first one will be taken into consideration even if it is incomplete. Also, if a player surrounds a good answer with false elements, it will be rejected.
- 8. Names of the players:** When we are looking to name a person, the last name is sufficient unless otherwise stated in the question. If a player risks saying the first name and is incorrect, the answer is rejected.
- 9. Enumerations:** When the answer is composed of many elements, they must all be correct for the answer to be valid unless otherwise stated in the question.
- 10. Authorised material:** Players may use pencils and paper that is at their disposal.
- 11. Coach and Spectators:** No coach or spectator can communicate with the players during a match. If an answer is given by either of a coach, the question is cancelled and replaced.
- 12. Tie breaking and overtime:** If a tournament match is a tie, 5 lightning round questions will be added as a tie breaker. If they are still at a tie, 5 more questions will be added until a winner is found.
- 13. End of a game:** A match lasts a maximum of 15 minutes. After 15 minutes, the match is over and the points remain as they are.
- 14. Results:** After a match, both captains must sign the score sheet to make the score official.

Types of questions

- 1. Face-off:** Help introduce players and tests all buzzers. The reader asks a question to each player one by one. Before answering, the player must press on the buzzer. No consultation or reply if given. The 10 seconds penalty does not apply.
- 2. Face to face and criss-cross:** Speed question between players sitting face to face (#1 vs. #1). The first player to attempt to answer can score 20 points. If he is wrong the other team can reply for a 10 points value. The 10 points penalty applies. In criss-cross, player #1 faces player #4 and so forth.



3. Collective: Questions asked to both teams at once. The first player to buzz has the right to answer. If he is wrong or cannot answer, the opposing team can attempt an answer. A good answer is worth 10 points. The 10 points penalty applies.

4. Identification: We are trying here to identify something or someone by giving out 4 clues of decreasing difficulty level. If a player gets the answer right after only 1 clue, his team gets 40 points. If a player gets the answer right after only 2 clues, his team gets 30 points. The right answer is worth 30 points after 2 clues, 20 points after 3 clues and 10 points after all 4 clues. A reply is allowed after every clue; teams may only answer once per clue. The 10 points penalty applies.

5. Lightning: Quick and easy collective questions, a good answer is worth 10 points. The 10 points penalty applies.

Ranking

For the preliminary rounds, the teams are divided randomly in 2 groups: A & B. After the preliminary rounds, the 4 winning teams go to quarter finals.

Group A : A1, A2, A3, A4.

Group B : B1, B2, B3, B4.

Where A1 & B1 are the first rank of their group and A4 & B4 are at the 4th rank. The 4 teams of each group that goes to the quarter final are determined by the average of the difference between the scores. A bigger average means a better score.

For example: There is the score of team X:

Match 1: winning by 140 points (+ 140)

Match 2: winning by 100 points (+ 100)

Match 3: losing by 30 points (- 30)

The total of the difference between the winning scores minus the total of the difference between the losing scores is 210 points. So the average of the difference between scores is 80 points or 210 divided by 3.



Annex B: Debate rules

Decision-making positions

Debate mediator/ Debate chair

The debate mediator, otherwise known as a Debate chair, is the expert in debate procedure and interpretation. The Mediator acts as an impartial judge and ensures that the judges understand the rules of the debate. The chair of the debate ensures the rules of the debate are upheld. He grants the right to speak (introduces the debater) and enforces the time limits. Most importantly, the chair makes the ruling on the *points de procedure* put forward by the debaters. The decisions of the chair are final.





Judges

An odd number of judges is required to assess the argumentation, communication skills and team dynamics of the competitors. Judges will have knowledge and/or experience in debating.

Timekeeper

The timekeeper is responsible for ensuring that competitors stay within their allowed time limits. The timekeeper will inform speakers of specific time intervals..

There are the different signals that the timekeeper uses to indicate the time during the debates:

<ul style="list-style-type: none"> When 30 seconds elapsed, the time keeper will raise a hand open to signify the start of the potential questions; 	
<ul style="list-style-type: none"> When 1 minutes elapsed, the timekeeper will raise the index to signify that there is only 1 minutes left to debate; 	
<ul style="list-style-type: none"> When 1min 30s elapsed, the time keeper will raise his fist to signify the end of the potential questions; 	
<ul style="list-style-type: none"> When there is only 10 seconds left, the timekeeper will place his arms to form an angle of 90 degree and he will lower one arm gradually during the 10 seconds until his two arms are in horizontal position. If a debater knocks on the table during these 10 seconds, the timekeeper will restart the countdown of 10 seconds, but there will be no more extension this time. 	

Decorum

The debate is between two teams, each with two members. The Proposition will be given the task of presenting an initial set of ideas and arguing their validity. The Opposition will then proceed to show how these ideas are undesirable. Before the resolution is revealed, a coin toss is held. The team that wins the toss gets to pick the side that they want to represent. Teams are expected to act responsibly at all times. Inappropriate language or offensiveness towards the other team, the officials, or the audience is not acceptable. Teams are expected to direct all of their speeches towards the audience.

Each team have to ask a minimum of one question to each speakers of the opposing team during the debate. Questions will not be allowed in the first 30 seconds of a speech or during the last 30 seconds, or during conclusions. Questions are a secondary means of refuting arguments. They can promptly point out

deficiencies in ideas. The debater who currently holds the floor has the authority to take or ignore questions. The opponent who wishes to ask a question indicates their desire by simply standing up. If the debater does not wish to take the question, he can so indicate by a wave of the hand or a simple *no, thank you*. If this occurs, the inquiring party must sit down. If the current debater wishes to entertain the question, it must be stated by the opponent in less than 15 seconds. Both team members may take part in answering the question. The time is stopped while the question is asked. The time used to answer the question comes out of the current debater's allowed time. Each debater must accept one question during his speech, if the opponent is making an honest attempt to ask a question. Three attempts at asking question constitutes an honest attempt.

If a team believes that one of the rules of the debate have been broken, they must immediately alert the chair of the violation by standing and saying *Procedural point*. The chair will then respond with *Make your point*. The team will then proceed to explain how the debate rules have not been followed. Finally, the chair will rule on the point by saying *Point well taken* or *Point not taken*. If it is obvious that the chair is incorrect, the team should not argue with the chair's shortcomings. The time it takes to rise and rule on a point is not included in the speaking time of the team currently debating. The following are violations that warrant a procedure point:

Unprofessional of offensive behavior – A speaker behaves unprofessionally when he is crude, or when his speech or attitude does not fit the debate's decorum. In this case, the President will ask the speaker to correct his mistakes. Failure to do so can lead to disqualification.

Truism – This procedure point can definitely change the course of a debate. A truism can occur when proposition as redefined cannot be debated, for it is a fact or a tautology. This procedure point must be signaled to the Chair by the 1st speaker of the opposition, after the 1st speaker of the proposition finishes his first speech, which includes litigious redefinition. If the procedure point is accepted, the 1st speaker of the opposition will be granted the opportunity to redefine the original proposition from the start, invalidating the previous redefinition brought by the proposition. If the point is refused, the debate will resume with the current proposition and redefinition.

Presentation of a specific knowledge in redefinition – A specific knowledge is defined as a concept or fact that is not known to an average engineering student. This procedure point must be signaled to the Chair by the 1st speaker of the opposition, after the 1st speaker of the proposition finishes his first speech, which includes the litigious redefinition. If the point is accepted, the 1st speaker of opposition will be granted the opportunity to redefine the part of the proposition that includes a specific knowledge, invalidating a part of the previous redefinition brought by the proposition. If the point is refused, the debate will resume with the current proposition and redefinition.

Presentation of a specific knowledge in arguments – A specific knowledge is defined as a concept or a fact that is not known to an average engineering student. If an argument is based on a specific knowledge, the procedure point must be signaled to the Chair immediately. Doing so will pause the debate. If the point is accepted, the Chair will ask the speaker to modify or abandon the argument and the judges will ignore this argument. The debate will resume and will assume this argument is invalid. If the point is rejected, the debate resumes and the argument will stand.

Misquotation – If the debater is misquoted by another one, he must signal the procedure point to the Chair immediately. If the procedure point is accepted, the Chair will ask the speaker to modify or abandon the wrong quotation and the judges will ignore the misquotation. If the point is rejected, the debate resumes and the quote will stand.

Speaking to the opponent directly – All debaters must address their speech to the Chair or the audience at all times. Speaking to an opponent directly is considered rude and a lack in decorum. A debater will signal this procedure point to the Chair immediately and the Chair will act accordingly.



A new argument in the conclusion – The essence of the debate is an exchange of ideas and arguments. New arguments or ideas are defined as concepts that have not been mentioned or discussed during the previous debate. It is prohibited to introduce new arguments in the conclusion, as it cannot be debated properly. A debater must signal this procedure point to the Chair immediately, which will pause the speaker's conclusion. If the point is accepted, the speaker will be asked to modify or abandon the argument and the judges will ignore it. If the point is refused, the debate is resumed and the argument still stands.

Introduction of parts of a plan by the second speaker – The first speaker of each team has the responsibility to introduce the argument plan to the audience. A second speaker can not introduce a new argument or topic which is not part of the original plan. A debater must signal this procedure point to the Chair immediately, which will pause the debate. If the point is accepted, the speaker will be asked to modify or abandon the argument and the judges will ignore it. If the point is rejected, the debate is resumed and the argument still stands.

Resolutions

The resolutions will be assigned by the organizing committee and will be validated by the Debate chair before the competition begins. They will be related to an issue that the average engineering student should have a defensible opinion on without any preparation. The resolutions will not be truisms. Absolute words such as *all*, *everyone*, and *always* will also be avoided. (Ex: *Be it resolved that all engineers are good at math* is a bad resolution, since there are always exceptions). Once both teams are informed of the resolution, they are given two minutes to prepare for the debate.

N.B. : All resolutions are first validated by the director of the competition and the debate chair several days before the competitions.

Time allowed for the debaters

There is the order and the time allowed for each speeches:

1. **First speaker** of the proposition: 2 minutes
2. **First speaker** of the opposition: 2 minutes
3. *Second speaker* of the proposition: 2 minutes
4. *Second speaker* of the opposition: 2 minutes
5. Conclusion by the **first speaker** of the opposition: 1 minute
6. Conclusion by the **first speaker** of the proposition: 1 minute

Team goals

The proposition

The proposition must narrow down the resolution so that the debate will be about one major topic. The resolution must not be squirreled or converted into truisms. Squirreling is the act of redefining the resolution so that it has a meaning different than the one intended by the resolution. The proposition must also avoid specific knowledge debates where the average engineer has no familiarity with the topic. The proposition can follow one of two different strategies in the debates.



The opposition

The opposition's task is to convince the judges that the proposition's views are fallacious. If the case presented by the proposition is a truism or requires specific knowledge to debate, the opposition can appeal to the judges with a procedure point at the beginning of the first speech from the opposition. If the point is well taken, then the opposition must redefine the resolution in a debatable manner.

Speakers' tasks

First speaker – Proposition

The first speaker of the proposition must explain the interpretation of the resolution, clearly state the principle or contention, and clarify any definitions. The first speaker must initiate the argumentation.

First speaker – opposition

The first speaker of the opposition has to set the position of his team on the resolution. He can reject the argument of the proposition and introduce his arguments.

Second speaker – Proposition and opposition

The tasks of the second speaker are to clarify, structure and reinforce the position of their team. Each one has to bring new arguments and refute the arguments of the opposing team.

Languages

The resolutions will be presented in English and in French. While every effort is made to translate the words and meaning of resolutions as accurately as possible, the meaning used by the Judges will be as redefined by the proposition. Each debater is allowed to debate either in French or in English but only in one of these languages. It is the debater's responsibility to make sure he can understand both French and English as no simultaneous translation will be offered. The organizing committee will make sure the judges and the Chair understand both languages.

Schedule and organisation of the debates

Organization of a debate

Preparation	
Assignment of positions	< 30 secondes
Unveiling of the subject	< 30 secondes
Caucus of preparation	2 minutes
Argumentation	
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 proposition	1 minute
First speaker of the opposition	1 minute
Decision-making of each judges	2 minutes
Total	15 minutes

Preliminaries

1. The preliminary debates will occur on Monday, January 4, 2016 PM.
2. A presentation meeting will be held:
 - a. A short presentation of the judges and the debate chairs will be shown to the participants.



- b. The rules will be reviewed with the participants.
 - c. This meeting will last maximum 20 minutes.
3. A draw will determine which teams will debate against each other. Each team will debate at least two times during the preliminaries. If a team has to debate more than 2 times, only the two first debates will be count.
 4. At the beginning of the competition, a draw will determine which position each team will have to defend (Proposition of opposition). For the second match, teams will defend the position that they have not defend yet. The goal of this measure is to allow every team to debate at least one time each of the positions.

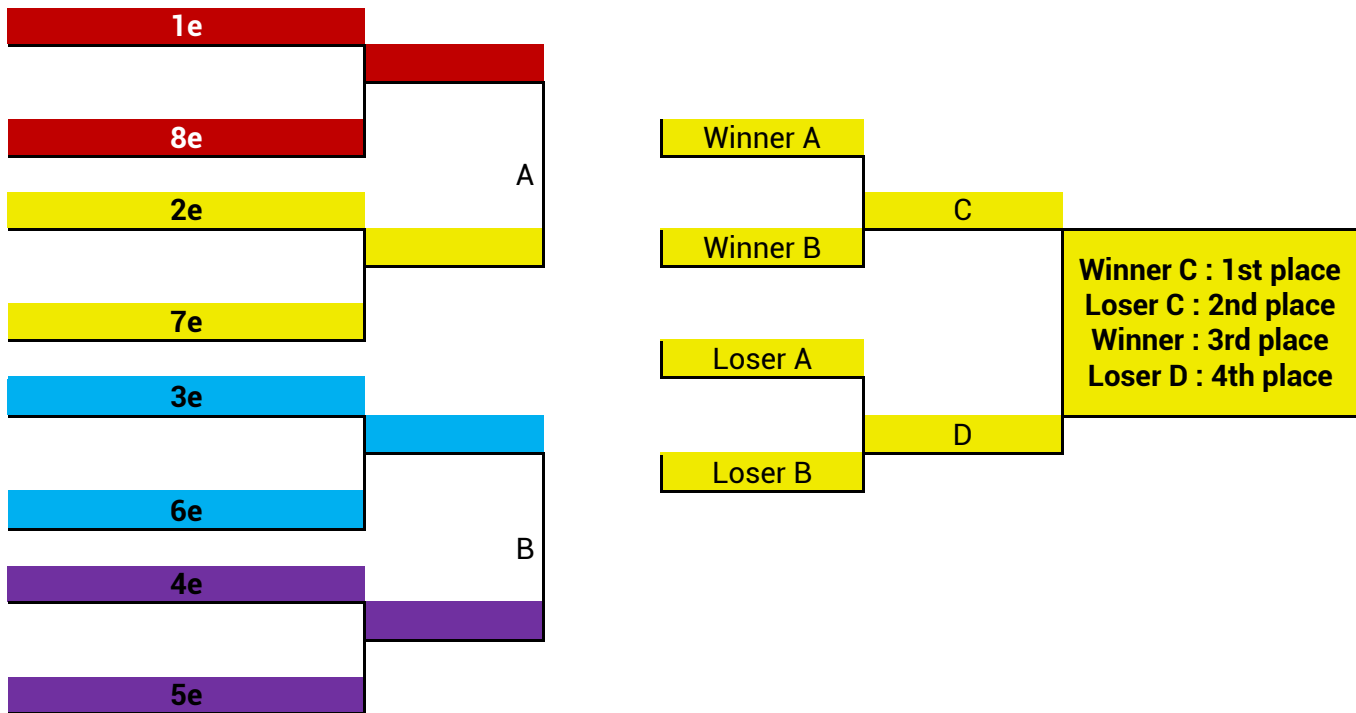
Teams	Position round 1	Position round 2	Position round 3
Team 1	For	Against	Random
Team 2	Against	For	Random
Team 3	For	Against	Random
Team 4	Against	For	Random
Team 5	For	Against	Random
Team 6	Against	For	Random
Team 7	For	Against	Random
Team 8	Against	For	Random
Team 9	For	Against	Random
Team 10	Against	For	Random
Team 11	For	Against	Random
Team 12	Against	For	Random

5. Only the 8 best teams will participate in the playoff.
6. The scores will in order of priorities the following criteria to establish the order of the teams:
 - a. The number of victory
 - b. The number of judges in favor
 - c. The number of procedure point held against.

Playoff

1. The playoff will occur on Wednesday, January 6, 2016 AM.
2. A score is determine after the preliminary rounds. The team will debate following this order (see scheme next page).





b. The scores will be unveiled at the closing banquet..

Assessment and judging

Judging

The debate is judged based upon the most convincing argument. Each judge will decide individually and the debate chair will announce the winner.

Feedback

After the conclusion of the debate and the announcement of the winning team, judges may elect to provide feedback to the competitors in the form of writing. The competition director will provide forms which can be used as guideline for comments.

Annex C: Improvisation rules

Teams

A team shall be composed of 4 improvisers (at least one woman) and a coach. Two opposing teams play during a match. A referee and two judges supervise the game to assure the respect of the rules.

Playing area

During each improvisation, players may not leave the rink surface.

Match duration

The time allowed for a match shall be 30 minutes with an intermission between matches of 5 minutes. The playoff will have a duration of 45 minutes.

Timing

The timer never stops within a 30 minutes period, even between sketches. However, each improvisation has a specified time duration.

Two types of improvisations

Compared:

Each team, in turns, must improvise on the same theme. A flip of the puck determines which team decides who starts first. No communication will be allowed while the other team improvises.

Mixed:

One player or more from both teams will face-off using the same theme.

Game flow

a) Announcement of the theme: The referee picks a card at random and reads it out loud :

1. Types of improvisation (compared or mixed)
2. Title of improvisation
3. Numbers of players
4. Category
5. Duration

b) Consultation

Teams have 20 seconds of consultation and take place on the rink. The referee starts the play by blowing his whistle.

For the compared type, the referee flip the puck after the 20 seconds of consultation.

c) Points

A point is awarded by the decision of the public and the two judges. A scoring team will have a minimum of 2 of the three votes. The public and each judges have one vote.

In the event of a tie (equality in the counting of the votes), no points are recorded.

Tie-breaking

In the event of a tie at the end of the match, a shootout type improvisation will be held. If there is equality in the counting of votes, another improvisation will follow.



Penalties

The referee is the absolute master of the game. At all times, he may impose a penalty on a player or a team for any offense affecting the quality of the game or the game flow. The penalty is announced before the vote on the improvisation.

Penalty points

The penalized team receives one or two penalty points depending on the nature of the offense (minor or major). A major penalty is an offense that destroys the game while a minor offense may be an oversight, a mistake, delay, etc. The accumulation of 3 penalty points (total accumulated chronically by players or teams) automatically gives a point to the opposing team.

Expulsion

Any player who has 2 penalties in the same game is expelled from the game and must retire to the locker room. His expulsion clears the penalty points resulting from the two faults if they have not already been tabulated.

Requests for information

Only the captain of each team is entitled to ask for an explanation from the referee. If the captain is already expelled, it will be replaced by the assistant captain.

Tournament mechanics

Playoff games

The eleven participating universities will be separated into 4 pools. The matches to determine the best teams in each pool will be held on Monday, January 4, 2016 PM. Playoffs follow the same regulations as the tournament games. However, the vote will be made by a panel of three judges. The top 2 teams from each pool will go into the tournament.

Scores:

Each team will play 3 matches in the preliminary matches. A victory equals 2 points, a lost in prolongation equals 1 point and a lost in the allowed time equals 0 point. The 8 best teams will go to the quarter finals. In case of a tie, the number of victories will determine who is first, then the differentials and then the number of penalties.

Match of the tournament:

Tournament matches will follow the rules of this document. The tournament is divided into quarter finals, semi-finals, bronze final and the grand finale. The grand finale and the bronze final will last for 45 minutes instead of 30 minutes. The podium will be announced during the closing banquet.

