ENGINEERING GAMES 2019

REACHING NEW HEIGHTS



PARTICIPANT BOOKLET



VIENS RENCONTRER L'ÉQUIPE DE **RHEINMETALL CANADA** À LA SOIRÉE RÉSEAUTAGE ET LORS DE LA **JOURNÉE DE LA MACHINE ROBOTIQUE**.

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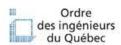


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ÉTUDIANTS EN GÉNIE DU QUÉBEC - OIQ
POUR SE RASSEMBLER ET ÉCHANGER

L'Ordre et sa Fondation sont fiers de souligner l'implication des participants et participantes aux Jeux de génie.

Bonne chance à tous nos futurs ingénieures et ingénieurs!





RÉSOLVEURS DE PROBLÈMES RECHERCHÉS. TEXTEZ « APPLIQUEZ » AU NUMÉRO DE TÉLÉPHONE SUIVANT MAINTENANT :

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ON RECRUTE -

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1. Behaviour and attitude to adopt during the games

Dear participants,

The Engineering Games represent the opportunity to fraternize, to meet new people, to build a network of contacts and to get out of your comfort zone all while having fun during these four incredible days.

However, we remind you that it is, after all, an engineering competition which requires a certain seriousness from your part. Many sponsors will be present to ensure the viability of the event, but also to network and recruit the best students of Quebec. Also, certain issues regarding the image portrayed these past few years have put the reputation of the games in danger. Each time an incident relating to bad behaviour would occur, more financial and logistics issues would occur and certain aspects of the games had to be modified or let go.

We therefore ask you to avoid any behaviour that could ruin the experience for others. The main objective of the Games is not to be a big party. Remember that your actions and attitude in each activity have a direct effect to the success or failure of the event. The organizing committee will not hesitate to expulse a participant that does not respect the code of conduct. We would like you to help us assure that we will have a successful edition of this event while being respectful with everyone as well all equipment while being civil and showing team spirit. This is the occasion for all of you to collaborate to bring back the exemplary values of this competition that have been around for 29 years.





2. Message from the organizing committee

In this booklet, you will find all necessary information concerning the event, including the schedule of the competitions, meals, and transportation to all scheduled activities for these four jam packed days. This competition would not be possible without our sponsors. This booklet also gives us the opportunity to thank our sponsors for their generosity which allows us each year to host this incredible event.

If you still have questions left unanswered in this booklet, it would be our pleasure to answer and guide you during the competition. The Games are the occasion for you to surpass yourselves and apply your knowledge while maintaining an exemplary team spirit to well represent the spirit of the games.

We hope that you have as much fun participating as we did preparing this event for you!

The organizing committee





3. Theme

From january 4th to 8th 2019, Sherbrooke University will host the 29th edition of the Engineering Games. For this occasion, the organizing committee would like to invite the participants to **reach new heights** as a part of their duties in engineering.

It is under this theme that the 12 participating universities will face each other in various competitions which will highlight their academic, sports, and cultural aptitudes and, for the first time this year, their entrepreneurial aptitudes.

It is therefore not enough to simply have engineering knowledge. The Engineering Games are looking for the best, the "creme de la creme", the fearless and those who are ready for anything to make it to the top. Will you reach new heights before your adversaries?

The organizing committee is challenging you to show that your delegation does not fear the altitude and will bring back the cup of the Engineering Games!







4. Sustainable development

We would like to invite the participants to follow us in the quest of reaching new heights all while being sustainable!

The organizing committee of the Engineering Games has committed itself to having a sustainable environment. We will highly manage any waste produced, the reduction of waste at the source and other sustainable touches that you will experience during the games. We would like to add ecoresponsable initiatives to the Engineering Games traditions, but we need your help to do so!

Points will be accorded if:

- The delegation helps in sorting out waste at the end of each meal (for example, helping out the volunteers to sort out waste);
- You avoid useless waste (for example, using unnecessary materials);
- You avoid the generation of single use waste (for example, using a reusable water bottle);
- You encourage the sustainable efforts of others (for example, not throwing out liquids in the recycling bags for cans);
- You have any other sustainable initiative.

Therefore, pay attention to any indications that are given. You will see that with certain concrete actions, it is possible to reduce the environmental impact of more than 450 people. A total of 2% of participation points are accorded to sustainable behaviour. You will therefore be rewarded for your consciousness and will allow your team to obtain additional points!





5. Addresses and important information

IMPORTANT: You must always wear your badge on you the entirety of the games. Otherwise it will be impossible for you to access meals and participate in activities.

You must also have a valid piece of identification (valid drivers licence or medicare card) on you for the opening night.

We also ask you to arrive 5 minutes in advance for all transportation to avoid delays. Thank you!

Hôtel Chéribourg

2603, chemin du Parc Orford (Québec) J1X 8C8

Université de Sherbrooke

2500, boulevard de l'Université Sherbrooke (Québec) J1K 2R1

Centre de l'activité physique (CAP) du Cégep de Sherbrooke

355, rue du Cégep Sherbrooke (Québec) J1E 3X7

Centre d'Arts Orford

3165, chemin du Parc Orford (Québec) J1X 7A2

Bar La P'tite Grenouille

154, rue Wellington Sud Sherbrooke (Québec) J1H 5C7





6. Schedule

Day 1

January 4 th 2019				
Time	Activity	Location		
10h30	Arrival : Sherbrooke			
10h45	Arrival : ETS			
11h	Arrival : Concordia			
11h15	Arrival : Laval			
11h30	Arrival : McGill			
11h45	Arrival : Poly			
12h	Arrival : UQOttawa	Hotel		
12h15	Arrival : UQAC			
12h30	Arrival : UQAR			
12h45	Arrival : UQAT			
13h	Arrival : ITR			
12h30 - 14h	Lunch in waves			
14h - 17h	Ice breaker games			
14h - 17h30	Machine work period			
17h30 - 18h	Transportation			
	Sherbrooke, ETS,			
	Concordia, Laval,	Transportation		
	McGill	Transportation		
18h30 - 19h	Transportation Poly,			
	UQOttawa, UQAC,			
	UQAR, UQAT, ITR			
18h - 19h30	Dinner	La P'tite Grenouille		
20h - 0h30	Opening night	La F lile Grenouille		
23h30 - 0h	Transportation wave 1	Transportation		
0h30 - 1h	Transportation wave 2	·		
0h - 5h	Dégrise	Hotel		





January 5 th 2019					
Time	Activity	Location			
5h30 - 7h30	5h30 - 7h30 Breakfast				
7h30 - 8h 8h30 - 9h	Transportation Electrical, Software, Mechanical and Consulting Engineering Transportation	tware, nd Transportation gineering			
	Chemical, Civil and Industrial Engineering				
8h - 12h	Competitions Electrical, Software, Mechanical and Consulting Engineering	Université de Sherbrooke			
9h - 12h30	Competitions Chemical, Civil and Industrial Engineering				
12 h -13 h 30	Lunch	Café Caus (UdeS)			
13h -17h30	Presentation Consulting Engineering				
13h - 18h	The "Majeure"				
13h30 - 17h30	Trivia, Improvisation, Debates and Entrepreneurship Competition	Université de Sherbrooke			
17h30 - 19h	Dinner	Café Caus (UdeS)			
18h30 - 19h	18h30 - 19h Transportation wave 1				
19h30 - 20h	Transportation wave 2	Transportation			
20h30h - 23h	Trials for the "Majeure"				
20h - 0h30	Networking cocktail	11-4-1			
23h30 - 3h30	Machine work period	Hotel			
	Dégrise	1			





Day 3

January 6 th 2019					
Time	Location				
5h30 - 7h30	Breakfast	Hotel			
7h30 - 8h	Transportation Éboulement sur la Montagne, Énigme du Vénérable du Sommet and Tchoukball dans le Fjord	Transportation			
8h30 - 9h	Transportation Fuyez l'Avalanche and Ruée vers l'Or				
8h - 12h30	Sports Competitions				
12h - 13h30	Lunch	Cégep de Sherbrooke			
13h30 - 17h30	Sports Competitions				
17h30 - 18h	Transportation wave 1	_ ,			
18h30 - 19h	Transportation wave 2	Transportation			
18h30 - 20h	Dinner				
20h - 0h30	Improvisation finals				
21h - 2h30	Machine work period	Hotel			
0h30 - 5h	Dégrise				





Day 4

January 7 th 2019					
Time	Location				
6h30 - 8h30	Breakfast				
8h - 11h	Debates finals and				
	Entrepreneurship	Hotel			
	Competition Pitchs				
11h30 -12h30	Lunch				
12h30 - 13h	Winter walk	Transportation			
13h - 17h30	Machine Competition	Centre d'Arts Orford			
17h30 - 18h	Winter walk	Transportation			
18h - 19h	Banquet preparation				
19h - 20h	Cocktail et delegation				
	pictures	Hotel			
20h - 0h	Banquet				
0h - 5h	Final dégrise				

Please note that certain details shown in these schedules are subject to change before the games, even if they are basically final. Do not worry, our team of volunteers or the organizing committee will inform you of any changes in the time needed.





7. Ice breaker games

This activity is the occasion for you, the delegates, to get to know each other. During the first day, at the hotel shortly after your arrival, you will meet short innovative challenges in teams composed of people from every delegation. These teams, 24 in total, will be revealed while receiving your badges. The following tables show the order of each team at the 12 stations that will be presented.

Time	Makalu	Kilimandjaro	Mont McKinley	Aconcagua	Massif Vinson	King Peak	Puncak Jaya	Mawenzi	Pic d'Orizaba
14h	1	2	3	4	5	6	7	8	9
14h15	2	1	4	3	6	5	8	7	10
14h30	3	12	5	2	7	4	9	6	11
14h45	4	11	6	1	8	3	10	5	12
15h	5	10	7	12	9	2	11	4	1
15h15	6	9	8	11	10	1	12	3	2
15h30	7	8	9	10	11	12	1	2	3
15h45	8	7	10	9	12	11	2	1	4
16h	9	6	11	8	1	10	3	12	5
16h15	10	5	12	7	2	9	4	11	6
16h30	11	4	1	6	3	8	5	10	7
16h45	12	3	2	5	4	7	6	9	8

Time	Huascarán	Mont Blanc	Everest	Pico Duarte	Nanga Parbat	Himalchuli	Chomo Lonzo	Nowshak	The Crown
14h	10	11	12	1	2	3	4	5	6
14h15	9	12	11	12	3	2	5	4	7
14h30	8	1	10	11	4	1	6	3	8
14h45	7	2	9	10	5	12	7	2	9
15h	6	3	8	9	6	11	8	1	10
15h15	5	4	7	8	7	10	9	12	11
15h30	4	5	6	7	8	9	10	11	12
15h45	3	6	5	6	9	8	11	10	1
16h	2	7	4	5	10	7	12	9	2
16h15	1	8	3	4	11	6	1	8	3
16h30	12	9	2	3	12	5	2	7	4
16h45	11	10	1	2	1	4	3	6	5





Time	Popocatépetl	Mont Cameroun	Mont Royal	Mont Bellevue	Machu Picchu	Mont Fudji
14h	7	8	9	10	11	12
14h15	6	9	8	11	10	1
14h30	5	10	7	12	9	2
14h45	4	11	6	1	8	3
15h	3	12	5	2	7	4
15h15	2	1	4	3	6	5
15h30	1	2	3	4	5	6
15h45	12	3	2	5	4	7
16h	11	4	1	6	3	8
16h15	10	5	12	7	2	9
16h30	9	6	11	8	1	10
16h45	8	7	10	9	12	11





8. Competitions

Here are the different academic, cultural, and sports competitions in which you will distinguish yourselves during the games. The exact locations and the schedule for the sports will be announced the morning of the competition. We invite you to follow indications from our volunteers on site to help you get to each activity.

Academic Competitions

Electrical engineering — January 5th 8 AM

Presented by



Software engineering — January 5th 8 AM

Presented by



Industrial engineering — January 5th 9 AM

Mechanical engineering — January 5th 8 AM

Chemical engineering — January 5th 9 AM

Presented by

RioTinto





Consulting engineering — January 5th 8 AM

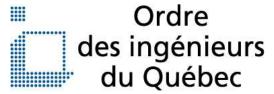
Presented by



The "Majeure" — January 5th 1PM

Live stream on the Facebook page of the Engineering Games during the networking evening

Presented by





Cultural Competitions

Trivia — January 5th 1:30 PM

Improvisation — January 5th 1:30 PM

Finals are January 6th at 8PM in the Magog room of the Hotel Cheribourg

Debates — January 5th 1:30PM

Finals are January 7th at 9AM in the Orford room of the Hotel Cheribourg





Sports Competitions

This year, the sports day is sponsored by Danone!





Danone Canada est la plus importante entreprise certifiée B Corp au pays. Danone répond aux normes les plus élevées en matière de performance sociale et environnementale, de responsabilité et de transparence.

Éboulement sur la Montagne — January 6th 8AM

Fuyez l'Avalanche — January 6th 8:45AM

L'Énigme du Vénérable du Sommet — January 6th 8AM

Tchoukball dans le Fjord — January 6th 8AM

La Ruée vers l'Or — January 6th 8:30AM

For all additional information on the various challenges, please consult the competitions booklet directly on our website.





Long Preparation Competitions

Entrepreneurial competition — January 5th 1:30PM

Public pitch January 7th in the Orford room of the Hotel Cheribourg

To learn more about the first edition of this challenge, you can consult the entrepreneurship booklet on our website.

The Machine — January 7th 7:30AM

Presentation and demo in the Salle de concert Gilles-Lefebvre at the Centre d'Arts Orford Live stream on the Quebec Engineering Game facebook page.





To learn more about the Engineering Games main competition, check out the Robotic Machine Booklet on our website (under the "Espace participants" tab).





9. Grading

Category	Competition	Weighting
	Electrical	/4
	Software	/4
	Industrial	/4
	Mechanical	/4
ACADEMICS	Chemical	/4
ACADEMICS	Civil	/4
	Consulting	/6
	Entrepreneurship	/8
	The "Majeure"	/6
	ACADEMICS SUMMARY	/44
	Indoor #1	/2
	Indoor #2	/2
	Surprise	/2
SPORTS	Pool	/2
	Outdoor	/2
	SPORTS SUMMARY	/10
	Debates	/5
	Trivia	/5
CULTURAL	Improvisation	/5
	CULTURAL SUMMARY	/15
MACHINE	Robotic Machine	/18
MACHINE	MACHINE SUMMARY	/18
	Opening night	/2
PARTICIPATION	Delegation theme	/1
	"Nuit de l'exploit"	/1





	Godparents	/1
	Eng games spirit (top 3)	/2
	Participation	/2
PARTICIPATION	Sustainability	/2
	Charity	/2
	PARTICIPATION SUMMARY	/13
	TOTAL	/100
	RANKING	





10. Participating Universities



























11. Thanks

The Organizing Committee of the 2019 Quebec Engineering Games would like to thank you for the the time you put into reading this booklet. We are sincerely happy to have you at our side for the adventure that is the 29th edition of the Quebec Engineering Games. It would not have been possible without the participation of all contributing parties. We express our most sincere thanks and will be eagerly waiting to see you in Sherbrooke on January 4th to 8th!

Marc-Antoine Godin — President

Danik Alexander-Renaud — VP Finance

Audrey L'Hébreux — VP Communications

Nathanaël Carbonneau — VP Logistics

Antoine Beaudry — VP Competitions

Raphaël Léandre — VP Robotic Machine

Nicole Boucher — VP Social

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Engineering

Alexandre Beaudoin — Industrial

Engineering

Raphaël Drouin — Software Engineering

Étienne Perron — Mechanical Engineering

Jean-François Péloquin— Mechanical

Engineering

Julien Rossignol —The "Majeure" **Philippe Designations** — Debates Nicolas Dufresne — Trivia Xavier Coupal — Improvisation Sarah Dion - Sports Alexandra Forget Hogue — Sports Eduard Paraschivescu — Entrepreneurship Philippe Daneau — Entrepreneurship Andrea Figueroa Mendez — Sustainability William Roy — Security Jacinthe Raymond — Food and Beverages Aleksi Côté — Transportation Randy Yantha — Audiovisual Victoria Julien-Bougie — Gear Hélène Maillé — Website Félicia Couturier — Graphic Design

A special thanks to all the volunteers who will provide helping hands during the Games and who have helped out during preparation, to the QCESO and to Photo Volatic!





