ENGINEERING GAMES



MISSION HANDBOOK



TABLE OF CONTENTS

1.	A WORD FROM THE ORGANIZING COMMITTEE7					
2.	BEHAVIOUR AND ATTITUDE					
3.	THEME					
4.	SUSTAINABILITY					
5.	ADRESSES AND IMPORTANT INSTRUCTIONS					
6.	SCHEDULE					
(GLOBAL SCHEDULE					
[Detailed Schedule					
7.	UNIFIED GAMES					
8.	COMPETITIONS					
A	Academic Competitions					
(CULTURAL COMPETITIONS					
	Sports					
L	LONG-TERM COMPETITIONS					
9.	SCORING					
10.	PARTICIPATING UNIVERSITIES					
11.	ACKNOWLEDGEMENTS					

O GENIUM 360 c'est ta communauté, active-la !

Privilèges commerciaux

Babillard d'emploi et de stage

Activités de réseautage

Nouvelles de l'industrie

Fais comme nos 96 000 membres et profites-en!

Adhésion gratuite genium360.ca



Antipote Le remède à tous vos mots.

- S Correcteur avancé avec filtres intelligents
- O Dictionnaires riches et complets
- 𝔅 **Guides** linguistiques clairs et détaillés

Antidote, c'est l'arsenal complet du parfait rédacteur, qui s'ajoute directement à vos logiciels préférés. Que vous écriviez un courriel ou un rapport, cliquez sur un bouton et voyez s'ouvrir un des ouvrages de référence parmi les plus riches et les plus utiles jamais produits. Si vous écrivez à l'ordinateur, Antidote est fait pour vous.

Pour **Windows**, **macOS** et **Linux**. Dictionnaires et guides aussi offerts sur **iPhone** et **iPad**. Pour les compatibilités et les caractéristiques, consultez :

www.antidote.info







TOUTES LES 6 MINUTES

IL SE PRODUIT UN ACCIDENT DU TRAVAIL

Quand on parle de sécurité, on élimine les dangers. parlersst.com







INSPIRATION

Pour ceux qui veulent construire des ouvrages qui ont un impact.

Vous voulez prendre part à des projets qui font une différence? Ne cherchez pas plus loin.

kiewitjobs.com

1. A Word from the Organizing Committee

Dear participants,

It is with great pride that the École de Technologie Supérieure will host the 30th edition of the province's largest engineering competition in January: the Quebec Engineering Games.

The organizing committee of the 2020 Engineering Games is pleased to send you the mission handbook, which aims to give you all the official information related to this 30th edition of the Games, from the competition schedule, meals, transportation to all the other activities on the program for these four busy days.

Without our valued partners, we would not be where we are today. This handbook is also an opportunity for us to thank them for their generosity that allows us to have such an incredible event every year!

If you don't find the answers to your questions in this document, it will be a pleasure for the entire team of volunteers and our committee to answer them and guide you throughout the competition. These games will be an opportunity to surpass yourself and put your knowledge to good use, while maintaining an outstanding team spirit in order to represent the spirit of the Games.

We hope you will have as much fun as we had preparing this event for you!

2. Behaviour and Attitude

The Engineering Games are an opportunity to fraternize, meet new people, build your network of contacts and get out of your comfort zone while having immeasurable fun during these four colourful days.

However, we remind you that this is first and foremost an engineering competition, which requires a certain amount of seriousness on your part. Major partners will be present to ensure the viability of the event, but also to network and recruit among the best students in Quebec. In addition, certain issues related to the public image that emerged a few years ago have jeopardized the Games' sustainability. Indeed, each time an incident related to misbehaviour occurs, the event's funding and logistics become increasingly complex, and certain aspects of the competition must sometimes be neglected.

We therefore ask you to avoid incidents of any kind that could be detrimental to the experience of others. Remember that your actions and attitude in all activities have a direct effect on the success or failure of the event. The organizing committee will not hesitate to expel a participant who does not respect the <u>discipline policy</u>.

If you witness or are a victim of such behaviour, do not hesitate to speak to a member of the Organizing Committee (red shirts) and/or to fill out the <u>QCESO complaint form</u>.

In addition, a special "**sponsors' choice**" prize will be awarded to the sponsors' favourite delegation. All the representatives of the companies on site will be able to vote for their favourite delegation, based on professionalism, positive attitude and genuine interest in the companies.

Help us ensure that this edition runs smoothly by remaining respectful of the people and equipment, and by showing good civism and team spirit. This is an opportunity to work together to promote the exemplary values that have characterized the Quebec Engineering Games for the past 30 years.

3. Theme

Survivor,

As you know, the adverse consequences of human activities are pushing the earth to its limits, meaning that it will soon be impossible to evolve in a safe ecosystem. Thus, last January, the scientists and climatologists of the **Bureau of Engineering and Planning of Competitions Organized as Multidisciplinary**, **the BEPCOM**, predicted the imminence of a series of environmental disasters, which could wipe out all life on Earth at an alarming rate. Unsurprisingly, our predictions proved accurate, and these unprecedented events began in September 2019. If you are reading this, you have survived.

In this particular context, the BEPCOM required each Quebec university to select, from among the survivors, the 46 most talented engineering students. This selection was based on your ability to solve complex problems related to the re-engineering of a greener, healthier and more sustainable world. It was also about selecting the most innovative, responsible, creative and respectful people. Now that the selection process is officially completed, the BEPCOM congratulates you on this remarkable achievement... however, the hardest part remains to be done.

Indeed, on 3 January, the BEPCOM will officially launch the JDG2020 Mission, and it cannot happen without you. **The objective of this mission is to improve the situation on Earth, preserve knowledge, responsibly exploit the remaining resources and restart activities in a sustainable manner**. It will be through a series of challenges, developed by BIPCOM's thought leaders, that you and 409 other extraordinary students will be tested to challenge all your skills and develop solutions to the 10 most critical issues for BEPCOM.

The BEPCOM once again wishes to congratulate you not only for surviving the natural disasters of recent months, but also for being selected for this vitally important mission, on which rests the future of humanity and of the world as we know it.

This document is intended to give you all the information you will need to follow, as well as the logistical details of Mission JDG2020. Please read it carefully to ensure its success.

We are counting on you and we believe in you. It's finally time to change the world.



4. Sustainability

We invite participants to pay attention to sustainability throughout the JDG2020 Mission.

The organizing committee of the Engineering Games is committed to sustainability, which is one of our 3 pillars. This is why we have reduced as much as possible the waste and greenhouse gas emissions generated by the event. We reduce waste at the source by using reusable dishes, by not offering any single-use items, by making recycling and compost available throughout the event and by making the trophies and centerpieces for the banquet with recycled materials.

In addition, we are proud to announce that, for the first time in 30 years, this edition of the Engineering Games will be CARBON NEUTRAL. To achieve this, we have reduced the event's greenhouse gas production by minimizing transportation, offering a vegetarian event by default, as well as other small sustainable initiatives that you will see during your stay. In this way, we want to sustainably integrate eco-responsible initiatives into the tradition of the Engineering Games, but to do so, we need your help!

Points will be given if:

- The delegation helps sorting waste at the end of each meal (for example, by working with volunteers to sort waste);
- You avoid unnecessary waste (e.g. by not destroying equipment);
- You avoid the generation of single-use waste (e.g. by using a reusable water bottle);
- You encourage the sustainable efforts of others (for example, by not disposing of any waste or liquid in can collection bags);
- You have any other sustainable initiative;

So, stay tuned for further instructions. You will see that with a few concrete actions, it is possible to reduce the environmental impact of a gathering of more than 450 people. You will therefore be rewarded by your good conscience and allow your delegation to earn a few extra points!

5. Adresses and important instructions

IMPORTANT: You must always wear your NFC bracelet on your wrist for the duration of the Games. Otherwise you will not be able to access activities and meals.

You must also have valid identification (driver's license or health insurance card) in your possession for opening night. Also bring cash, as Café Campus will not accept payment by card.

Finally, we ask you to arrive 5 minutes early for all transports in order to avoid delays. Thank you!

Hôtel Crowne Plaza

6600 Chemin de la Côte-de-Liesse Montréal (Québec) H4T 1E3

Café Campus

57 Rue Prince Arthur E Montréal (Québec) H2X 1B4

École de Technologie Supérieure

Pavillon Principal 1100 Rue Notre-Dame Ouest Montréal (Québec) H3C 1K3

Cinéma Impérial

1430 Rue de Bleury Montréal (Québec) H3A 2J1

6. Schedule

Global Schedule

	Friday January 3rd	Saturday January 4th	Sunday January 5th	Monday January 6th	Tuesday January 7th
AM	Delegates' arrival (Hotel)	Academic Competitions (ÉTS)	Sports day (ÉTS)	Debates Finals (Hôtel)	Delegates' departure
Lunch	Hotel	ÉTS	ÉTS	Hôtel	
PM	Jeux unifiés	La Majeure, Entrepreneurship competition, Trivia, Improvisation and Debates (ÉTS)	Sports day (ÉTS)	Machine Competition (Théâtre impérial)	
Dinner	Café Campus	ÉTS	ÉTS	Hotel	
Evening	Opening Ceremonies (Café Campus)	Networking event with sponsors (Hotel)	Improvisation Finals (Hotel)	Banquet (Hotel)	

Detailed Schedule

From now on and throughout the event, you will be able to consult the detailed schedule via this link. It will be kept up to date in case of any changes.

7. Unified Games

This event is an opportunity for you, the delegates, to get to know each other more. On the first day, directly at the hotel shortly after your arrival, you will take on short, innovative challenges as a team made up of members of each of the delegations.

The teams will be revealed in the early afternoon.

This year's unified games will be in the form of a scavenger hunt with a host of questions, puzzles, challenges and booths to be completed with your team! You will need to enter the answers to the challenges on a web-based platform, so **make sure you have your cell phone charged and with you** at the event! Detailed information will be given to you on site.

Some challenges will have to be done in front of the judges to be validated. This is the time to showcase your creativity, humour and quick-wittedness!

The winning team of these unified games will be revealed at the opening show and will win an incredible ... suprise ;)

8. Competitions

Here are the different academic, cultural and sports competitions in which you will have to perform at the Games. The exact venues and game schedule for each delegation will be announced on the morning of the competition. We invite you to follow the directions of the volunteers on site to get to the right place during the activities.

Academic Competitions

Electrical Engineering – January 4th, 7:30 am

Presented by



Mechanical Engineering – January 4th, 7:30 am

Presented by



Computer Engineering – January 4th, 7:30 am

Presented by



Industrial Engineering – January 4th, 8:30 am

Presented by



Chemical Engineering – January 4th, 8:30 am

Presented by



Civil Engineering – January 4th, 8:30 am



Consulting – January 4th, 8:30 am



"La Majeure" – January 4th, 12:00 pm

Presented by





TON INGÉNIOSITÉ AU SERVICE DES GENS





TON INGÉNIOSITÉ AU SERVICE DES GENS





Un siècle d'innovations qui changent le monde

Solutions d'inspection et de mesure

Ultrasons | Ultrasons Multiéléments | Courants de Foucault | Courants de Foucault Multiéléments | Inspection Visuelle à Distance | Microscopie | Fluorescence à Rayons X

Olympus conçoit et fabrique une variété de solutions et de produits CND novateurs élaborés pour répondre aux attentes des clients en matière de technologie, de conception et de convivialité.

Grâce à nos nombreuses technologies, nous pouvons collaborer avec nos clients du domaine industriel pour les aider à faire face aux défis complexes que pose l'inspection. Nos produits sont d'ailleurs utilisés dans un large éventail d'applications et dans différents marchés, notamment :

> industrie aérospatiale> production d'énergie

> industrie pétrolière et gazière

> produits chimiques

> transport

> soudage

- fabrication
- > industrie minière
- > industrie du recyclage

Notre engagement à concevoir des produits de qualité est directement lié à la responsabilité de nos clients, qui doivent se conformer aux normes et à la réglementation les plus strictes de l'industrie pour garantir la sécurité, la qualité et la fiabilité des infrastructures et assurer la sécurité du public.



Olympus NDT Canada, fier partenaire des Jeux de Génie 2020

www.olympus-ims.com



Promoting innovation for over 139 years

We are proud to sponsor the 2020 Québec Engineering Games at ÉTS, a university recognized for its technological and economic contribution to the development of Québec.

We welcome you and wish you an awesome event!

Interested in developing revolutionary products used by all Canadians? See us at the Bell Booth & go to **Bell.ca/EngineeringGames** for Full Time and Internship opportunities!

Environmental services leader







Veolia is contributing to the human progress.

Our team works together to share ideas, develop solutions and solve complex environmental challenges!

Join us to Resource the world together



Resourcing the world

VEOLIA

anada's To

RioTinto

Rio Tinto est fier de soutenir les futurs ingénieurs, leaders de demain.

Partenaire OR des Jeux de Génie du Québec 2020

Rio Tinto is proud to support future engineers, tomorrow's leaders.

Gold Partner of the 2020 Quebec Engineering Games

riotinto.com/canada

You Tube

7

7

7

7

7

7

7

7

7

7

7

7

7

7

7

7

7

7

MON HORIZON **DE CARRIÈRE**

sinfra

AVANCEMENT • DÉFIS • TRAVAIL D'ÉQUIPE

Pionnière dans la construction et avec plus de 90 ans d'expertise, Sintra est chef de file dans le domaine de la construction et de l'entretien des infrastructures de transport.

On attend plus que vous !

Conseiller en ressources humaines et en santé et sécurité | Conseiller en environnement | Conseiller juridique | Adjoint administratif | Comptable | Analyste comptable | Contrôleur | Technicien à la comptabilité | Génie civil | Directeur des opérations | Directeur de projets | Chargé de projets



Gérant de chantiers | Estimateur | Responsable des services techniques | Chef de laboratoire | Technicien de laboratoire | Surintendant | Contremaître | Opérateur de machineries lourdes | Mécanicien/soudeur | Journalier | Chef d'équipe | Camionneur | Arpenteur | Signaleur

EMPLOIS D'ÉTÉ | STAGE | ALTERNANCE TRAVAIL ÉTUDES







Tu n'as pas **peur** de **relever** des défis ?

Rejoins *la gang* d'Eurovia Québec!

ENVOIE TA CANDIDATURE SUR

rh@euroviaqc.ca

euroviaqc.ca



Cultural competitions

Trivia – January 4th, 1:00 pm Presented by



Improvisation — January 4th, 1:00 pm

Finals are January 5th, 7:00 pm in room "Internationale BCD" of the Crowne Plaza Hotel.



Debates — January 4th, 1:00 pm

Finals are January 6th, 8:00 am in room "Internationale BCD" of the Crowne Plaza Hotel. Presented by



Sports

This year, the sports day (January 5th) is presented by the Association Étudiante de l'École de Technologie Supérieure (AÉÉTS) !



The following sports start at 8:00 am :

- Outdoors Kickball
- Spikeball
- Suprise Sport
- eSports

Dance starts at 9 :00 am.

For more detailed information on the various events, please consult the Competition Handbook available on the <u>Quebec Engineering Games website</u>.



Long-Term Competitions

Entrepreneurship Competition — January 4th, 1 :30 pm Public pitch on January 6th, 10 :00 am in room "Internationale BCD" of the Crowne Plaza Hotel.

Presented by



To find out all about the Entrepreneurship Competition, please consult the Entrepreneurship Competition Handbook available on our website (Participants' Page).

La Machine – January 6th, 1 :30 pm

Presentation and demonstration at Cinéma Impérial Live broadcasting on the Jeux de Génie du Québec facebook page Presented by



To find out all about the Engineering Games centrepiece event, please consult the Machine Competition Handbook available on our website (Participants' Page).



Reconnu dans le

TOP 20 MONDIAL

des incubateurs universitaires les plus performants.

Prochain dépôt de projet : 10 avril 2020 sur centech.co





ENSEMBLE, ON PEUT POUSSER LA TECHNOLOGIE ENCORE PLUS LOIN

Trouve ta place dans une équipe qui valorise ton talent. Quand on collabore, aucune idée n'est trop grande, aucun défi trop complexe.

VIENS METTRE TON INGÉNIOSITÉ AU SERVICE DE L'HUMANITÉ CHEZ RHEINMETALL CANADA. Nous sommes toujours prêts à rencontrer de nouveaux talents, consulte les emplois et les stages disponibles.

rheinmetall.ca/carrieres





JEUX DE GÉNIE 2020



> Nous somme fiers d'avoir l'opportunité de vous aider avec vos créations!

Utilisez le code AddisonJDG2020 et obtenez des rabais sur vos achats en ligne! www.addison-electronique.com



DU 3 AU 7 JANVIER 2020 À MONTRÉAL

30^E ÉDITION

Changer le monde, c'est tout un projet



Devenez membre étudiant de votre section locale du Project Management Institute

Communiquez avec nous pour un code promo!



Project Management Institute_{*} Montréal

514-861-8788 www.pmimontreal.org



9. Scoring

As you may know, the ETS trains 25% of all engineers in Quebec, and more than 3,700 internships are completed annually. ÉTS's coop education program encourages students to get to know each other as professionals in the following three areas:

- Know-how: brings together the technical skills of the engineer;
- Knowing how to act: includes the ability to take action for the well-being of the group;
- Knowing how to be: the individual's personal skills.

For many people, the Engineering Games are a way to improve their skills. It is through the scoring grid that we will try to motivate your actions. The evaluation scale for all the Engineering Games is detailed as follows:

		Civil	75
		Mechanical	75
	Academics	Electrical	75
		Software	75
		Industrial	75
		Chemical	75
		Consulting	109
	Sports	Majeure	109
SAVOIR-FAIRE		Sport 1	40
SAVOIK-FAIKE		Sport 2	40
		Sport 3	40
		Sport 4	40
		Outdoor Sport	40
	Machine	Machine	403
	Entrepreneurship	Entrepreneurship	303
		Improvisation	81
	Cultural	Debates	81
		Trivia	81
	A	Opening ceremonies	25
	Animation	Delegation's theme	15
		Parrains' Acad	5
	Parrains	Attitude	9
SAVOIR-AGIR	Sustainability	Commitment to the delegation	15
		Procurement	12
		Involvement during the games	12
		Charity event	26
	En a Camara anin't	Participation	30
	EngGames spirit Professionnalism	EngGames spirit	30
SAVOIR-ETRE		Sponsor's honorable mention	6
		Presence	9
		Assiduity	9
	2020		

10. Participating Universities





École polytechnique de Montréal



École de technologie supérieure



Université Laval



Université McGill



JEUX DE GÉNIE Université du Québec à

Trois-Rivières



Université du Québec à Chicoutimi



Université du Québec à Rimouski



Université du Québec en Abitibi-Témiscamingue



Université du Québec en Outaouais & Université d'Ottawa

11. Acknowledgements

The organizing committee of the 2020 Quebec Engineering Games sincerely thanks you for having paid attention to this document. We are extremely pleased to count you among us in the adventure of this 30th and memorable edition of the Quebec Engineering Games, which would never have been possible without the help of all these beautiful people. A huge thank you to all of you for your involvement. We look forward to seeing you in Montreal from January 3 to 7!

Anne-Sophie Lachapelle - President

Célia-Nour Mahrour-Venturelli - VP Finance

Alyssa Bouchenak - VP Communications

Jérémie Lesuise - VP Sponsorship

François Pelletier - VP Competitions

Sacha Terral - VP Logistics

Gabriel Lévesque - VP Machine

Marc Antoine Dumont - Sustainability Advisor

Marie-Aude Ardizzon - Production Advisor

Thierry Meunier - Co-chef parrain

Rachelle Sederoff - Co-cheffe marraine

Christophe Duchesne - Partnership Director

Cédric Vigneault - Partnership Director

Maxence Frenette - Website Director

Camille Lalancette - Logistics Director

Alexandre Mongrain - Machine Director

Pierrick Arsenault - Machine Director

Benjamin Fevereiro - Machine Director

Stéphane Jenkins – Competitions Director

Eduard Paraschivescu - Entrepreneurship Alexandre Robillard – Chemical Engineering

Philippe Daneau - Entrepreneurship

Isabelle Hoang – Civil Engineering

Stéphane Jenkins - Consulting		
Louis Félix Baillargeon – Electrical Engineering		
Benoit Côté-Jodoin – Computer Engineering		
Antoine Leblanc – Mechanical Engineering		
Imen Bessioud – Industrial Engineering Jessica Ing - Industrial Engineering		

A very special thank you also goes out to the entire team of volunteers who will be with us at the Games or who have helped on both sides in the preparation of the event, to QCESO, to our precious partners, as well as to Photo Voltaic!