



QUEBEC
ENGINEERING GAMES²⁰²⁵

📅 V1 - September 2024

Entrepreneurship Booklet

United for the Games | 34th Engineering Games
From January 3 to 7, 2025 | École de technologie supérieure



Photo: Port de Montreal

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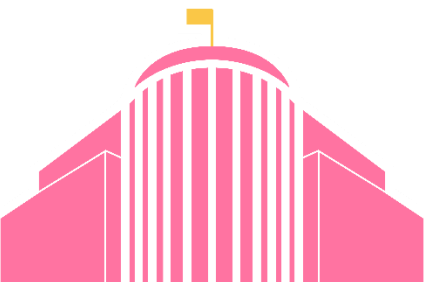
Introduction

For over 30 years now, the Quebec Engineering Games have been the largest engineering competition in Quebec, and the largest gathering of engineering students in the province. Participants from 14 universities in Quebec, Ontario and New Brunswick put their general and specific engineering skills to the test by competing in a variety of challenges. École de Technologie Supérieure is honoured to host the 34th edition, taking place from January 3 to 7, 2025.

This year marks the sixth edition of the Quebec Engineering Games entrepreneurial competition. This stimulating event challenges participants to push themselves to find innovative solutions to the challenges facing the world today. Teams must not only demonstrate boldness and creativity, but also learn to collaborate with one another.

The future engineers will have the task of building a solid business model and creating a representative prototype of a viable, innovative solution that will have a significant impact on Quebec industries. Each team will then present its project to an expert jury at the Engineering Games in January 2025.

Get ready to take on a challenge, innovate and leave your mark on the entrepreneurial world!



Presentation

Video Introducing This Year's Challenge



Theme

Overall, the challenge is to identify an economic sector and develop a product or service that responds to a need or issue, while having a positive social or environmental impact. For the 2025 edition, the aim of the competition is to successfully merge two existing industries in Quebec/Canada, and create innovative companies focused on the B2B¹ market.

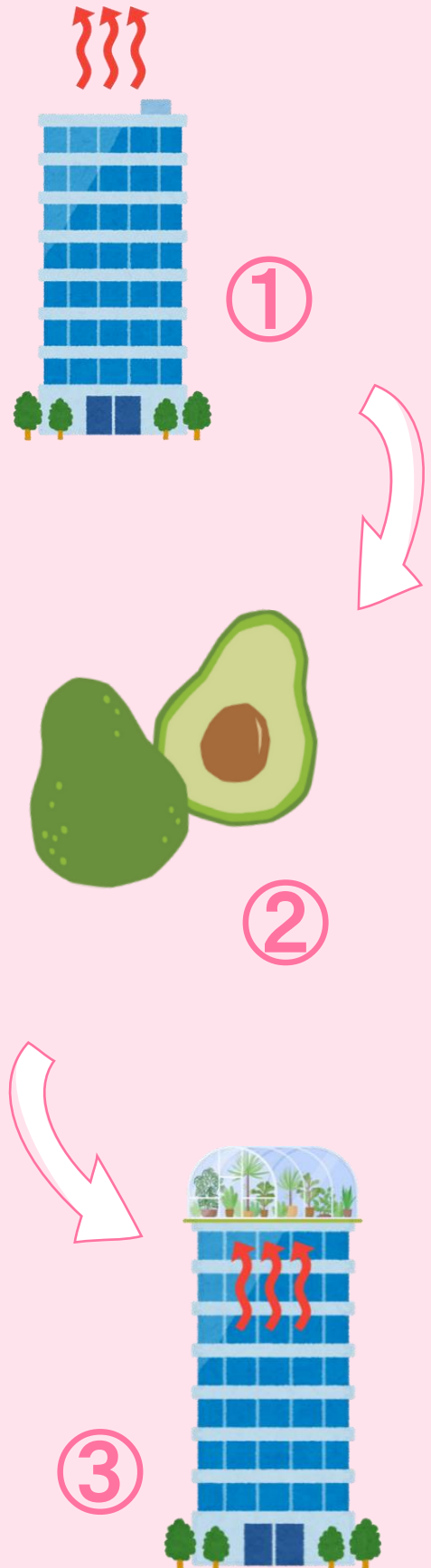
More concretely, teams will have to target two industries and become the bridge that links them to create a third product/service.

2025 Challenge

A good example is the existence of greenhouses, installed on the roofs of buildings that generate heat because of their energy consumption.

To avoid the loss of energy emitted by an industry, ① the energy supply from the buildings is converted into a source of energy for another industry, namely ② food industry. By creating a bridge between the two industries, a third product with a positive impact on our society is created: ③ urban greenhouses.

¹ B2B: "Business-to-Business, is a situation where one business makes a commercial transaction with another." (Wikipedia, 2024)



Deliverable 1

Problem Search

The first deliverable is due on **September 18 at 11:59pm**. The first stage of the competition is to identify your project's problem. A team brainstorming session is recommended to generate ideas. The first deliverable will be the result of this process, in the form of a table (see [Appendix A: Deliverables](#)). This table will highlight all the elements needed to structure and define your entrepreneurial project.

The aim of this deliverable is to develop a structured, in-depth understanding of the problem you wish to solve, and to map the surrounding environment. You'll need to fill in two to three tables based on the issues you feel have the most potential.

The deliverable should contain one or more pages of bibliography (min 10 references) and should cover the following points:

- The problem: Describe the problem in one sentence clearly and concisely so that someone outside the project can understand it.
- Stakeholders: Identify the people impacted by the problem. Describe their typical profile, needs and industries.
- Existing solutions: Explain briefly what solutions exist on the market today and highlight their advantages as well as their shortcomings in relation to the needs of those affected.
- Potential solutions: Preliminarily propose several new potential solutions. Are there several options? Are they varied and innovative? Demonstrate that you have explored a variety of possible solutions and that it is possible to solve the problem.
- Resources: Describe the approximate technical and financial resources required to carry out your project.
- Opportunity: Analyze the economic opportunity represented by this problem. Show that there is a market for solving this problem. This section can be supported by statistics on the economic market and the demographics of this part of the market.

- Value proposition: Describe how your proposition differs from existing solutions. What needs do you address, and why are these needs important? The added value should be consistent with the problem, the people impacted and the existing solutions.
- Scope: Describe the two (or more) industries targeted by the problem. Then, explain how your solution links these industries and the impact it has on each of them.
- Obstacles: Identify the current obstacles that explain the lack of progress or the barriers that prevent progress in solving this problem. You need to demonstrate a thorough understanding of the problem and highlight the obstacles that future solutions may encounter.
- Causes: Describe the ecosystem surrounding the problem and the causes behind the lack of resolution. Go beyond the initial “why” and show that you have examined the problem in all its dimensions.



Good to know

A table template will be provided to facilitate completion of the first deliverable.

The rubric is available in [Appendix B: Grading criteria and evaluation rubrics](#). It contains evaluation criteria to guide you in the grading of the deliverable.

Deliverable 2

Value proposition and preliminary BMC

The second deliverable is due on **October 12, at 11:59 pm.**

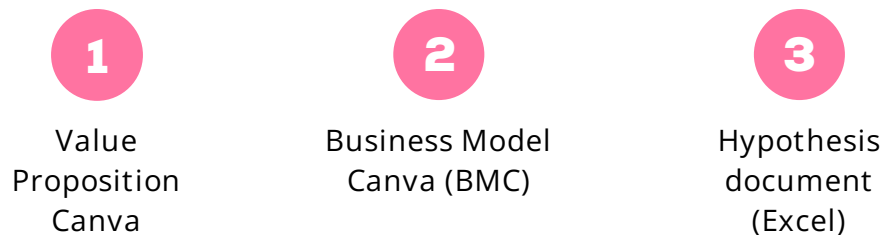
It will define the initial outline of your business. For your business to be viable and sustainable, it's important that the product you offer brings value to a specific clientele. So, in the first part, we ask you to develop your project's value proposition. You should use the value proposition template in the [appendix](#) to help you define this proposition.

In the first part, the Value Proposition Canvas (VPC) will enable you to get started on your Business Model Canvas (BMC). This template will help you fill in the "value proposition" and "market segment" sections. We're asking you to evolve your product ideology over the course of this fall. That's why we want to see iterations on your business model based on this deliverable.

In the second part, it will be necessary to produce a first version of the BMC. We suggest that you concentrate on the value proposition, market segment (which should already be idealized by part 1 of Deliverable 2), cost structure and revenue streams sections. The other sections should have been briefly elaborated (at least one item per section).

In the third and final part, complete the hypothesis document². You'll need to detail each hypothesis you've made in constructing your CMB. How do you plan to confirm or refute these hypotheses? (Contact a specialist, a potential customer, consult statistics or data, etc.).

In summary, we ask you to provide three documents for this deliverable:



² The template for the hypothesis document (Excel file) will be shared with the challenge participants via Teams.

2.1 BMC guide

Description of the Business Model Canva boxes

Customer Segments

Description: Identify the different groups of people or organizations your company aims to reach and serve.

Examples: Individual customers, businesses, young professionals, parents, etc.

Value proposition

Description: Describe the mix of products and services that create value for a specific clientele segment. This is the reason why customers choose your product/service over those of the competition.

Examples: Innovative solution, personalization, design, price, performance, etc.

Channels

Description: Explain how your company communicates with its customer segments and how it delivers to them its value proposition.

Examples: Direct sales, online, partnerships, physical stores, etc.

Customer Relationships

Description: Define the type of relationship you establish with specific customer segments. This relationship can be personal, automated, etc.

Examples: Personal assistance, automated assistance, communities, co-creation, etc.

Revenue Streams

Description: Identify how your company makes money from each customer segment.

Examples: product sales, subscription fees, rental/leasing, license fees, advertising, etc.

Key Resources

Description: List the most important assets required to make your business model work.

Examples: physical resources (infrastructure), intellectual resources (patents, brands), human resources (team), financial resources (credit lines), etc.

Key activities

Description: Describe the most important activities your company needs to do to make its business model work.

Examples: Production, problem solving, platform/network management, etc.

Key Partners

Description: Describe the network of suppliers and partners that make your business model possible.

Examples: Strategic alliances, joint-ventures, supplier relationships, etc.

Cost Structure

Description: Identify all the costs incurred in running your business model.

Examples: Fixed costs (salaries, rent), variable costs (materials, production), economies of scale, economies of scope, etc.

2.2 VPC Guide

Description of the Value Proposition Canvas boxes

1. Customer Jobs

Description: The tasks, problems or needs your customers are looking to accomplish or solve.

Questions to ask :

- What are the main tasks your customers are trying to accomplish?
- What problems are they trying to solve?
- What needs are they attempting to satisfy?

2. Pains

Description: The difficulties, risks or undesirable effects encountered by your customers in carrying out their work.

Questions to ask :

- What obstacles prevent your customers from carrying out their work?
- What are the main risks or difficulties they encounter?
- What do your customers find costly (time, money, effort)?

3. Gains

Description: The results, benefits or goals your customers want to achieve.

Questions to ask:

- What benefits would your customers like to see?
- What would make them happy?
- What positive results or benefits are they looking for?

4. Products and Services

Description: The list of products and services you offer that help your customers get the job done.

Questions to ask:

- What products or services do you offer?
- What are the most important aspects of these products or services for your customers?

5. Pain Relief

Description: How do your products and services relieve or eliminate your customers' pain.

Questions to ask:

- How do your products/services help eliminate or reduce the obstacles and difficulties encountered by your customers?
- How do they relieve frustration or minimize risk for your customers?

6. Gain Creators

Description : How do your products/services create gains or benefits for your customers.

Questions to ask:

- How do your products/services create positive benefits or outcomes for your customers?
- How do they improve results or make your customers happy?



Good to know

The rubric is available in [Appendix B: Grading criteria and evaluation rubrics](#). It contains evaluation criteria to guide you in the grading of the deliverable.

Deliverable 3

Revised business model and answered hypotheses

The third deliverable is due on **November 27, at 11:59 pm**. This step involves developing a revised and improved version of your business model. You will need to complete the Business Model Canvas (BMC) again, incorporating more comprehensively the information gathered from the hypotheses made in Deliverable 2. In addition, the hypothesis model will also need to be resubmitted, with all the hypotheses made and their corresponding answers. Another new addition is the collaboration workshop, which will be discussed below.

The sections to be completed in the matrix remain the same as for Deliverable 2, but will need to be addressed in greater depth. The hypothesis document should trace the history of all hypotheses put forward, including their answers and the methods used to answer them. In addition, it should include any new assumptions made as a result of the answers obtained. Response methods can take various forms, such as interviews, surveys, document research, proofs of concept, experiments or market analyses, among others.

In summary, we ask you to provide two documents for this deliverable:

**1**

Revised Business
Model Canva
(BMC)

**2**

Document of
answered
hypotheses

3.1 Collaboration Workshop

The collaboration workshop is a new addition this year, and the date will be decided in the weeks following submission of the handbook to allow as many people as possible to attend. The aim of this workshop is to highlight the theme of unity and get the various participating universities to work together.

3.1.1 Goal of this Workshop

We want to enable teams to receive constructive criticism of their ideas and, at the same time, give them an opportunity to present to an audience at least once before the official Engineering Games pitch.

Each team will be given one minute to present their project in an “elevator pitch” format, i.e. a short explanation designed to quickly explain their company's concept. The team then has 3 minutes to present the main hypotheses on which their project is based,

This concludes with a 2-minute question and answer session, during which the "judging" delegations can ask questions and provide feedback.

During each pitch, the other teams will be asked to take notes and give constructive feedback on the content of the presentation and the presenters' performance. A model feedback structure will be provided at the workshop.



Important!

All points associated with this workshop are based on participation (presentation and feedback). We do NOT evaluate presentation performance.

From this point on, it will be forbidden to pivot without the approval of the CO of the entrepreneurial competition and to take up an idea similar to one presented by another team. Plagiarism will not be tolerated.



Good to know

The rubric is available in [Appendix B: Grading criteria and evaluation rubrics](#). It contains evaluation criteria to guide you in the grading of the deliverable.

Deliverable 4

Business Plan

The fourth deliverable is due **January 1st at 11:59pm**. This step consists of the complete presentation of your company's business plan, including a three-year financial projection and technical documentation of your engineering innovation. This document is crucial, as it summarizes your entire business model and details your strategy for developing your company.

Your business plan will need to convince any potential investor of your company's economic viability, demonstrate that your value proposition meets a real market need, and prove that your technological innovation is feasible with the resources you have available.

The deliverable should cover the following points:

- 1. Team Presentation (∞ pages): Introduce each member of your team with a photo, first and last name, and role within the team, along with a brief description of their expertise and contribution to the project.
- 2. Company Description (2 pages) : Introduce the company (name, logo, mission, vision, objectives, values, etc.) as well as a short description. Describe external resources and current or future partners.
- 3. Product (1 page) :

Problem: Summarize the problem your product or service aims to solve, detailing specific market needs and issues.

Existing solutions: Give an overview of current solutions on the market, highlighting their limitations that your proposal seeks to overcome.

Your product: Explain in detail the unique features and functionalities of your product, highlighting its innovative nature and the benefits it offers.

Target market: Describe the demographics and characteristics of your target market, including market size and economic opportunities.

4. Implementation (1 page) :

Key success factors and risks: Identify the key factors for the success of your business in the short and medium term, as well as the main risks.

Development and commercialization: Describe the key stages in the development of your product, from R&D to commercialization, including any necessary certifications, and your strategy for gaining market share.

Finance: Summarize the anticipated costs of the development stages and the financing strategies envisaged.



Good to know

The rubric is available in [Appendix B: Grading criteria and evaluation rubrics](#). It contains evaluation criteria to guide you in the grading of the deliverable.

4.1 Appendix 1 – Economic Analysis

Make a financial projection of your company for the next three years. You will need to establish:

- A selling price for the product
- The company's break-even point based on expected revenues
 - Production costs (fixed and variable)
 - Administrative costs
 - Marketing costs.
 - Fixed costs, including (but not limited to) materials, tools, buildings, energy consumption (if applicable), etc.
 - Variable costs, which include parts (including transportation and manufacturing), labor and any other element related to the product.

Don't neglect to analyze the cost of sales in terms of sales staff time, implementation costs, delivery costs and so on.

4.1.1 Costs and Financing (January 1, 2025 to December 31, 2027)

Examine your company's expenses and sources of financing in detail. Your report should include the following elements:

- Operating costs: Current expenses to maintain operations (salaries, rent, etc.).
- Production costs: Expenses related to manufacturing your product.
- Sales costs : Expenses associated with promotion and marketing.
- Development costs: Capital invested in research and development and in improving your product.
- Administrative costs: General expenses related to the management and general administration of your business.
- Sources of financing: Sources of the capital needed to develop your business come from (investors, founders, loans, and grants, etc.).
- Financing structure: Breakdown of financing between equity and debt, as well as any repayment terms.

4.1.2 Detailed income statement (January 1, 2025 to December 31, 2027)

Detailed income statement shows your company's revenues, expenses and profits or losses. Your report should include the following points³ :

- Revenues: The company's sources of income.
- Cost of sales: Expenses directly related to the production or supply of products or services sold.
- Operating expenses: the company's general and administrative expenses.
- Financial expenses: interest paid on debts or other financial costs.
- Income tax: amount of tax due on realized profits.
- Net profit or loss: the difference between revenues and expenses, indicating whether the startup has made a profit or incurred a loss over the given period.



Good to know

To carry out the financial analysis, we STRONGLY suggest the use of financial analysis tools for small businesses, such as Budgeto.

³ Given that your company is in a start-up phase, it is normal for certain amounts to be estimated.

4.2 Appendix 2 – Technical Documentation

In Appendix 2, include all relevant technical documentation for the product and clearly indicate the technological innovation. For example: 3D model, technical manufacturing plan, electrical diagram, operating architecture, pseudo-code, etc. There is no page limit, but text paragraphs are not permitted. ([See Appendix D: Specifications and regulations.](#))



Penalties

An extra page is allowed wherever you deem most relevant in the overall document.
A penalty of one point will be applied per number of extra pages after the permitted page,

Deliverable 5

Presentation

The presentation will take the form of a sales pitch to a panel of judges, lasting a maximum of 7 minutes. An additional 3 minutes may be allowed for a demonstration of the prototype. After the presentation, a question-and-answer session will be held with the judges. The objective of the pitch is to convince a startup accelerator that your product has a place in the market and that your company is viable in order to integrate the accelerator and obtain financing.

Here is a suggested generic format for the pitch. Each team is free to be creative and adapt it to its own business:

1. Problem :

- Introduce the industry and the chosen problem. Put the jury in context by describing the specific challenges your company is seeking to solve.
- Tip: Use relevant statistics and concrete anecdotes to illustrate the scope of the problem.

2. Solution:

- Present your product and explain how it solves the problem. This is an ideal opportunity to demonstrate the prototype.
- Include audiovisual support showing the product in operation to reinforce the visual impact of your solution.
- Tip: Emphasize the innovation and unique advantages of your solution over existing alternatives.

3. Market:

- Describe your target clientele in detail. Use the results of your market tests to show that you have a thorough understanding of the market.
- Tip: Mention the size of the market, the specific segments you're targeting, and the economic opportunities it represents.

4. Business plan:

- Present the essential elements of your business plan to demonstrate your company's viability and resilience in the face of risk.

- Include key financial aspects such as break-even point, cost of production, selling price and profit margin.
- Tip: Use graphs and charts to illustrate your financial projections and make your arguments more convincing.

5.1 Second Presentation

The top 5 teams will have the opportunity to present again in front of all the delegations and a new panel of judges. This presentation will last a maximum of 5 minutes, followed by a short question period from the judges. Time will be set aside between the two presentations to make modifications based on feedback received and the new time limit. The presentation will be cut off once the maximum time is exceeded, even if it is not finished.



Important!

It will be crucial to include the product demonstration in the final presentation. The final podium will be determined by this final panel of judges.

5.2 Role division

	Person 1	Person 2	Person 3
Section	The Opening and the Issue	The Solution and the Product	Market and Business Plan
Role	<ul style="list-style-type: none"> - Welcome the jury and audience. - Briefly introduce the team and company. - Introduce the industry and the chosen problem. - Contextualize the scope and importance of the problem to be solved. 	<ul style="list-style-type: none"> - Introduce and describe the product or service. - Explain how the solution solves the problem in an innovative way. - Demonstrate the prototype (if applicable). - Use audiovisual aids to illustrate how the product works. 	<ul style="list-style-type: none"> - Present target clientele and results of market tests. - Detail key aspects of the business plan, including economic viability. - Include key financial projections: break-even point, cost of production, selling price, and profit margin. - Conclude with a convincing summary of the company's strength and potential.
Skills required	<ul style="list-style-type: none"> - Excellent communication skills to immediately capture attention. - Ability to tell an engaging story. - In-depth knowledge of the issue and industry. 	<ul style="list-style-type: none"> - Technical expertise in explaining product details. - Ability to handle and demonstrate the prototype live. - Ability to explain innovative aspects of the product clearly and concisely. 	<ul style="list-style-type: none"> - Strong market analysis and financial skills. - Ability to explain figures and financial projections in an accessible way. - Persuasive skills to convince the jury of the company's viability and potential for success.

5.3 Pitch Recommendations

Showcase the team.

- Briefly introduce your team members, highlighting their skills and relevant experience.
- Tip: Show that you have a strong, complementary team capable of bringing your project to fruition.

Be concise and to the point.

- Limit your presentation to the essential points and avoid superfluous details. Every word must have an impact.
- Tip: Practice your pitch several times to make sure you stay within the allotted time while still being convincing.

Tell a story.

- Start with a story or anecdote that grabs the jury's attention and illustrates the problem you're solving.
- Tip: An engaging narrative can make your presentation memorable and help establish an emotional connection with the jury.

Be prepared for questions.

- Anticipate the questions the judges might ask and prepare clear, precise answers.
- Tip: Practice Q&A sessions with mentors or colleagues to hone your answers.

Deliverable 6

Prototype

The purpose of the prototype presented to the judges is to confirm that the proposed solution is functional. It removes any doubt as to the feasibility of the product and explicitly demonstrates technological innovation. The demonstration must highlight the functionality and method of use of the final product.

A prototype, by definition, has all the technical qualities and operating characteristics of the new product you are developing. However, it can also be an incomplete, non-final example of what the final product could be. The important thing is that the prototype shows all the functionalities mentioned.

The prototype can take one of two forms, depending on your projects:

Type	Proof of concept	Physical prototype
Objective	Proof of concept aims to answer any doubts about the technological risks of the solution. It must demonstrate irrefutably that your product will be able to solve the identified problem.	The purpose of the physical prototype is to demonstrate a complex product and dispel doubts about its effectiveness and functionality.
Suitability	This form of proof is ideal for projects involving new technologies, which are the main source of risk for your company.	This prototype is suitable for complex projects that present risks in terms of use and performance.
Characteristics	A proof of concept should not require complex handling. Its presentation should also be accompanied by a visual layout of the final product.	A good physical prototype should be similar to your company's final product, and convincingly demonstrate its effectiveness in solving the problem. It must demonstrate that it is fully functional, without necessarily resembling the marketed product. This prototype allows the judges to understand how the various components interact with each other.

6.1 Regulations

- A video cannot replace the prototype, even if it is too large. It can, however, be used as an accessory for your presentation.
- The maximum dimensions of the prototype are (1.5 m X 1.5 m X 0.80 m). A waiver may be issued, but it must be ensured that the prototype can pass through a door frame and be moved using an elevator. Teams are responsible for being able to move their prototype. No equipment will be provided for this purpose.

- A scale prototype may be submitted.
- Prototypes must be handed in on arrival at the Engineering Games. Minor modifications to the prototype will be permitted during work periods, but no large tools will be allowed in the rooms (consult the CO if in doubt).

Other Deliverables

The following items must also be completed when submitting Deliverable 4.

7.1 Information Sheet

To assist the audience during the presentation, each team must print a letter-size sheet (one side only) and give it to the judges (minimum 15 sheets). This sheet summarizes your entire project and will be used primarily during the deliberations.

Please note that the sheet and its contents will not be directly evaluated, but its absence will be penalized. In addition, only this sheet may be given to the judges. Any other form of documentation is strictly prohibited. Make sure it is legible and visually appealing.

7.2 Video infomercial

The video, maximum 3 minutes long, must be submitted with the latest deliverables in MP4 format. Its purpose is to present your product in the form of a television commercial. This video will be used during the competition to concisely present your project to other delegates.

The video should highlight your product and the innovation at the heart of your project. It's essential to explain in a charismatic and interesting way how your product stands out from the competition.

Tasteful humor is permitted, and even encouraged. If in doubt, refer to the CO (Megane Darnaud). If your video contains inappropriate subject matter, it will not be presented and the team will be penalized.



Important!

Tasteful humor is permitted, and even encouraged. If in doubt, refer to the CO ([Megane Darnaud](#)). If your video contains inappropriate subject matter, it will not be presented, and the team will be penalized.

Evaluations

The table below presents the percentage points given for each deliverable and stage of the competition. All the evaluation criteria are presented [in Appendix B: Grading criteria and evaluation rubrics](#).

Deliverables	Weight (%)
Deliverable 1 : Problem Search	5
Deliverable 2 : Business Model	7.5
Deliverable 3 : Hypotheses	15
Deliverable 3 : Collaboration Workshop	5
Deliverable 4 : Business Plan	20
<hr/>	
Video Informercial	5
Information Sheet	1
Presentation (pitch)	30
Prototype	20
Environmental Impact	1.5



Good to know

It is worth noting that if your team qualifies for the final presentation after the initial sales pitches, it will only be the final presentation that will be considered for the podium rankings.

Appendix A

Deliverables Templates

A.1 Template – Problem Search (Deliverable 1)

The template begins on the following page.

Problem



STAKEHOLDERS

CURRENT SOLUTIONS

MAGNITUDE

OBSTACLES

POTENTIAL SOLUTIONS

Empty box for writing potential solutions.

RESOURCES

Empty box for writing resources.

OPPORTUNITY

Empty box for writing opportunity.

VALUE PROPOSITION

Empty box for writing value proposition.

CAUSE	→	EFFECT
	→	EFFECT
CAUSE	→	EFFECT
	→	EFFECT
CAUSE	→	EFFECT
	→	EFFECT

Bibliography



A.2 Template – Business Model Canva (BMC) (Deliverables 2 and 3)










Business Model Canvas

Designed by:

Date:

Version:



<p>Key Partners </p>	<p>Key Activities </p>	<p>Value Propositions </p>	<p>Customer Relationship </p>	<p>Customer Segments </p>
<p>Key Resources </p>			<p>Channel </p>	
<p>Cost Structure </p>			<p>Revenue Stream </p>	

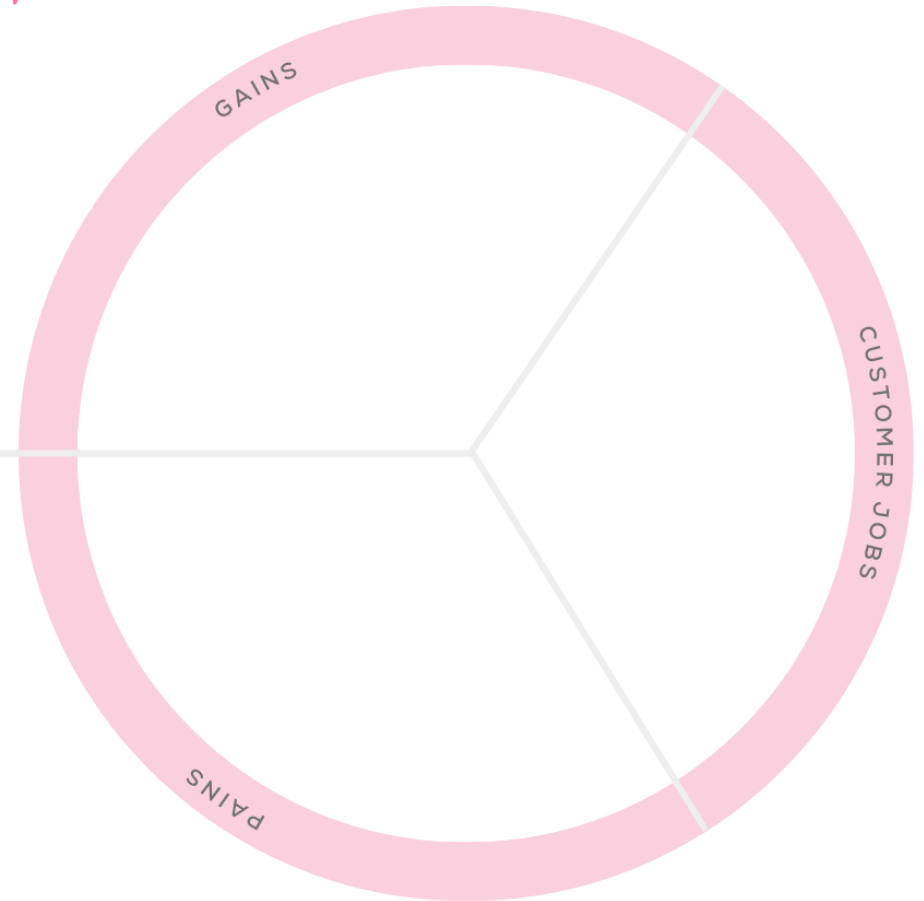
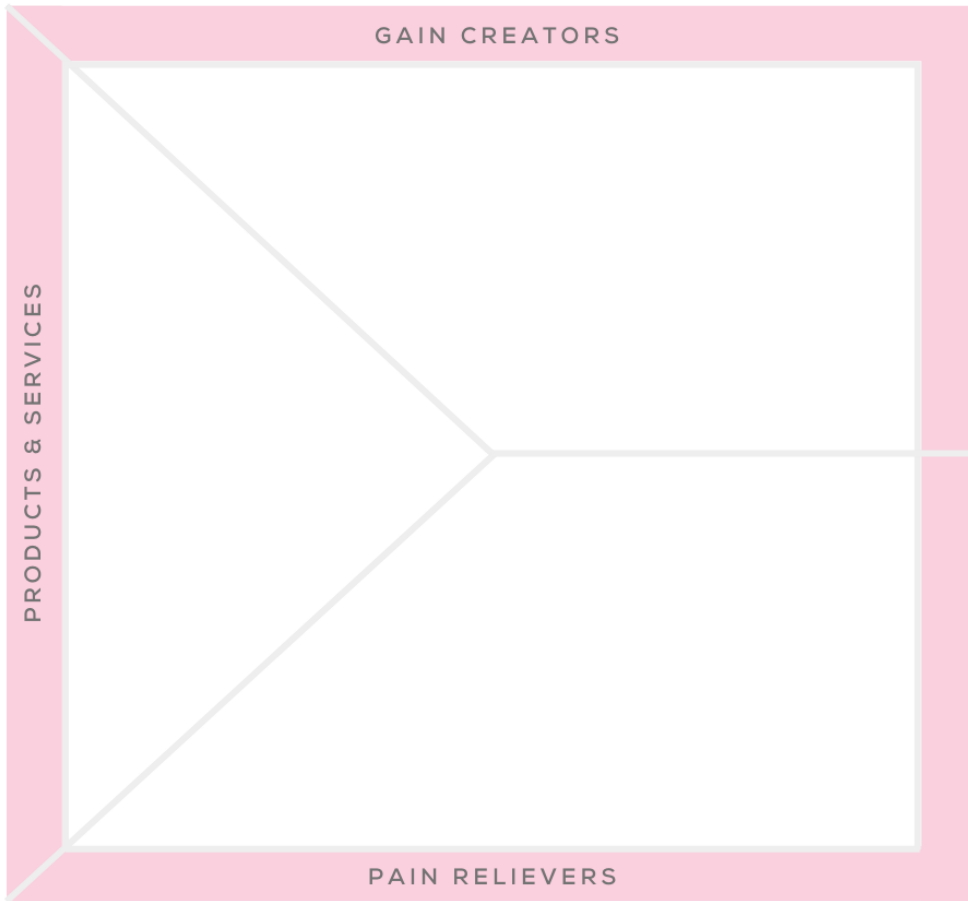
A.3 Template - Value Proposition Canvas (VPC) (Deliverables 2 and 3)



CANVAS
Value Proposition

VALUE PROPOSITION

CUSTOMER SEGMENTS



Appendix B

Grading criteria and evaluation rubrics

By incorporating these criteria into your competition, you ensure a comprehensive and fair assessment of the projects submitted, focusing on the essential aspects of creating and managing an innovative company.

C1 – Desirability: The solution meets the market's need and stands out from the competition.

This criterion evaluates the extent to which the company and its product/service stand out from the competition by offering a unique and innovative value proposition that meets the market's needs and desires. It takes into account the appeal and usefulness of the offering, as well as the relevance of the proposed solution to the problem. The team must demonstrate a thorough understanding of the competitive advantages of their offering and how it differs from existing solutions on the market. They must also show how their value proposition meets the needs and desires of the target market.

Key points to assess :

- Originality and innovation of the value proposition
- Understanding of the target market's needs and desires
- Analysis of competitive advantages
- Relevance of the proposed solution

C2 – Feasibility: The company can implement the proposed solution within a realistic timeframe.

This criterion assesses the company's ability to implement the proposed solution in terms of technology, resources and time. The team must demonstrate a thorough understanding of the technical and logistical challenges associated with implementing its solution, as well as the skills required to overcome these challenges. It must also demonstrate that its solution is economically and technically feasible, and that it can be implemented within the given timeframe.

Key points to assess :

- Technical viability of the product/service
- Availability and management of necessary resources
- Realistic implementation schedule
- Team's ability to overcome challenges

C3 – Viability: The business model is profitable over the long term and generates a positive impact.

This criterion assesses the viability of the company and its business model, as well as the impact created. The team must demonstrate a clear understanding of the costs and revenues associated with its business model, and its ability to maintain sustainable growth over the long term. It must also show how its company can have a positive impact on society or the environment through its product/service, business model or operational practices. The team should explain how its social or environmental impact is significant and sustainable, and how it fits into its business model.

Key points to assess :

- Profitability and sustainability of the business model
- Clarity and realism of financial projections
- Positive social or environmental impact
- Integration of impact into business model

C4 – Professionalism: The entrepreneurial team acts in a professional manner.

This criterion evaluates the level of professionalism demonstrated by the team throughout the competition. It encompasses several aspects such as compliance with established criteria, the quality of documents submitted, and the way they reflect the work carried out, as well as the team's entrepreneurial spirit. The team must demonstrate attention to detail and organization by providing clear, coherent and well-structured documents. In addition, the team must demonstrate its understanding of the competition's requirements by respecting deadlines and guidelines. Documents and presentations must reflect the team's professionalism, highlighting the work carried out, the results obtained and the entrepreneurial vision behind the project.

Key points to assess :

- Quality and structure of submitted documents
- Compliance with deadlines and guidelines
- Clear and coherent presentation of the project
- Level of organization and detail

B.1 Grading Rubric - Deliverable 1

Criteria	Details	Description	Points
C1 : Desirability	Opportunity of the problem	The team has demonstrated the importance of the chosen issue by highlighting current solutions and its potential for significant impact. The team clearly identifies the stakeholders.	/20
	Problem Definition	The team presented a clear and precise definition of the problem, enabling us to understand its scope and stakes. The problem corresponds to the theme.	/25
	Proposal Coherence	The team put forward a convincing overall vision, demonstrating a value proposition that goes beyond existing solutions.	/20
C2: Feasibility	Innovation	The team comes up with a problem and realistic solutions, while demonstrating innovative elements. The team goes beyond conventional approaches to solve the problem.	/20
C4: Professionalism	Presented Document Quality	The document is clean, concise and free of spelling, grammatical and syntactical errors. It complies with the instructions provided, and reflects complete, high-quality work.	/15

B.2 Grading Rubric - Deliverable 2

Criteria	Details	Description	Points
C1 : Desirability	Business Model Desirability	The team has precisely identified the target clientele segment as well as indirect actors. They have also defined channels for sales, communications, and customer relations. The value proposition and business model are clear and convincing, offering a real added value. The elements presented are consistent between themselves and with the rest of the business model.	/18
	Hypothesis Coherence	The hypotheses identified by the team are precise, consistent with the business model, and provide relevant information.	/10
C2: Feasibility	Business Model Feasibility	The team has clearly identified the partners, resources and key activities required to realize the business model. The engineering innovation proposed responds adequately to the needs and issues identified, bringing real added value. The elements presented are consistent with each other and with the rest of the business model.	/17
	Hypothesis Coherence	The hypotheses identified by the team are precise, consistent with the business model, and provide relevant information.	/10
C3: Viability	Business Model Viability	The revenue and expense structures are realistic and demonstrate long-term viability. Research shows that the company will be able to continue in business over the long term. All BMC boxes are filled.	/20
	Hypothesis Coherence	The hypotheses identified by the team are precise, consistent with the business model, and provide relevant information.	/10
C4: Professionalism	Presented Document Quality	The document is clean, concise and free of spelling, grammatical and syntactical errors. It complies with the instructions provided, and reflects complete, high-quality work.	/15

B.3 Grading Rubric - Deliverable 3

Criteria	Details	Description	Points
C1 : Desirability	Business Model Desirability	The team has precisely identified the target clientele segment as well as indirect actors, as well as defining channels for sales, communications, and customer relations. The value proposition and business model are clear and convincing, offering a real added value. The elements presented are consistent between themselves and with the rest of the business model.	/15
	Hypothesis Coherence	Hypotheses have been verified and allow the business model matrix to be populated with relevant and accurate information. The validation process is well demonstrated, showing the team's iterative process.	/16
C2: Feasibility	Business Model Feasibility	The team has clearly identified the partners, resources and key activities required to realize the business model. The engineering innovation proposed responds adequately to the needs and issues identified, bringing real added value. The elements presented are consistent with each other and with the rest of the business model.	/12
	Hypothesis Coherence	Hypotheses have been verified and allow the business model matrix to be populated with relevant and accurate information. The validation process is well demonstrated, showing the team's iterative process.	/16
C3: Viability	Business Model Viability	The revenue and expense structures are realistic and demonstrate long-term viability. Research shows that the company will be able to continue in business over the long term. All BMC boxes are filled.	/12
	Hypothesis Coherence	Hypotheses have been verified and allow the business model matrix to be populated with relevant and accurate information. The validation process is well demonstrated, showing the team's iterative process.	/17
C4: Professionalism	Presented Document Quality	The document is clean, concise and free of spelling, grammatical and syntactical errors. It complies with the instructions provided, and reflects complete, high-quality work.	/15

B.4 Grading Rubric - Deliverable 4

Critère	Détail	Description	Points
C1 : Desirability	Market Description	The team clearly identified its target clientele, the potential for innovation in the market and succeeded in demonstrating the project's economic potential.	/15
	Existing Solutions	All pre-existing solutions are identified; their advantages and disadvantages are highlighted. The team demonstrates its knowledge of the current state of the market and highlights the project's value proposition.	/5
	Development and Marking of the Product	The team presents a clear, well-structured action plan over time, enabling it to expand its market and establish a relationship with customers through different channels. The next key activities are highlighted, clearly demonstrating the team's coherent vision for the development and evolution of its business.	/10
C2: Feasibility	Product/Service Description	The project is based on an engineering product that stands out from the current competition because of its innovative nature. The description of the product and its use is clear, and all relevant technical documentation is included	/15
	Success/Risk Factors	The success and risk factors are clear and their impacts have been clearly identified.	/10
C3: Viability	Economic Analysis and Cost Summary	The economic analysis is complete and realistic. It demonstrates the company's viability. Medium-term financial projections and income statement are complete.	/20
	Theme	The project without a doubt respects the theme of the competition. (Fusion of industries, see theme page)	/5
	Problem and Need	The team clearly and precisely describes the problem or need to which the project responds.	/5
C4: Professionalism	Presented Document Quality	The document is clean, concise and free of spelling, grammatical and syntactical errors. It complies with the instructions provided, and reflects complete, high-quality work. The presentation of the team and company are complete.	/15

Appendix C

Important Dates

Deliverable 1

- Explanatory video: September 5
- Question and answer session: September 9, 19h
- Submission: Wednesday, September 18, 23h59
- Grading meeting: September 22
- Grading session: September 23

Deliverable 2

- Explanatory video: September 19
- Question and answer session: September 23, 19h
- Submission: October 12, 23h59
- Grading meeting: October 19
- Grading session: October 20

Deliverable 3

- Explanatory video: October 13
- Question and answer session: October 16, 19h
- Collaboration session: to be determined
- Submission: November 27, 23h59
- Grading meeting: November 30
- Grading session: December 7

Deliverable 4

- Explanatory video: November 28
- Question and answer session: December 3, 19h
- Submission: January 1, 23h59
- Grading meeting: January 2
- Grading session: January 3

Engineering Games

- Pitch presentation: January 4
- Grand finale (finalists): January 6

Upcoming events

- Workshop: how to make a final pitch
- Private question periods

Appendix D

Specifications and Regulations

D.1 Late deliverables

- Any late deliverable (except Deliverable 4) will incur a penalty of 5% per day (24h) of delay.
- Deliverable 4: Each additional page for Deliverable 4 will incur a penalty of 20%. Any late delivery of Deliverable 4 (24h) will incur a penalty of 33.33% per day late.

D.2 Pre-existing projects

- A project resulting from the continuation of a pre-existing project (including a technical group, a research project, etc.) will be DISQUALIFIED from the final (and therefore from the podium). The organizing committee reserves the right to apply this rule at any time during the competition.

D.3 Submission of deliverables

- All deliverables must be submitted via the Teams reserved for your university.

D.4 Questions and clarifications

- Any questions regarding deliverables or rules should be asked via the Teams channel reserved for your university. Answers to general questions deemed relevant by the organizing committee will be communicated via the general channel.

D.5 Rule changes

- The organizing committee reserves the right to adapt certain sections of the present booklet throughout the competition. Such modifications will be announced to the VPs of Entrepreneurship of each delegation and will always be made with the goal of maintaining a healthy, high-quality competition.

Questions and Organizing Committee

For any questions or comments regarding the challenge, you can reach out to the Entrepreneurial Team.

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