

MANAGERS, ENGINEERS, DESIGNERS,  
**TOGETHER, YOU  
ARE A FORCE TO BE  
RECKONED WITH!**



# MSc

## **INNOVATION, CREATION & ENTREPRENEURSHIP**

Developing new Business value through Innovation,  
Entrepreneurship and multidisciplinary Team work.

# A JOINT PROGRAMME COMBINING ENGINEERING, DESIGN AND MANAGEMENT

The Master of Science Innovation, Creation & Entrepreneurship was founded from a partnership between Groupe ESC Troyes (School of Management) and EPF Graduate School of Engineering together with the Science Park Technopole de l'Aube en Champagne and its 60+ Start ups. Accredited by the "Conférence des Grandes Ecoles", this joint programme is open to students with a management, engineering or design background.

This 13/14-month-programme starts with 8 months/two semesters of classes followed by a 5/6-month-internship or personal Business Project Creation.

## KEY LEARNING OUTCOMES

of this MSc ICE programme are to develop your abilities to Innovate and enhance your entrepreneurial skills.

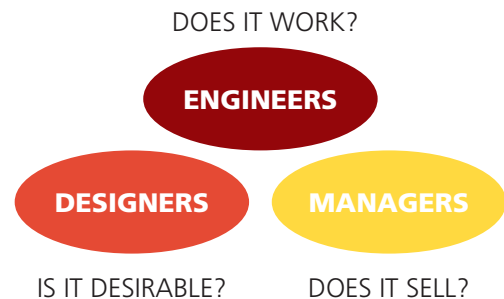
When joining this programme, students will be part of a cross-functional and multicultural team, each to be challenged with a real life customer project. They will develop and bring value to the Team as an Engineer, a Manager or a Designer. Innovation to be efficient needs complementary skills including soft skills. Understanding the value of these complementary skills during the project development stages is a critical key learning outcome of this programme.

**100%**  
OF THE PROGRAMME  
IS TAUGHT IN ENGLISH

## ENTREPRENEURIAL CULTURE & BUSINESS GAME

Part of the programme aims at providing students with a **solid entrepreneurial culture** through meetings with Business owners, networking sessions, lectures, workshops and European Commission lobbies. In the course of their 8 months of studies, they will be faced with several sessions of intensive 3-day-challenges given by startups.

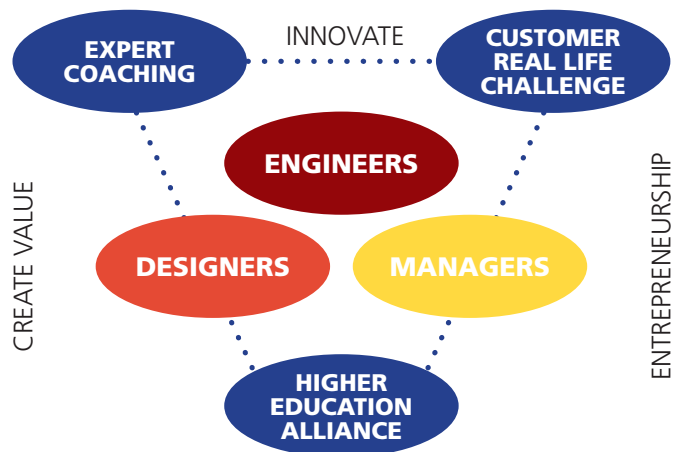
By the end of the second semester, in order to assess their overall skills, students take part in a **Business Game**. For a whole week, they are asked to manage and implement an innovative project within challenging scenarios.



## INDIVIDUAL COACHING

Students will have expert mentors assigned to support their project Teams.

Some of the students will have their own projects that they will develop in parallel to the Team main frame project. These students will also have coaching provided by experts from the Incubator Young Entrepreneur Center (YEC) of Technopole de l'Aube en Champagne to support them as individuals. At the end of this programme some students will join the Incubator YEC to create their own business and bring value to the community.



## CAREER PROSPECTS

MSc ICE provides tremendous career opportunities in design, management or engineering in all growth sectors.

Graduate students will either be able to work in small and medium-size businesses or large companies in R&D or Project management functions.

### TOP RESPONSIBILITIES JOB OPPORTUNITIES:

- > Innovative Project Leaders
- > Entrepreneurship and Innovation Consultant
- > Change/Strategic Management Consultant
- > Head of R&D and Innovation Director
- > Entrepreneur

# A FOUR STAGE PROGRAMME

**EMERGENCE**

**PROBLEMATIZATION**

## FIRST PERIOD

September - October			November - December		
<b>Entrepreneurial Landscape &amp; Spirit</b>	<b>Hours</b>	<b>ECTS</b>	<b>Business Model &amp; Growth Management</b>	<b>Hours</b>	<b>ECTS</b>
Individual Entrepreneurship and Corporate Entrepreneurship	12	1	Entrepreneurship: Managing New Venture Growth	15	1
Entrepreneurial Team Formation	12	1	Rethinking and Designing New Business Model	18	2
Design Thinking	12	1	Market Studies For New Product Creation	15	2
Advanced Methods of Creativity	12	1			
Social Entrepreneurship	12	1			
<b>Technological Engineering and Change</b>	<b>Hours</b>	<b>ECTS</b>	<b>Innovation Environment and Dynamics</b>	<b>Hours</b>	<b>ECTS</b>
Introduction to Innovation and Evolution from past to Future	9	1,5	Getting Innovation in Action	15	1,5
Technological Monitoring and Business Intelligence	15	1	Standards and Quality	9	1
System Engineering 1: Requirements	12	1	Eco-conception	6	1
Change Management	12	1,5	System Engineering 2 - DMU	21	2,5
	<b>108</b>	<b>10</b>		<b>99</b>	<b>11</b>

STAGE GATES EVALUATION (ESC-EPF-TECHNOLOGY PARK)					
	Hours	ECTS		Hours	ECTS
Evaluation Stage 1 validation	7	4	Evaluation Stage 2 validation	7	5
<b>TOTAL (without tutoring)</b>	<b>115</b>	<b>14</b>	<b>TOTAL (without tutoring)</b>	<b>106</b>	<b>16</b>

**TUTORING / COACHING / MENTORING (PROFESSORS, PARTNERS)**

**CONFERENCES, ENTREPRENEURIAL EVENTS & VISITS**

## THIRD PERIOD -

**First option : BUSINESS PROJECT CREATION  
Business Incubation (Technology Park) - 5 months**

The development process follows a Stage Gate process with 4 stages and 4 Gate reviews. Specific designed courses support each stage. In between each stage, there is a project review with the customer to validate team added value. Agility and iterative development work using System Engineering, Visualization and High Speed Prototyping, are taught. At the end of the project, Team will have to present a value added business model and innovative prototypes to customers in a final review.

## BUSINESS MODEL

## IMPLEMENTATION

### SECOND PERIOD

January - February

March - April

Entrepreneurial Project Development			Market Entry Strategy		
	Hours	ECTS		Hours	ECTS
Business Plan Achievement	12	2	Legal Pathways in the Settlement	12	1
Entrepreneurial Finance	18	2	How to communicate your product's value?	15	1
Financing SME R&D Projects in Europe	18	1			
New Product Commercialization	15	1			

Legal Human Organization and Design			Implementation		
	Hours	ECTS		Hours	ECTS
The Leverage of Teams in Yielding Innovation	15	1	Management by process	12	1
System Engineering 3: Collaborative Work	12	1	System Engineering 4: Manufacturing	12	1

90 8

51 4

### STAGE GATES EVALUATION (ESC-EPF-TECHNOLOGY PARK)

	Hours	ECTS		Hours	ECTS
Evaluation Stage 3 validation	7	6	Evaluation Stage 4 validation	7	7
<b>TOTAL (without tutoring)</b>	<b>97</b>	<b>14</b>	<b>TOTAL (without tutoring)</b>	<b>58</b>	<b>11</b>

ERS, TECHNOLOGY PARK ) Coaching (40h) - Immersion (2h)

Business GAME		
	Hours	ECTS
Business Game	24	5

WORKSHOPS Young Entrepreneur Center (24h)

May / October

Second option : INTERNSHIP  
Innovation Oriented Business - 5 months



## GRUPE ESC TROYES-SCHOOL OF MANAGEMENT

- > **6** programmes
- > **1 780** students
- > **4 294** alumni
- > **49** nationalities
- > Over **200** partner universities all over the world

## EPF GRADUATE SCHOOL OF ENGINEERING

- > **5** programmes on **3** campuses in France
- > **1 700** students
- > **9 200** alumni
- > **20%** of international students
- > **150** partner universities all over the world

## SCIENCE PARK TECHNOPOLE DE L'AUBE EN CHAMPAGNE

- > Over a **15**-year-expertise in innovative projects follow-up
- > **66** innovative companies
- > **350** entrepreneurs and experts mobilized on a regular basis
- > Over **10 000** m<sup>2</sup> of available space: incubator and business centers
- > **70** hectares dedicated to innovation and entrepreneurship



## ENTRANCE EXAMINATION

Applicants must be graduated in the field of engineering, management or design. French students must have completed a Master 1 degree (240 ECTS) and International students a Bachelor degree.

Selection is based on the quality of academic background together with a solid personal project. Application of candidates with a significant professional experience may be considered. The Admission Board will consider the applications and may decide for an interview in English to further clarify the motivations of the candidates.

Level of English required: B2 minimum (IELTS, TOEFL, TOEIC accepted)

## APPLICATION FORMS ARE AVAILABLE ONLINE

For Engineer profiles:  
<http://www.epf.fr/en/msc-ice>

For Manager / Designer profiles:  
[www.concours.groupe-esc-troyes.com](http://www.concours.groupe-esc-troyes.com)

## TUITION FEES

For the academic year 2016-2017  
> European applicants: €8,900  
> Overseas applicants: €10,200

## ACCOMMODATION IN TROYES, CHAMPAGNE

Various possibilities of accommodations are available close to EPF or ESC campuses, or in downtown Troyes. Accommodation costs are very reasonable in the range of €300 to €450 per month.



# AN ECOSYSTEM TO DEVELOP YOUR INNOVATIVE PROJECTS!

**T**he city of Troyes is located in Champagne less than 90 minutes away from the heart of Paris. This city shows tremendous dynamism with its 10 000 students. The MSc Innovation, Creation & Entrepreneurship courses, are taught on 4 campuses ensuring a dynamic environment and high level academics.



About 20 major national and international players in innovation and entrepreneurship support the programme:



## GRUPE ESC TROYES

217, avenue Pierre Brossolette  
CS 20710  
10002 Troyes Cedex - France

### For further information:

Laurie Jeanson-Dutripon - International Admissions Officer  
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Tél. : +33 (0)3 25 71 22 65

## EPF - GRADUATE SCHOOL OF ENGINEERING

Campus de Troyes  
2 rue Fernand Sastre  
10430 Rosières-près-Troyes - France

### For further information:

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## SCIENCE PARK TECHNOPOLE DE L'AUBE EN CHAMPAGNE

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