



## EUROPASS DIPLOMA SUPPLEMENT

### Ingénieur civil de l'Ecole Nationale Supérieure des Mines de Saint-Etienne

*This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.*

#### 1 INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

- 1.1 Family Name(s): **GASS**  
1.2 First or given name(s): **Raphaël**  
1.3 Date of birth: **7 June 1997**  
1.4 Student identification number: **2808013199K**

#### 2 INFORMATION IDENTIFYING THE QUALIFICATION

2.1 Name of the qualification and title conferred

Curriculum ingénieur civil des mines - Titre d'ingénieur diplômé de l'Ecole nationale supérieure des mines de Saint-Etienne de l'Institut Mines-Télécom (This diploma is a master's degree in Science and Executive Engineering).  
EUR-ACE® Master (European-Accredited Engineering Master) and CeQuInt (Certificate for Quality in Internationalisation).

2.2 Main fields of study for the qualification

- common core courses : mathematics, physics, computer science, corporate management, communication tools.
- methods, tools, sciences and techniques for engineers
- highly specialized double majors in: Material Science, Mechanical Engineering, Process and Energy Engineering, connected objects, Information Technology, Data Science, Industrial Engineering, Biomedical Engineering, Urban and Industrial Engineering, Corporate Finance. The double majors are studied through the prism of one of the following societal challenges: Eco-Design, Energy Transition, Nanotechnologies, Levers and Management of Industrial Renewal, Intelligent Transport and Mobility, Big Data, Design-Innovation-Creation, artificial intelligence.
- Professional, cultural and societal elective discovery modules.

2.3 Name and status of awarding institution

Ecole Nationale Supérieure des Mines de Saint-Etienne (Mines Saint-Etienne)

Is a school of Institut Mines-Telecom a great national institute of Science and Technology governed by the ministers in charge of industry and electronic communications

158 cours Fauriel – CS 62362 – 42023 Saint-Etienne cedex 2, FRANCE

2.4 Name and status of institution administering studies

Idem, unless otherwise mentioned (see §6.1)

2.5 Language(s) of instruction and examinations

French, unless otherwise mentioned (see §6.1)

### **3 INFORMATION ON THE LEVEL OF THE QUALIFICATION**

#### *3.1 Level of qualification*

5 years (10 semesters) of university studies after the baccalauréat (secondary education diploma), which confer the holder of the diploma a Master's degree (see §8)

#### *3.2 Official length of programme*

The total number of years necessary for obtaining the diploma is 10 semesters, or 300 ECTS credits:

- 4 semesters (120 ECTS) of undergraduate preparation course or equivalent (see § 3.3)
- after admission through a national competitive examination, 6 semesters (180 ECTS) of engineering studies at Mines Saint-Etienne
- Please see §6 for information on the student's individual admission process.

#### *3.3 Access requirements*

The undergraduate intensive course (known as "preparatory classes") preparing to the competitive examination is an advanced and selective higher education program which comprises fundamental sciences (mathematics, physics, technology, engineering sciences) as well as humanities and foreign languages.

Only 10% of the holders of a "science baccalauréat", the French secondary education exam are admitted in such courses. The workload is intensive and includes class work as well as individual study time. When students complete their intensive course and pass the competitive entrance examination, they are credited with 120 ECTS credits.

Admission upon qualifications is also open to students holding science degrees. The admission process includes a certain number of selection examinations and the final decision is taken by a jury. Admission is open to :

- French and foreign students who have completed 4 semesters of University studies (equivalent of a Bachelor's degree). Students are admitted in the 1<sup>st</sup> year at Mines Saint-Etienne.
- French and foreign students who have completed 6 semesters of University studies (equivalent of the first year of a Master's degree). Students are admitted in the 2<sup>nd</sup> year at ENSM-SE and follow a 4-semester program leading to the "diplôme d'ingénieur".

There are approximately 230 engineering schools known as "Grandes Ecoles" in France. Ranking surveys on the quality of teaching and research, international recognition, and entry-level salaries place Mines Saint-Etienne among the 15 top schools in France.

### **4 INFORMATION OF PROGRAM CONTENT AND GRADING SYSTEM**

#### *4.1 Mode of study*

Full-time studies.

#### *4.2 Programme requirements*

- Admission into the following year is conditioned upon:
- obtaining 60 ECTS credits in one year

Obtaining the diploma is subject to the validation of 3 academic years, a minimum TOEIC score of 800 (or an equivalent score in any other internationally recognized English test).

"Ingénieurs civils des mines" graduating from Mines Saint-Etienne are high level generalist engineers educated to design, implement, control and manage complex systems and organizations, in the economic context of globalization. Their profile enables them to work in various activity sectors and to adapt to a perpetually changing world.

Consolidated by a solid scientific foundation in the first year of engineering studies, particularly in mathematics and physics, their competences are twofold:

- generic competences , which encompass engineering sciences , corporate management, communication and international business, allow them to join multidisciplinary and multicultural teams to carry out projects and to play a federating role between team members
- specific competences, which are developed in the areas of expertise of the school , with active interplay between industrial and academic research confer them an ability to analyze a professional situation, to identify progress areas and foresee their costs, and to propose innovating solutions.

These competences are acquired through active teaching methods which favor situational case-studies, collective projects and international experience.

#### 4.3 Programme details, and grades/credit points obtained

The complete list of courses followed by the student and grades obtained is included in the transcript(s).

#### 4.4 Grading scheme and grade distribution guidance

Since September 1<sup>st</sup> 2005, students' assessment has relied on the ECTS European credit transfer system.

The annual teaching load is divided into seven Pedagogical Groups (known as GP), to which a given number of credits are allocated. There are a total of 60 credits per year and the number of credits allocated to a course is proportional to the student's workload.

A GP is composed of different teaching activities which are all separately graded

(lectures, laboratory work, projects, bibliographical research, seminars and industrial placement). These separate grades are combined by the teachers' council into one global grade according to ECTS guidelines.

Percentage of year group	From 2014/2015	
	EMSE grades	Numerical value
Top 10%	A+	4.33
Next 25%	A	4.00
Next 30%	B	3.33
Next 25%	C	2.66
Next 10%		
Fail (before resit exam)	Fx	0
Fail (after resit exam)	F	0
Deferred exam	V	0
Exempted	W	

For GPs that do not give grades based on this statistical distribution, students either Pass (*Validé*) or Fail (*Non validé*).

#### 4.5 Overall classification of the qualification

n/a

## 5 INFORMATION ON THE FUNCTION OF THE QUALIFICATION

#### 5.1 Access to further studies

The diploma of "ingénieur civil des mines de ENSM-SE" allows access to a large number of further academic programs:

- specialized Masters' degrees awarded by the Conférence des Grandes Ecoles, further engineering degrees, access into the 3<sup>rd</sup> year of medicine, odontology or pharmacy.
- PhDs (6 semesters)

#### 5.2 Professional status

In France the title of "ingénieur" is regulated by the *Commission des Titres d'Ingénieur* (CTI). This title gives access to the rightful exercise of the profession of engineer.

## 6 ADDITIONAL INFORMATION

#### 6.1 Additional Information

Information contained in this paragraph concerns the personal curriculum of the student named in §1.

##### 6.1.1 Student's background

The student was admitted through the procedure described in §3.3:

**admission in 1st year engineering studies by competitive examination**

### 6.1.2 Industrial placements

One mandatory industrial placement is included in every academic year. Each placement has specific objectives. The first year placement aims at giving the student a first hands-on experience of shop-floor production work and thus apprehend the social and economic realities of operator-level type of jobs. During the second placement, the student is in the position of an assistant-engineer and has to apply his engineering courses to a specific engineering problem, thus discovering the job of an engineer and its multi-faceted characteristics. The final placement covers a subject connected to the student's major and directly opens to entry-level jobs.

The student concerned by the present additional information has carried out the following industrial placements:

Type of placement	Duration	Company	Country
Operator's placement	4 weeks	CIMC AIR MARREL SAS	FRANCE
Assistant engineer	11 weeks	EDF	FRANCE
Engineer	21 weeks	AIX-MARSEILLE UNIVERSITÉ	FRANCE

### 6.1.3 Foreign languages

Every graduate engineer must be fluent in three languages, including French and English. The languages taught at the school are, in addition to English and French, German, Spanish, Italian, Russian, Japanese, Chinese and Portuguese. The student's skill level was measured:

- by an internationally recognised examination (compulsory in English, optional for the second language),
- by an evaluation in accordance with the recommendations of the Council of Europe carried out by the school's teachers. For students who completed their third year of engineering studies abroad (see § 6.1.4), the level reached at the end of their stay in the language of the host country could not be measured; that of the other language was assessed before their departure at the end of the second year

Mandatory foreign language	External examination	Score
English	TOEIC	940

Level according to Common European Framework of reference
C1

Second language	Optional external examination	Score
Spanish		

Level according to common European Framework of reference
B1+

### 6.1.4 International experience

The student has completed a period of studies or an industrial placement abroad of at least 12 weeks :

- academic study period during year 2019/2020 at University of Dublin - Ireland

### 6.2 Further information source

<http://www.mines-stetienne.fr>

## 7 CERTIFICATION OF THE SUPPLEMENT

7.1 *Date:* November 25, 2021

7.2 *Signature:* Pascal RAY

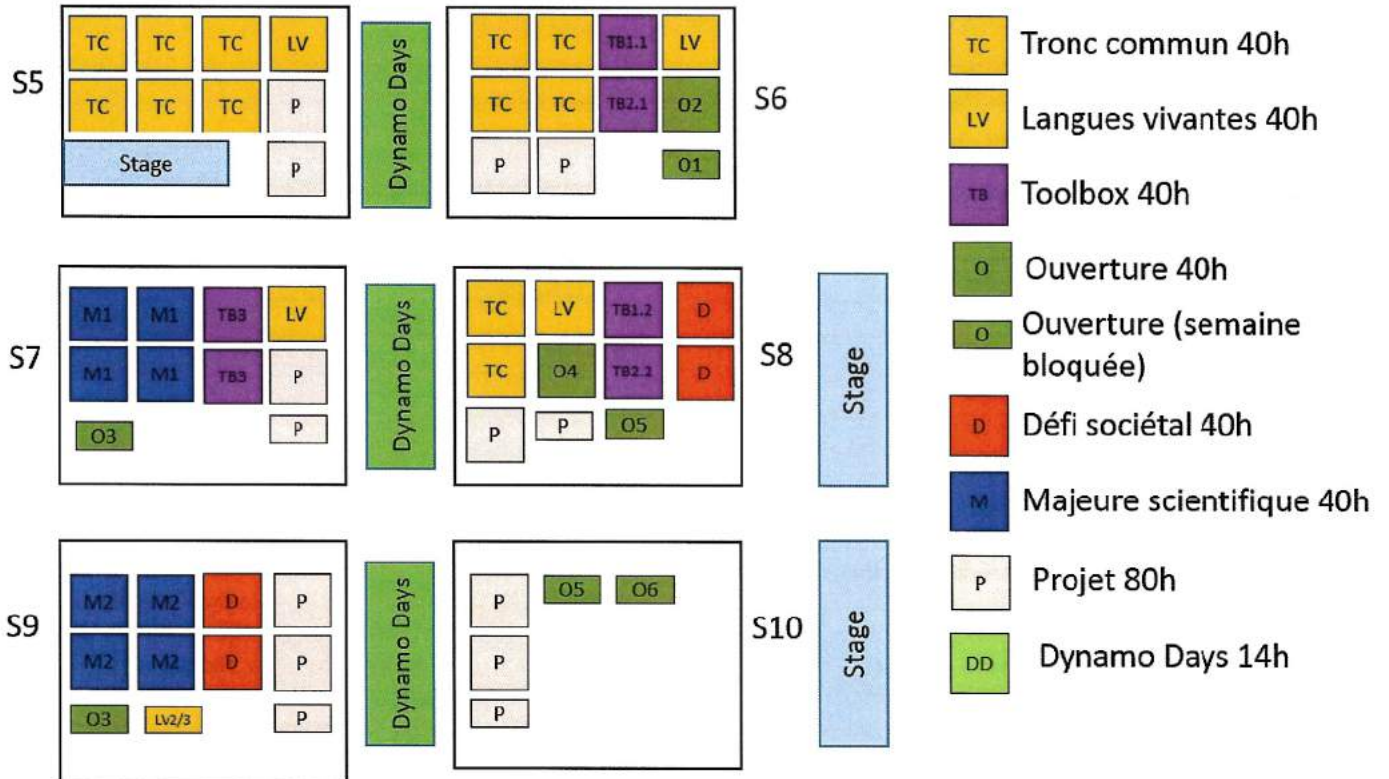


7.3 *Capacity:* Director

7.4 *Official stamp or seal:*



## 8 INFORMATION ON THE COURSE REPARTITION SYSTEM



## 9 INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

APRÈS LE BACCALAURÉAT

