CentraleSupélec
Accelerated Engineering Degree Programme

– 2-year graduate programme –

March 2019
CENTRALESUPELEC IN BRIEF:

- One of France’s top Engineering/Scientific ‘Grandes Ecoles’
- 30% of students come from the best international universities
- A founding member of université PARIS-SACLAY
CENTRALESUPELEC: GLOBAL KEY FIGURES

STUDENT BODY
4300 students
3200 student engineers
30% international students

STAFF
435 academic staff & researchers
482 administrative & tech staff
600 PhD candidates
70 postdoctoral fellows

INTERNATIONAL
180 partners
45 countries
80 double degree agreements
T.I.M.E.
(Top Industrial Managers for Europe)
Erasmus Mundus

COMPANIES
140 corporate partners
executive education
300 training and degree programmes

RESEARCH
17 research depts
750 rank A publications
18 teaching and research chairs

NETWORK
35 000 active alumni
5 continents
strong and active regional groups
EUROPEAN AND CHINESE DEGREE SYSTEMS

European Degree System

Elementary School / Junior High / High School

Licence (L) Cycle

Master (M) Cycle

PhD

High School Diploma « Baccalauréat »

Prep School “classe préparatoire”

Higher Education Institution “Grande Ecole”

National Competitive Entrance Exams

Engineer Title (CTI – ENAEE)

Chinese Degree System

Gaokao 高考

Bachelor 本科学位

Master 硕士学位


6 yo 12 years 18 yo 3 years 21 yo 2 years 23 yo 3 years 26 yo

- Elementary School / Junior High / High School
- Licence (L) Cycle
- Master (M) Cycle
- PhD
- High School Diploma « Baccalauréat »
- Prep School “classe préparatoire”
- Higher Education Institution “Grande Ecole”
- National Competitive Entrance Exams
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- Gaokao 高考
- Bachelor 本科学位
- Master 硕士学位
CENTRALESUPELEC RANKINGS

- **National Ranking**
  - Ranked n°2 in training multi-disciplinary engineers in France
  - Ranked n°1 for company relations

- **International Ranking**
  - **Employability and Employer Reputation 2018**
    - 6th in the QS Worldwide Employer Reputation (1st in France)
    - 39th in THE Global Employability University Ranking
  - **Rankings by subject QS 2019**
    - 61th worldwide and 1st in France in Engineering and Technology
    - **1st in France** in Civil and Structural Engineering
    - **1nd in France** in Electrical & Electronic Engineering
    - **1nd in France** in Mechanical, Aeronautical and Manufacturing Engineering
THE CENTRALESUPELEC ENGINEERING STUDENT

- Standard **engineering curriculum**: 3 years
- **3500 engineering students** on our 3 French campuses (Paris-Saclay, Rennes, Metz)
- **30% international** students
- **40% of our students** graduate with a double degree from a partner university (200, including NUS, HKUST, Tsinghua, TU Munchen, EPFL)
- **High employability rate** (8 out of 10 students find a job before graduating)
- **Average gross annual salary** (with bonuses) €50k
The CentraleSupélec alumni network includes more than 35,000 active professional engineers throughout the world.

- 4,000 alumni abroad
- Present in 39 countries
- Working in many fields including industry, consulting, energy, finance

Business leaders (creating, managing, developing companies), engineering experts in corporate or public research, entrepreneurs
CENTRALESUPELEC: SOME FAMOUS ALUMNI

**Historical**
- Gustave Eiffel
- Louis Charles Breguet
- André Michelin
- Armand Peugeot
- Francis Bouygues

**Mid-20th century**
- Sidney Toledano
- Jean-Luc Lagardère
- Gérard Pélisson

**Now**
- Alain Benichou
- Benoît Potier
- Delphine Ernotte
- Air Liquide
- France Télévisions
CENTRALESUPELEC INTERNATIONAL ACCELERATED ENGINEERING PROGRAMME

OUR ACCELERATED PROGRAMME TRAINS YOU TO BECOME AN OUTSTANDING FRENCH ENGINEER IN ONLY 2 YEARS!

French student path to our Diplôme d’ingénieur

BAC

PREPA

Y1

PREPA

Y2

Concours

Accelerated path to our Diplôme d’ingénieur

A-LVL / GaoKao

Bach.

Y1

Bach.

Y2

Bach.

Y3

Bach.

Y4

Bachelor's degree

Centralesupélec

Accelerated Year 1

Centralesupélec

Accelerated Year 2

International Entrance Exam

ACCELERATED
INTERNERSHIPS AND JOB OFFERS FROM FRENCH AND INTERNATIONAL COMPANIES

Companies listed include:
- BNP PARIBAS
- EDF
- Orange
- RTE
- GROUPE CRÉDIT AGRICOLE
- Capgemini
- Bouygues Construction
- Michelin
- Enedis
- Thales
- SAFRAN Aerospace-Defence-Security
- SOCITÉ GÉNÉRALE
- Colas
- Schlumberger
- IBM
- Société Générale
- TOTAL
- Huawei
- NOKIA
- Vinci Construction
- Deloitte
- Air Liquide
- Valeo
- AIRFRANCE
- AREVA
- MAZARS
- Fives
- Christian Dior Couture
- OLIVIER WYMAN
- Carrefour
- Eiffage
- L'Oréal
- ZODIAC Aerospace
- ArcelorMittal
- Amazon
- VALLOUREC
- Thomsun Reuters
- BCG
- McKinsey & Company
- Roland Berger
- SUEZ
- Sagemcom
- LYMTH
A top-level science & engineering professional:
multi-disciplinarity, integration, modelling and abstraction, complex systems

A committed leader and team player with professional and social skills:
adaptable, pragmatic, innovative, leader, entrepreneur, team player, committed, responsible

Internationally at ease, and professional skilled in a global environment:
living and working in a globalized environment; prepared to tackle global and local challenges; multilingual; trained for the multicultural, multisite workplace
HIGHLIGHTS OF THE PROGRAMME

Combining the tradition of scientific excellence with innovation, technology and corporate spirit

Learn to tackle complex engineering problems and develop professional and personal skills

Year 1: Introductory courses in fundamental sciences, elective courses to prepare specialisation

Year 2: Advanced courses in sciences and engineering, 6-month internship and collaborative projects
HIGHLIGHTS OF THE PROGRAMME

Year 1

The tailor-made curriculum offers a choice from a wide range of courses to support your career aspirations. Examples can be found in the catalogue*

1. Fundamental sciences (Mathematics and Physics) and multi-disciplinary engineering courses
2. Elective courses to prepare your specialisation
3. Team projects, languages, soft skills, business sciences, humanities, social sciences and sports

*Courses are subject to suitability and availability and may change during the course of study.
8 FIELDS OF STUDY

- Energy (ENE)
- Large Scale Interacting Systems (GSI)
- Computer Science (InfoNum)
- Mathematics and Data Science (MDS)
- Physics and Nanotechnology (PNT)
- Biotechnology and Environmental Engineering (VSE)
- Communicating systems and Internet of Things (SCOC)
- Civil Engineering and Transportation (CVT)
HIGHLIGHTS OF THE PROGRAMME
Year 2

ST 9
Major

Energy
Energy Resources [PS]
Energy Networks & Smart Grids [PS]
Energy transition [PS]

Biotechnology & environmental eng.
Environment / Sustainable Production [PS]
Healthcare & biomedical services [PS]

Large-Scale interactive Systems
Control Engineering [PS /R]
Design and System Sciences [PS]
Supply Chain & Operations Management [PS]

Internet of Things & Communication Systems
Smart Networks Systems [PS]
Connected Objects & Embedded Systems [R]
Mobile Communicating Systems [PS]

Mathematics & Data Science
Mathematical Modeling & Simulation [PS]
Data & Information Science [PS/M]

Computer science
Software Design [PS]
Artificial Intelligence [PS]
Architecture of Information Systems [PS]
Cybersecurity [R]

Physics & Nanotechnology
Physics & Photonics [M]
Quantum Engineering [PS]

Civil eng. & Transportation
Construction & Urbain Engineering [PS]
Mechanical & Aerospace Engineering PS

Skills

Des "mentions"
Au sein des dominantes
Profession
Internship
Energy & Biotechnology & environmental eng.
Mathematics & Data Science
Large-Scale interactive Systems
Internet of Things & Communication Systems
Computer science
Civil eng. & Transportation

PS = campus of Paris-Saclay
R = campus of Rennes
M = campus of Metz
## 2 Workshops to Prepare Students for Career Opportunities

### 8 Professions available:

<table>
<thead>
<tr>
<th>Profession</th>
<th>CVT</th>
<th>ENE</th>
<th>GSI</th>
<th>InfoNum</th>
<th>MDS</th>
<th>SCOC</th>
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<td>Innovation / Development / Service</td>
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<td>Operations Management</td>
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CVT - Civil Engineering and Transportation  
ENE - Energy  
GSI - Large Scale Interacting Systems  
InfoNum - Computer Science  
MDS - Mathematics and Data Science  
SCOC - Communicating systems and Internet of Things  
PNT - Physics and Nanotechnology  
VSE - Biotechnology and Environmental Engineering
SPECIAL SERVICES

Services dedicated to the Accelerated Engineering Degree Programme students:

- Tailored courses/training: more than 60% of English taught courses for the whole programme
- French language courses to help students reach the required level
- Coaching in Maths & Physics
- Assistance with finding an internship
- Mentoring by CentraleSupélec alumni, professors and peers in career, studies and campus life aspects
COMING TO CENTRALESUPELEC: WHY?

- Obtain a Master’s level degree at one of the best European Institutions
- Develop skills for lifelong learning in a changing world
- Take on science and technology challenges in business and industry
- Access a broad range of recruiters
- Join an active, global alumni network
- Experience life in France
There are more than 200 student associations and special interest groups at CentraleSupélec:

- **Campus life** (BDE, CS Racing Team, Club Tech)
- **Business** (Junior CentraleSupélec, FORUM)
- **Humanitarian** (ISF-Impact, Cheer up)
- **Arts & Culture** (CS Design, Club Rock, Magics)
- **Sports** (Football, Basketball, Handball)
- **Events** (Toss, Raid, Cercle Europe)
APPLICATION PROCESS

- Online application
- Candidate selection for written and oral examinations
- Sit the written examination at our approved exam centres
- Sit the oral examination in Paris or Beijing
- Announcement of results
- Candidates’ acceptance

- By 14 April 2019
- 19 April 2019
- 6 May 2019
- 8-15 May 2019
- End of May 2019
- Mid-June 2019
PRACTICAL INFO

Who can apply?

- Students who hold a 4-year Bachelor of Science or Engineering from a non-French university
- 3rd and 4th year Bachelor students in Science or Engineering from a non-French university
- Candidates may only apply once

What degree will I get after the programme?

- Students will obtain the CentraleSupélec engineering degree, Master's equivalent (the degree that French engineering students obtain at CentraleSupélec)

Housing and living costs

- A room or shared apartment is guaranteed on campus for this programme at an average cost of €400/month
- Average living costs in Paris for students is around €800/month (including accommodation)

Campus life

- A new and vibrant campus 25km south of Paris easily accessible by public transport
- A well-planned green campus landscape supporting CentraleSupélec’s commitment to ecological sustainability
- An array of essential facilities including cafeteria, library, co-working spaces and gym
FINANCIAL INFORMATION

Tuition fees for the Accelerated Engineering Degree Programme

€18,000/year

Partner university fees

Candidates studying for a Bachelor’s degree or holding a Partner university Bachelor’s are entitled to a reduced fee of €12,000/year.

CentraleSupélec Scholarship

Scholarships available for students with highest scores

Start of the programme

September 2019 – Start of the programme for candidates selected in the 4th year of Bachelor’s degree
September 2020 – Start of the programme for candidates selected in the 3rd year of Bachelor’s degree

- Partner universities in China include: Beihang, Tsinghua, Shanghai Jiaotong, Xi’an Jiaotong, Zhejiang U, Beijing Institute of Technology, USTC (Hefei), Harbin Institute of Technology, BUPT, Huazhong
- This list is not exhaustive. Please contact us for further information at: accelerated_eng_prog@centralesupelec.fr
PHASE 1 – ONLINE APPLICATION

Apply online: [http://centralesupelec-accelerated-progr.fr/registration/](http://centralesupelec-accelerated-progr.fr/registration/)

Mid-February – 14 April 2019

All elements of the application must be in either English or French and must be submitted in pdf format

- Photocopy of passport or national identity card or equivalent documentation from candidate’s country of residence
- Identity photograph
- CV
- Transcript of grades obtained during bachelor’s degree, including first semester of current year
- English or French language certificate (there is no mandatory minimum level, however some indication is required that the candidate is capable of sitting the examination)
- Official school-leaving diploma (e.g. Baccalauréat, Gaokao, A-level, SAT, International Baccalaureate)
- Official results of GRE or Tage Mage standardised tests (optional but recommended)
- Motivation letter
- Letter(s) of recommendation (optional)
- Online application form, completed and signed

The online application will be used to determine which candidates will be invited to sit the written and oral examinations.

The following documents will be requested before you enter the programme if your application is successful:

- English test: to show a minimum IELTS score of 6.5 or a TOEFL score of 550 for a paper-based test and of 77 for an Internet-based test
PHASE 2 – WRITTEN AND ORAL EXAMINATIONS

If selected, you will be invited to sit the written and oral examinations at the exam centres you will have chosen upon application:

- **Written examinations**: 6 May 2019
- **Oral examinations**: 8-15 May 2019

Depending on your academic background, you will take different series of tests:

<table>
<thead>
<tr>
<th>Bach. in Maths/IT/Computer Sc. and related</th>
<th>Bach. in Physics Sc. and related</th>
<th>Bach. in Mechanical Eng. and related</th>
<th>Bach. in Electrical Eng. and related</th>
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</thead>
<tbody>
<tr>
<td><strong>WRITTEN TESTS (3 hrs)</strong></td>
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<tr>
<td>Maths 2 hrs</td>
<td>Physics 2 hrs</td>
<td>Mechanical eng 2 hrs</td>
<td>Electrical eng. 2 hrs</td>
</tr>
<tr>
<td>MCQ in Maths &amp; Physics 1 hr</td>
<td>MCQ in Maths 1 hr</td>
<td>MCQ in Maths 1 hr</td>
<td>MCQ in Maths 1 hr</td>
</tr>
<tr>
<td>Maths 45 mn</td>
<td>Physics 45 mn</td>
<td>Mechanical eng. 45 mn</td>
<td>Electrical eng. 45 mn</td>
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<tr>
<td>Physics 45 mn</td>
<td>Engineering topic 45 mn</td>
<td>Maths 45 mn</td>
<td>Maths 45 mn</td>
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<tr>
<td>Interview 30 mn</td>
<td>Interview 30 mn</td>
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</tbody>
</table>

The scope of the tests and last year’s exam topics are available on the website: [http://www.centralesupelec-accelerated-progr.fr](http://www.centralesupelec-accelerated-progr.fr)
Any questions?

- General information on the programme
  
  http://www.centralesupelec.fr/en/accelerated-engineering-degree-masters-level

- Application to the programme
  

- Contact us by email
  
  accelerated_prog_eng@centralesupelec.fr