

CENTRALESUPELEC

A GLOBAL HEI IN SCIENCES & TECHNOLOGIES IN PARIS-SACLAY, BRITTANY AND LORRAINE



CentraleSupélec



Ecole Centrale Paris (Ecole Centrale Paris -1829)
Supélec (Ecole Supérieure d'Electricité - 1894)
 Merged 1 Jan 2015 to jointly create **CentraleSupélec**



137 WW
61 in Eng. & Tech 1st in France
8 in LessThan50 ranking
9 in Employer Reputation / 67 in employability



Telecomm Eng.	18 WW	1 st in France
Automation and Control	35 WW	1 st in France
Elec^{al} & Elec^{ic} Eng.	51-75 WW	1 st in France
Mechanical Eng.	51-75 WW	2 nd in France
Comp Science	101-150 WW	2 nd in France

CENTRALESUPELEC

GLOBAL KEY FIGURES



4000 Graduate Students
30% International
500 doctoral candidates



450 Teachers/Researchers



200 International Partners



CESAER

10 INDUSTRIAL
MANAGERS
EUROPE

Joined CESAER in 1990 and founded T.I.M.E. in 1989



17 Research Depts

140 Corp. Partners



35 000 WW active Alumni



A LOCAL ANCHORAGE



60 000 students

9 000 Masters and 4600 PhD (40% international)

9 000 researchers

145 ERC grants, 10 Fields Medalists, 2 Nobel Prize

Represents 13 % of the French public research

20 Doctoral Schools



A NATIONAL GROUP

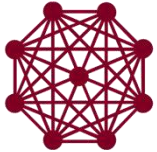




2017 A NEW CAMPUS IN SACLAY



CENTRALESUPÉLEC - ENGINEERS-ENTREPRENEURS OF HIGH SCIENTIFIC LEVEL



- CS Engineers master **Science & Technology** with a high capacity of **abstraction and conceptualization** applied to **Complex Systems**



- They are **Leaders and Innovators in action**, creating social and economic value at an international level




- They are **comfortable and innovative with major technological and societal changes**, especially in the digital world




- they are **humanists**, sensitive to social issues. They have a sense of responsibilities and respect for others

20 specialized tracks in 8 domains of concentration




Energy

- Resources
- Networks and Smart Grids
- Energy Efficiency




Biomed & Environmental Eng

- Environment / Sustainable Production
- Healthcare & Services Biomedical Eng




Mathematics, Data Sciences

- Complex Systems and Numerical Simulation
- Data Science




Large scale interacting systems

- Control Engineering
- Design and System Sciences
- Supply Chain and Operations Management




Computer Sci and Digital Transformation

- Software Engineering
- Artificial Intelligence
- System Architecture




Internet of Things & Communicating Systems

- Smart Systems
- IoT & Embedded Systems
- Nanoelec and Electromagn.



Civil Eng. & Transportation

- Smart Cities
- Aerospace and Mechanical Systems



Physics and nanotech

- Physics & Photonics
- Quantum Engineering

A STRONG INTERNATIONAL SCOPE

CESAER

conference of european schools
for advanced engineering education
and research

TOP INDUSTRIAL MANAGERS
EUROPE



200 international agreements – 50 core (non-inc. US/UK)

30% international students – 70 nationalities on campus

International concours opened in 2017

Degree Seeking Programs

- **Engineering Program:** Complex Systems (need a high level in Math)
 - Very best Bachelor students (GaoKao+4)
 - 2 Year Accelerated track mostly taught-in-English program

- **MSc Advanced Program in Engineering :** 1 year in a given Major taught in French
 - Automation
 - Energy
 - Mechanical Engineering and Aerospace
 - Signal and telecommunication
 - Data Science and Mathematics
 - Computer Science
 - Industrial Engineering

- **Data Science & Business CentraleSupélec with ESSEC**
 - 1year program in English
 - 2 tracks: Data Science and Business analytics

Semester Programs for international Students

Spring Semester

- Feb-June each Year
- Taught in English (expt BOA)
- courses + project +
Language + Campus life and
Sport
- Paris-Saclay, Rennes or Metz
Campuses (expt BOA in Morocco)

Mechanical &
Aerospace

Applied Maths &
Computer Sci.

Applied Physics

Industrial Eng.

Electrical Eng.

Business &
Operation in
Africa

Summer Schools for international Students

- **Artificial Intelligence and Industry4.0**
- 2 weeks early July
- Courses, Project and Seminars
- In Partnership with Flinders (Australia) and ETS (Quebec)
- Cultural program



<https://www.summerschoolcentralesupelec.fr/>



- ❑ Confidentiality, Integrity, Availability, Repartition (CIDRE – Rennes) *assoc. with INRIA, CNRS*
- ❑ Hybrid Systems Control (ASH – Rennes) *assoc. with CNRS*
- ❑ Facial Analysis, Synthesis and Tracking (FAST – Rennes)
- ❑ Signal, Communications & Embedded Systems (SCEE – Rennes) *assoc. with CNRS*
- ❑ Optical Materials, Photonics, and Systems (LMOPS – Metz)
- ❑ Autonomous Systems and Robotics (Metz) *assoc. with LORIA*
- ❑ Signals and Systems (L2S – Paris-Saclay) *assoc. with CNRS*
- ❑ Mathematics and Informatics for Complex Systems (MICS – Paris-Saclay)
- ❑ Computer Science (within LRI – Paris-Saclay) *associated with CNRS, Psud*
- ❑ Industrial Engineering and Innovation Management (LGI – Paris-Saclay)
- ❑ Process Engineering and Materials (LGPM – Paris-Saclay)
- ❑ Energetics and Combustion (EM2C – Paris-Saclay) *associated with CNRS*
- ❑ Quantum and Molecular Photonics (LPQM – Paris-Saclay) *associated with CNRS*
- ❑ Physical Properties and Modeling of Materials (SPMS – Paris-Saclay) *associated with CNRS*
- ❑ Mechanics, Structures and Material – Civil Eng. (MSSMat – Paris-Saclay)
- ❑ Group of electrical engineering- PariS (GeePs – Paris-Saclay) *associated with CNRS, Psud, UPMC*



- ❖ **Premium Partner club:** GdF Suez, EdF, EADS, Safran, PSA...
- ❖ **Education:** Teaching, projects, seminars and conferences, visits, field trips
- ❖ **Research:** Contract, PhD works, Chairs, Sponsorship
- ❖ **Innovation:** Open Inno Inst., Incubator, Entrepreneurship, Technology Transfer
- ❖ **Professional training:** Skills oriented teaching, **Internships (28 weeks minimum)**, CentraleSupélec Forums (national and international)
- ❖ **Policy and Sponsorship:** School board, consulting bodies, major sponsorship, scholarship, strong Alumni Association (regional offices)
- ❖ **Alumni**
- ❖ **Executive Education**



