

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





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 employab



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



CENTRALESUPELEC GLOBAL KEY FIGURES



4000 Graduate Students
30% International
500 doctoral candidates



450 Teachers/Researchers



200 International Partners



CESAER *100 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



ARWU 2018 by Subject Ranking



2nd	10th	32nd	43rd	Worldwide ranking
1st	1st	1st	1st	Nationwide ranking
MATHS	PHYSICS	MATERIAL SCIENCE & ENGINEERING	STATISTICS	



2nd	24th	Worldwide ranking
1st	3rd	Nationwide ranking
ATMOSPHERIC SCIENCE	EARTH SCIENCES	



19th	Worldwide ranking
1st	Nationwide ranking
AGRICULTURAL SCIENCES	



18th	35th	Worldwide ranking
1st	1st	Nationwide ranking
TELECOM. ENGINEERING	AUTOMATION & CONTROL	

université
PARIS-SACLAY

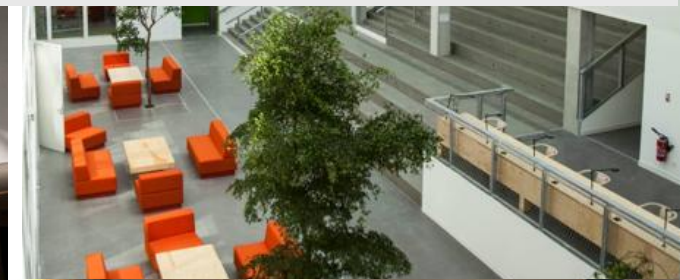
2018
Projected
ARWU World
Ranking
16th – 20th

A NATIONAL GROUP

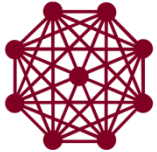




2017 A NEW CAMPUS IN SACLAY



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.

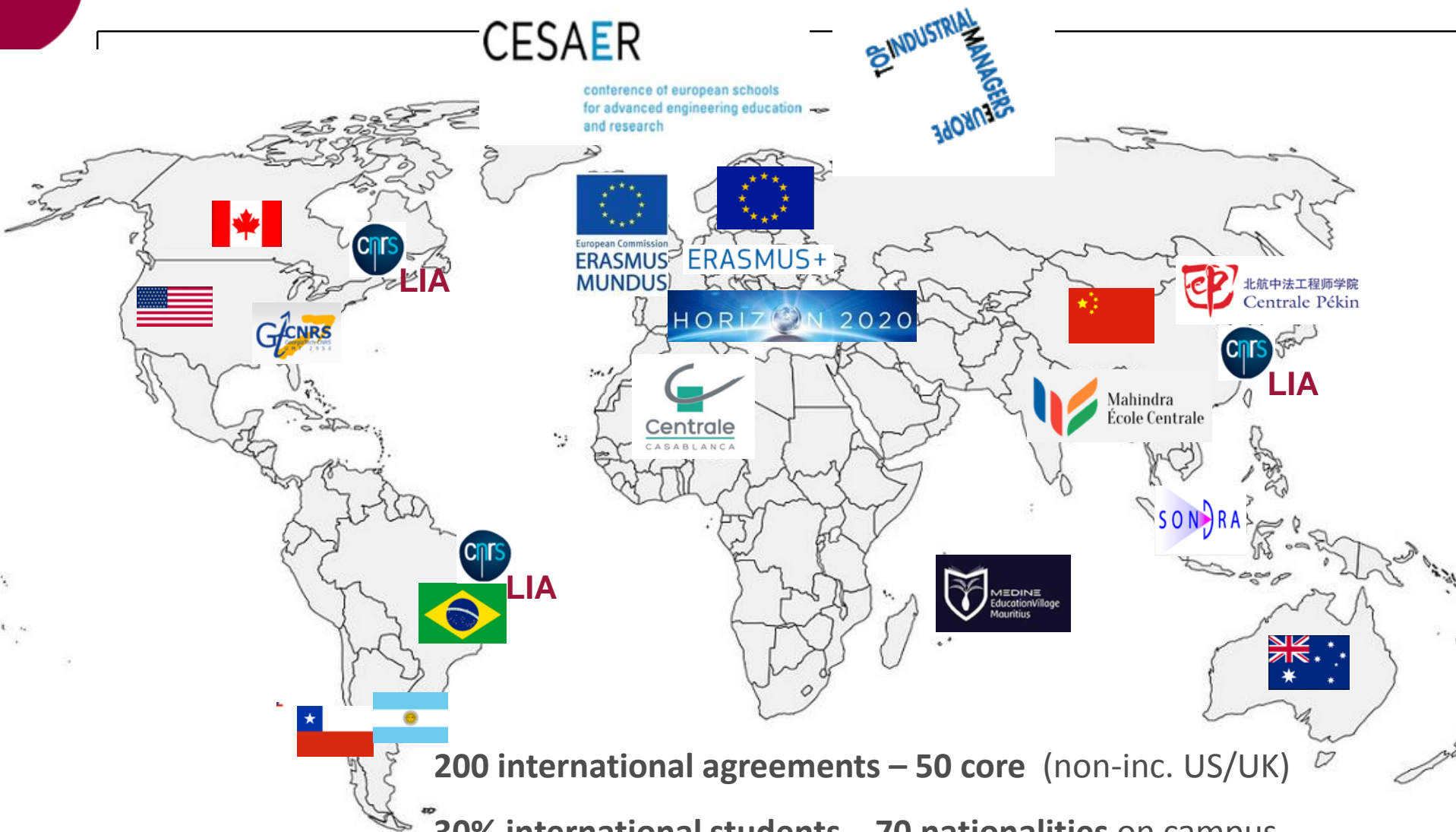
 **Civil Eng. & Transportation**

- Smart Cities
- Aerospace and Mechanical Systems

 **Physics and nanotech**

- Physics & Photonics
- Quantum Engineering

A STRONG INTERNATIONAL SCOPE



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/>





RESEARCH CENTRES

- ❑ 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)



University –Industry Collaboration @ CentraleSupélec

- ❖ **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**





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THOMSON REUTERS

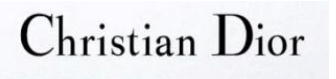


OLIVER WYMAN



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THE BOSTON CONSULTING GROUP



SOLETANCHE BACHY

