École Centrale Paris was founded on November 3rd, 1829 by M. LAVALLÉE with Jean-Baptiste DUMAS, Théodore OLIVIER and Eugène PÉCLET

- « Centraliens » have been major actors of scientific and technical progress for nearly two centuries

- Originally described as the “Doctors of industry and factories”,

- « Centraliens » have a long tradition of being innovators, designers, builders, manufacturers, or even sometimes journalists or artists.
Centrale Paris’ Director, Hervé Biausser, encourages today’s “Centraliens” to

- Find solutions to XXIst century issues
- Master leading edge technologies and advanced science
- Combine excellence in innovation with social responsibility
- Become global leaders, entrepreneurs and innovators

École Centrale Paris: 180 years of excellence in innovative engineering
Training at École Centrale Paris: key figures

Education

- **1450** engineering students of which **17%** are female students
- **230** doctoral candidates
- **10** academic departments
- **8** options and **5** career tracks in the third year
- **180** permanent faculty and 1200 adjunct faculty

Research

- **113** Faculty-Researchers and full-time researchers
- **5** Research Fields
- **7** Research Departments
- **31 000 m²** of laboratories, testing areas and offices
- **118** publications in refereed journals (CNRS Rank A)
Strategic Alliances

- Groupe of Ecoles Centrales
- Centrale-Supélec
- ENS Cachan and Paris XI
- ESSEC Business School
1878 – **Gustave Eiffel**, Eiffel tower

1878 – **Edmond Coignet**, ferroconcrete

1989 – **Bouygues**, Grande Arche de la Défense

2001 – **Bouygues**, Tour EDF la Défense
1893 – Robert Peugeot, quadricycle
1896 – Emile Levasseur & René Panhard, two seat car
1909 – Robert Peugeot, first passenger car
1948 – Maurice Goudard et Marcel Mennesson, Solex
1983 – Jean-Jacques His, V10RS08 engine of Renault Formule 1
1998 – Robert Peugeot, Diesel HDI Engine
Providing Graduate & Post–Graduate Education

- The Centrale Paris « Ingénieur » Program

- Research Masters (6 fields of study)

- Specialised Master’s Degrees: Management and Technology, Science and Technologies, Health and Biotech

- PhD programs

- Executive Education
Centrale Paris Degree Equivalence

Centrale Paris degree

- 1st yr Prep. to Entrance Exam
- 2nd yr Prep. to Entrance Exam
- 1st yr
- 2nd yr
- 3rd yr Elective Skills Professional Track
- Master of Research

Partner Institution

European model
- 1st Year
- 2nd Year
- 3rd Year
- 4th Year
- 5th Year
- 6th Year

Angl-Saxon model
- 1st Year
- 2nd Year
- 3rd Year
- 4th Year
- 5th Year
- 6th Year

Partner Institutions

- Mast. Deg.
- Mast. Deg.
- Mast. Deg.
- BSc. Deg.
- BSc. Deg.
A Single Commitment to Excellence

**Benoît Potier**, current CEO of Air Liquide

**Bernard Liautaud**, founder of Business Objects, sold it in 2005

Two Centraliens were on **Albert Fert’s** magnetoresistance team (Nobel Prize 2007)

Chamayou dit **Felix**, Sculptor, la Geode (La Villette)

**Christian Toledano**, current CEO of Christian Dior

1943 - **Boris Vian**, Writer

From Leading CEOs to Inventors and even Artists!
Centrale Paris’ Research Centre

The Research Centre of École Centrale Paris contributes to finding solutions to today’s major technological and social challenges.

7 research departments:

- **Energetics and Combustion** (Énergétique Moléculaire et Macroscopique, Combustion) EM2C (UPR CNRS 288)
- **Physical Properties of Materials and Modelling** (Structures, Propriétés et Modélisation des Solides) SPMS (UMR CNRS 8580)
- **Mechanics, Structures and Materials** (Mécanique des Sols, Structures et Matériaux) MSSMat (UMR CNRS 8579)
- **Chemical Engineering** (Génie des Procédés et Matériaux) LGPM (EA 4038)
- **Applied Mathematics and Systems** (Mathématiques Appliquées aux Systèmes) MAS (EA 4037)
- **Industrial Engineering** (Génie Industriel) LGI (EA 2606)
- **Economy Modelling** (Recherche en Analyse des Systèmes et en Modélisation économique) ERASME (EA 2605)
Centrale Paris’ industrial partners:

- Help to define Centrale Paris’ strategy (ex: through the Board of Directors)
- Supply one thousand visiting faculty and adjunct-lecturers each year
- Host students for internships of 8 to 20 months
- Contribute to 3rd year pedagogical partnership programs
- Sponsor Corporate Chairs.

Since 2001, École Centrale Paris has had a business incubator, facilitating the creation of 15 high-performance companies.
Strategic ties to industry

12 Premium Partners:
Centrale Paris’ international network:
Over 100 partner universities in more than 30 countries
A network of over 100 universities in more than 30 countries

- **The T.I.M.E** (Top Industrial Managers for Europe) Network
  (55 top universities)

- **CESAER** (Conference of European School for Advanced Engineering Education and Research)

**International Campus**

- 30% international students
- 40% double degree students
- 52 nationalities on the campus
Some of our international partners

Europe
Cambridge University – UK
RWTH Aachen - Germany
TU München - Germany
Politecnico di Milano - Italy
ETS II Madrid - Spain
KTH Stockholm – Sweden
EPF Lausanne - Switzerland

Brazil
EP - U Sao Paulo – Brazil

Asia
Tsinghua University - China
Beihang University – China
Shanghai Jiao Tong University – China
NUS - Singapour
IIT Kanpur – India
IIT Delhi - India
Keio University - Japan

USA
Cornell University - USA
Stanford University - USA
Columbia University – USA
Penn State - USA
All engineering students must work or study abroad for at least six months.

**International opportunities:**

- Double-Degree academic exchange (1 to 2 years)
- One-semester academic exchange
- One-semester research internship
- 6 to 9 month internship abroad
- Sandwich year in a company abroad

*Most students spend at least one year abroad.*
3rd year engineering student from Cambridge attend the 2nd year courses at Centrale Paris.

Students from the 2nd year of Centrale Paris attend the 3rd year Masters of engineering at University of Cambridge.
Masters programs in the UK

Centrale Paris also send students for Masters programs at:

Cambridge

Oxford

London School of Economics

Cranfield
The « 4 + 5 » program of excellence between

Tsinghua Beijing University
Shanghai Jiaotong University
Xi’an Jiaotong University
Chengdu Jiaotong University

and

École Centrale Lille
École Centrale Lyon
École Centrale Marseille
École Centrale Nantes
École Centrale Paris

Alumni

- More than 500 engineers from the Groupe des Ecoles Centrales work in China
- Annual Job Fair
In 2005, École Centrale Beijing welcomed its first intake of 105 high school graduates from amongst the very best in China.

An initiative of the Group of Écoles Centrales, the Beijing school trains young engineers according to the traditional Centrale Paris pedagogy over a period of six years.

The students graduate trilingual and totally prepared for work in an international environment.
École Centrale Paris