LE CINQUE «GRANDES ECOLES»
Il Gruppo delle ECOLES CENTRALE: A NETWORK

**Mutual educational programs**
Well-developed relationships with corporate world
*Shared international experience in student exchanges*

Students: 2 000 graduate students in engineering/year.

Research:  - 450 Master’s Degree students
           - 280 PhD students

27 CNRS laboratories

Alumni: 27 000 engineers world-wide
Écoles Centrale: Top 10 « grandes écoles » (3 students out of 10 000)

« General engineering » profile:
- based on strong background in mathematics, physics and chemist
- involving different scientific and technical disciplines,
as well as economics, management and human sciences.

Specific skills: managing complex multi-disciplinary projects in all fields

Global vision & open-minded approach

Closely linked to the corporate and research worlds.
PROFILE: « CENTRALIEN »

All sectors of economy (public & private industry & services)

- Research, development and innovation
- Other sectors
  - Finance / Banking / Insurance (16%)
  - Energy (14%)
  - Pharmaceutical / Food Industry (6%)
  - Design / Audit / Consulting (6%)
  - Public Works / Construction (17%)
  - Information Technology (12%)
  - Transport Industry (11%)

CENTRALE NETWORK
Major partners of the Centrale Network:

- **Aerospace**: AIRBUS, CNES, DASSAULT AVIATION, DASSAULT SYSTEMS, EADS, SNECMA-SAFRAN

- **Energy**: ALSTOM, CEA, EDF, SCHLUMBERGER, TOTAL, AIR LIQUIDE, Général Electric, GDF Suez

- **Transport**: CGG CHANTIERS DE L’ATLANTIQUE, MICHELIN, PSA, RENAULT, SNCF, Eurocopter

- **Information Systems**: THALES, THOMSON MULTIMEDIA, ST MICROELECTRONICS, ORANGE, SOPRA Group, Accenture, France Telecom

- **Services**: L’Oreal, Ernst & Young, SAP Business Objects, Société, Générale, CIC, Mackinsey & company, AXA

- **Heavy- and Light-Metal Industry**: Arcelor Mittal, ALCAN, Vallourec
**FRENCH GRANDE ÉCOLE ?**

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Grande École d’Ingénieurs

highly selective entrance exam

Classes préparatoires

CPGE
EDUCATION

GENERAL TRAINING

1 Year

High educational training in:

- Engineering fields (math, computer sci., information and communication, materials, mechanics, etc.)

- Economics, sociology, philosophy, languages, sport

2 Year

SPECIALISATION

3 Year

Specialisations (industrial fields) and activities (R&D, supply chain, production, etc.)

Master’s degrees

- Complex systems
- Mechanics, Civil Engineering, Acoustics
- Chemical Engineering, Materials
- Nanotechnologies
- Physics, Optics, Energetics and Combustion
- Applied Mathematics
- Industrial Engineering

17/03/2015
1. Small groups teaching and team-working: tutorials, practical works, project-work (supported by research labs).

2. Specific educational programs geared towards the corporate world:
   - Companies participate in all levels of the engineering training program:
     • Trans-disciplinary projects on company proposals
     • 3 internships in the curriculum

3. International experience (~4 months)
SKILLS AND VALUES

-Capability of managing complex multi-disciplinary projects in all fields.
-Adaptability to a changing world throughout professional life.
-Innovation capabilities (entrepreneurial spirit)

-Democratic team spirit, sense of service, of responsibilities
-Awareness of sustainable development issues
-Being open, inquisitive, attentive

International experience / exchange is a key point
Centrale Diplôme d’Ingénieur Master’s Degree + Italian Master’s Degree
INSTITUTIONAL PARTNERS

Best worldwide partner universities

- 180 exchange agreements with top level partner universities
- 53 Double-Degree agreements
- More than 25% foreign students in the Groupe
- 42 nationalities
- 25% Double-Degree students
Professional experiences in student-run organisations (humanitarian, social events, engineering prestations):

• Ingénieurs sans Frontières (« Engineers without Borders »)
• Junior Entreprise
• Event with Companies: Corporate Forum

Sports and other clubs:

• Jazz, Chess, Theatre, Cinema, Dance
• Sailing, Rugby, Football, Basketball,

International Clubs:

• Club TIME, etc.
Accommodation: private student residences

*Priority for international students*

- Individual or shared rooms
- Internet connection
- TV
- Gym
- Laundry facilities
- Other facilities