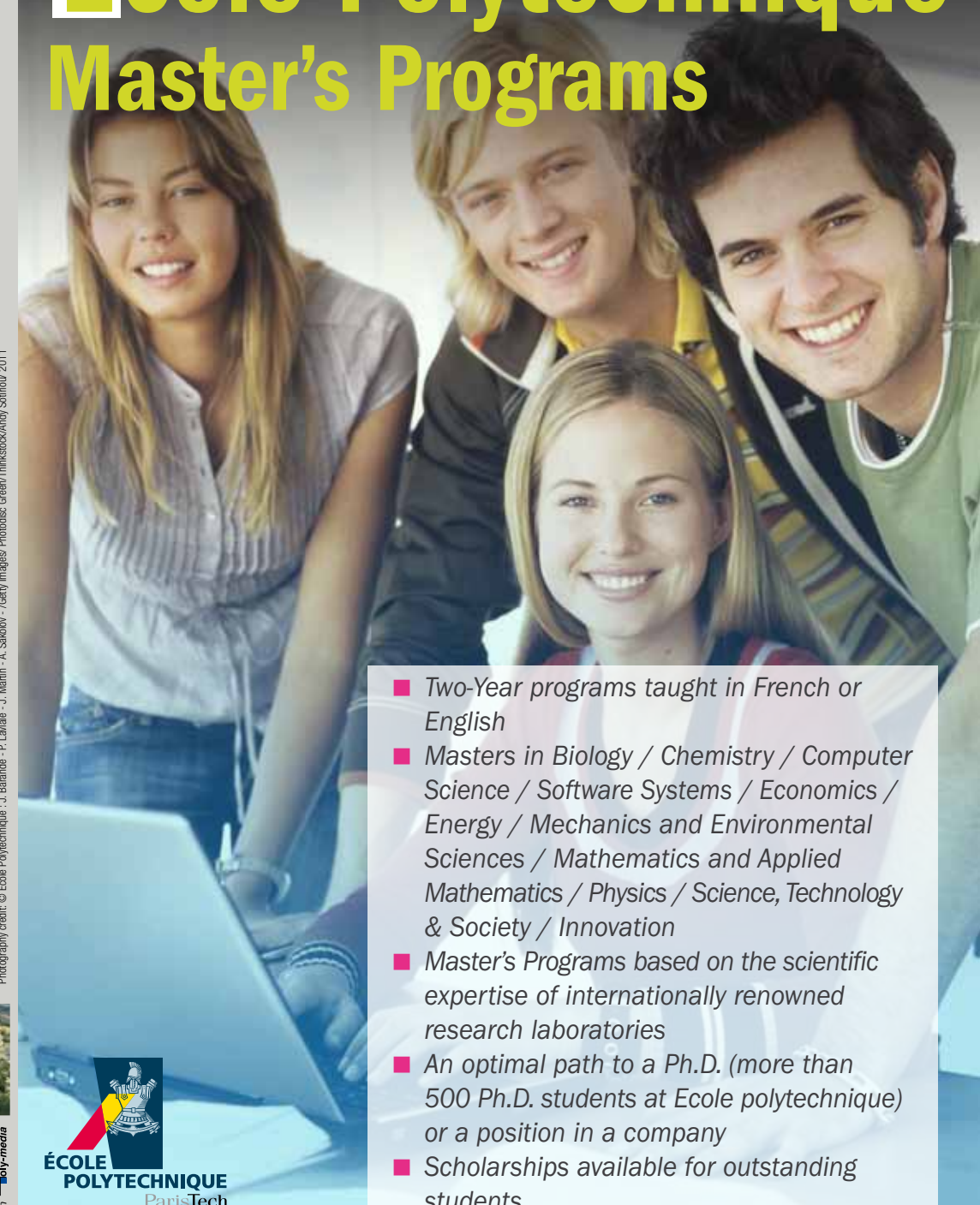


# École Polytechnique Master's Programs



- Two-Year programs taught in French or English
- Masters in Biology / Chemistry / Computer Science / Software Systems / Economics / Energy / Mechanics and Environmental Sciences / Mathematics and Applied Mathematics / Physics / Science, Technology & Society / Innovation
- Master's Programs based on the scientific expertise of internationally renowned research laboratories
- An optimal path to a Ph.D. (more than 500 Ph.D. students at Ecole polytechnique) or a position in a company
- Scholarships available for outstanding students



**École Polytechnique:**  
"The Best Graduate Institute of Science and Technology in France since 1794."

- 2,800 Students (1,850 graduate students)
- 28% of International students
- 660 Faculty Members
- 19% International Faculty Members
- 65 Nationalities
- 19000 Alumni

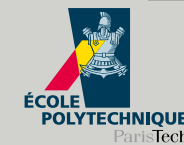
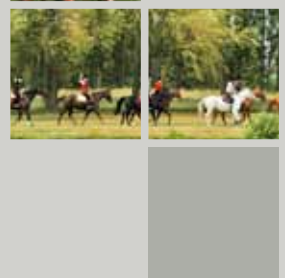
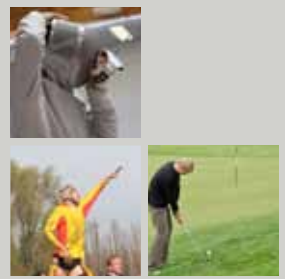
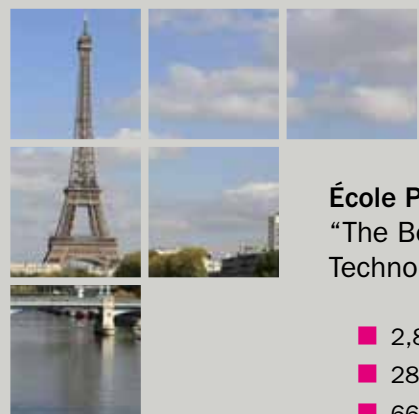
**A long tradition of scientific excellence:** Ampère-Cauchy-Coriolis-Fourier-Fresnel-Lagrange-Monge-Poincaré-Poisson; two Nobel Prizes (Allais, Becquerel) and two Fields Medals; (Lions, Schwartz)

**A multi-disciplinary research center with 22 laboratories (more than 500 Ph.D. students).**

**A strategic location on the Paris-Saclay Campus** that gathers 10 % of the French research activity in Science and Technology.

**A member of ParisTech**, a cluster of excellence of twelve of the most prestigious Graduate Institutes of Science and Technology in Paris.

**A member of IDEA League**, an International network in partnership with Imperial College, TU Delft, ETH Zurich, RWTH Aachen & ParisTech.



## Scholarships:

**Outstanding international students admitted in Master's programs at Ecole Polytechnique benefit from a scholarship. Here is a presentation of the main scholarship programs Ecole Polytechnique Master's students have been awarded.**

### ► Ecole Polytechnique Scholarship Programs:

More than thirty scholarships are awarded to outstanding international students each year.  
All Master's programs and citizenships are eligible.

### ► Scholarships in partnership with Companies or Foundations :

About forty scholarships are awarded to Ecole Polytechnique international master's students each year.

- As part of direct education and research cooperation with Ecole Polytechnique, companies such as TOTAL, EDF, Saint Gobain, PSA Peugeot Citroën, Schneider Electric are providing Master's scholarships.
- The French Ministry of Foreign and European Affairs (MAEE) and companies in partnership with Ecole Polytechnique have decided to create scholarship programs:
  - The Air Liquide International Scholarship (ALIS) program
  - The Credit Agricole International Talents program
- The Jacques Hadamard Foundation for Mathematics.

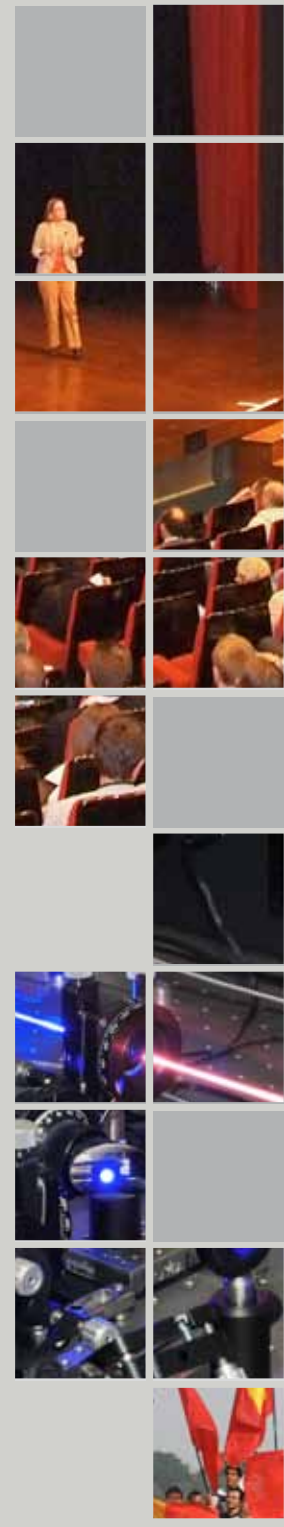
### ► French Government Scholarships :

Some scholarships are given to international students by the French embassy in their home country each year.

Due to the limited number of scholarships available at Ecole Polytechnique, students are strongly advised to look for and apply on external scholarship programs.

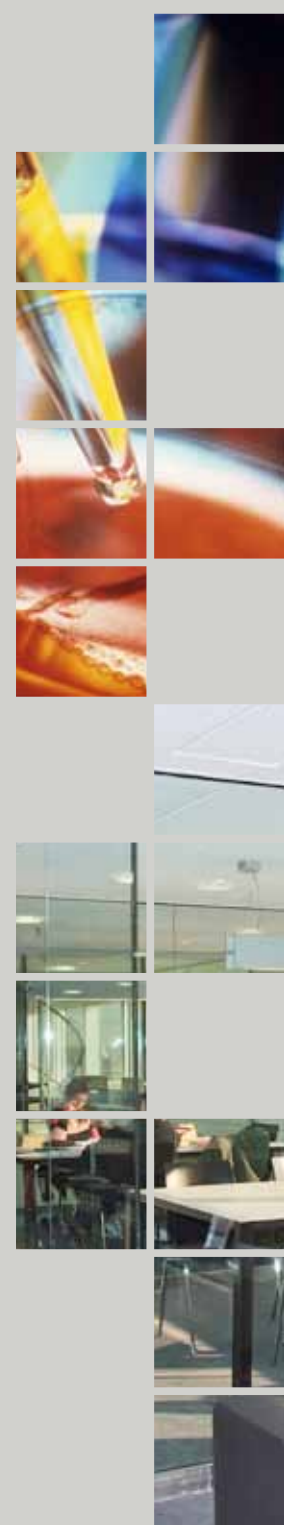
## Contact:

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Création by media



Ecole Polytechnique has created a serie of Master's programs in partnership with partner institutions. These Master's programs are opened to the best International, European and French students having a Bachelor's degree or equivalent.

Each program is a two-year program (120 ECTS). However, direct admission to Year 2 is possible for suitably qualified students.

### Fields of Education:

Biology / Chemistry / Computer Science / Software Systems / Economics / Energy / Mechanics and Environmental Sciences / Mathematics and Applied Mathematics / Physics / Science, Technology & Society / Innovation.

### Master's programs schedule:

- ▶ **First Year:**  
September–December: courses  
January–March: courses  
April–July: a three-month internship.
- ▶ **Second Year:**  
September–March: courses  
March–August: a six-month Master's thesis.  
Internships can be carried out in a laboratory at Ecole Polytechnique, at partner academic institutions or in a R&D Center in a company.

### Basic information:

- ▶ Application:  
2 application deadlines each year:  
February 15th–May 1st.
- ▶ Registration Fees: €245 for the 2011-2012 academic year
- ▶ Tuition fees:  
• Year 1: €6,600–Year 2: €4,400.  
• Complete program (2 years): €11,000
- ▶ Limited housing available on campus

### International cooperation:

#### Double degree agreements with:

USA (California Institute of Technology, Columbia)  
China (Fudan University, Shandong University)  
South Korea (Kyung Hee University)  
Europe (Warsaw University, Politecnico di Torino, Novosibirsk State University)

## MASTER'S PROGRAMS AVAILABLE AT ECOLE POLYTECHNIQUE

( Fr : taught in French ; En : taught in English)

BIOLOGY	
Engineering of Biomolecules (Fr)	
Bioinformatics and Biostatistics (Fr)	

CHEMISTRY	
Molecular Chemistry (En)	

INFORMATICS COMPUTER SCIENCE & SOFTWARE SYSTEM	
Electrical Engineering (Fr)	
Reasearch in Computer Science (Fr)	
Bioinformatics and Biostatistics (Fr)	
Complex information Systems (Fr)	
Operations Reasearch (Fr)	

ECONOMICS	
Economics of Energy, Environment, Sustainable Development	▶ Environment (Fr) ▶ Energy (Fr)
Economics & Public Policy (En)	
Quantitative Economics and Finance (En)	▶ Economic Analysis & Policy (En) ▶ Economics of Markets and Organizations (En)

ENERGY	
Renewable Energy Science & Technology (En)	
Nuclear Energy	▶ Nuclear Reactor Physics and Engineering (En) ▶ Nuclear Plant Design (En) ▶ Fuel Cycle (En) ▶ Operations (En) ▶ Decommissioning and Waste Management (En)

MECHANICS AND ENVIRONMENTAL SCIENCES	
Fluid Mechanics (En)	
Solid Mechanics (En)	
Environmental Mechanics & Physics (En)	▶ Water, Air, Pollution and Energy at local and regional scales

MATHEMATICS AND APPLIED MATHEMATICS	
Analysis, Arithmetic, Geometry (Fr)	
Mathematics and Modelling	▶ Numerical Analysis and Partial Differential Equations (En) ▶ Optimization, Game Theory and Modeling in Economics (Fr) ▶ Mathematics, Vision, Learning (Fr) ▶ Mathematics: Applications to Biology and Medical Sciences (Fr)
Probability & Finance (Fr)	
Probability Theory and Random Models (Fr)	

PHYSICS AND APPLIED PHYSICS	
Fundamental Concepts in Physics	▶ Theoretical Physics (Fr) ▶ Quantum Physics (Fr) ▶ Condensed Matter Physics (Fr) ▶ Liquid State Physics (Fr)
High Energy Physics (En)	
Fusion Sciences	▶ Magnetic Confinement Fusion (En) ▶ Inertial Confinement Fusion (En) ▶ Fusion Physics and Technology (En)
Materials Science and Nano-Objects (Fr)	
Optics, Matter & Plasma	▶ Laser & Matter (Fr) ▶ Light & Matter (Fr) ▶ Plasmas: from Space to Lab (Fr) ▶ Optics from Sciences to Technologies (En)
Nanosciences	▶ Nanophysics (Fr) ▶ Nanochemistry (Fr) ▶ Nanodevices (Fr) ▶ International track in nanophysics (En)
Quantum Devices (En)	

SCIENCE, TECHNOLOGY & SOCIETY/INNOVATION	
Cognition and Complex Systems	▶ Cognition Science (Fr) ▶ Complex Systems Sciences (Fr)
Management, Innovation, Conception in Science & Technology	▶ Project Innovation Design (Fr) ▶ Network Industries and Digital Economy (Fr)
Innovative Technologies: Engineering & Entrepreneurship	