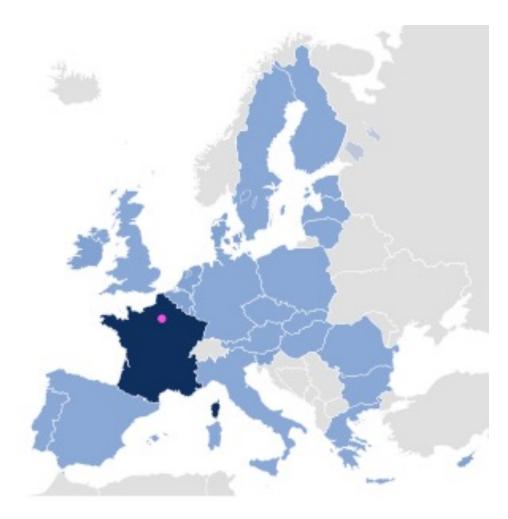




Known as l'X







Ecole Polytechnique

- Grande Ecoles top tier of French universities
- Admission through competitive exam process
- Engineering, Science, Arts & Humanities, Business, Political Science/Social Science
- 250 Grande Ecoles in France educate the future French elite – only 5% of all university student study at a grande ecole
- Ecole Polytechinique ranked 1st or 2nd

What are the Grandes Ecoles?

- The *grandes écoles* (literally in <u>French</u> "higher schools") of <u>France</u> are higher education establishments outside the main framework of the French <u>university</u> system. The *grandes écoles* select students for admission based chiefly on national ranking in competitive written and oral exams. In contrast, French public universities have a legal obligation to accept all candidates of the region who hold a <u>baccalauréat</u>.
- Usually candidates for the national exams have completed two years of dedicated preparatory classes, although this is not always the case.
- They have produced many if not most of France's high-ranking civil servants, politicians and <u>executives</u>, as well as many scientists, writers and philosophers.
- Some grandes écoles concentrate on a subject area, such as <u>engineering</u>, <u>sciences</u>, <u>social sciences</u>, or <u>business</u>.

Facts & figures

2,000 students

250 students

500 students

- 2,750 students
- « Ingénieur Polytechnicien »:
- Master of Science:
- PhD:

660 faculty members

- 14 members of the French Academy of Sciences
- 19 % international
- 10 departments (education and research)

Research Research

- 1,600 people in the research center
- 600 researchers 500 PhD
- 22 laboratories
- Total research budget of €95 million
- 1,000 publications per year

International

- More than 700 international students (27%) from 60 different countries
- 84% of a Class goes abroad (9 months)

20 % international

50 % international

35 % international

- 445 visiting scientists each year (>1 month)
- 179 agreements with foreign universities





A multidisciplinary research centre

Physics and Applied Physics

(Theoretical, Condensed Matter, Solid-State, Particle, Nuclear, Plasma, Materials, Electronics, Lasers, Optics)

Mathematics

Applied Mathematics

Computer Science

Engineering Mechanics (Solid Mechanics, Fluid Dynamics, Meteorology)

22 laboratories 1,600 people



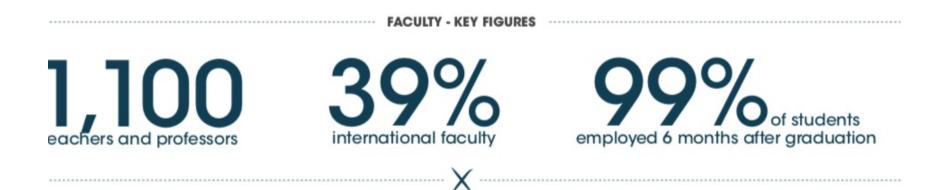
Quantitative Economics & Finance, Management

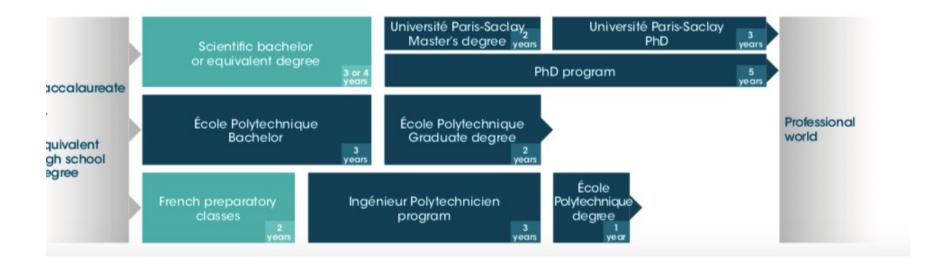




Chemistry

Faculty





Ingénieur Polytechnicien Program

Both general and specialized studies
 École Polytechnique's Ingénieur
 Polytechnicien Program is a unique 4-year
 program: 3 years to obtain the Engineering
 degree and 1 year to obtain École
 Polytechnique's Diploma.

4 Year Program

• This 4-year curriculum provides students with:

- A multidisciplinary scientific training that gives students a broad scientific base (basic sciences, engineering sciences, social economics).

- A human, military and sports training that allows students to develop their behavioral and relational skills.
- Specialized courses with advanced scientific concentrations that rival the top engineering schools worldwide.

Education Undergraduate Graduate « INGENIEUR POLYTECHNICIEN » MASTER Two to three years of undergraduate PhD studies Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7

- > « Ingénieur Polytechnicien »
- > Master Program
- > PhD Program

2,000 students20% international250 students50% international500 students35% international



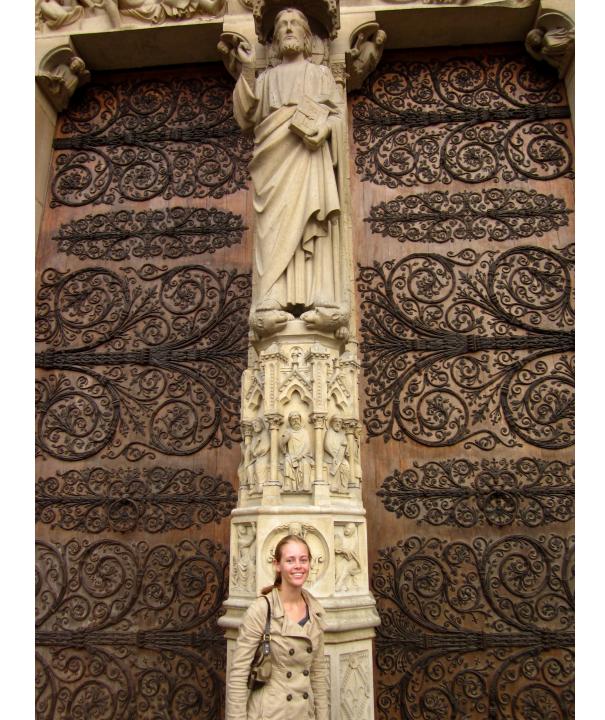


Ecole Polytechnique Scholars Program

- 3.3 GPA required
- Must be able to read, write and comprehend French at least at an intermediate level.
- 14-week term (early Sept. to mid December)
- Students take classes ONLY from Year 3 (courses numbered in the 500 range)
- Students take 4 classes in their Programme d'Approfondissement (option) *literally means intensification or deepening* + possible Hum class + required French class

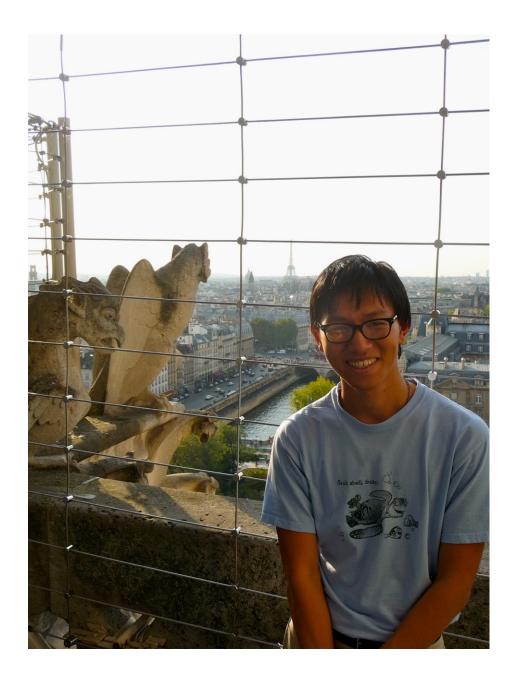
Campus Life

- Students live on campus in single dorm rooms
- There is very affordable on campus dining, as well as a kitchen to cook in
- Lots of clubs, and even more sports. Sports are a huge part of campus culture and are required for regular X students
- There is a week-long fall break, or reading week, in mid-October



What's there to do in Paris?

- About a 45 minute train ride from X you' II be there every weekend!
- Food (<u>http://www.timeout.com/paris/feature/food/pariss-best-cheap-eats</u>)
- Marie Curie walking tour: http://hypatiamaze.org/m_curie/curie_walk.html
- Art!
- Le Louvre (Mona Lisa, anyone?)
- Musee d' Orsay (Hey Monet)
- Centre Pompidou (inside out building)
- Musee Carnavalet (Paris history free!)



Ecoly Polytechnique Napoleon Uniforms Founded 1794 & Became Military Academy under Napoleon in 1804



This Photo by Unknown Author is licensed under CC BY-SA

Technicians out of uniform







Binets (Clubs)

- About 250 clubs
- Cultural, artistic, social, scientific, religious and sporting activities.

 Find out more at: <u>https://programmes.polytechnique.edu/en/in</u> <u>genieur-polytechnicien-program/student-</u> <u>life/student-organizations</u>

Horseback Riding!



Le Lac



Campus View



Academic Structure & Choosing Classes

Ecole Polytechnique Exchange Overview:

https://programmes.polytechnique.edu/en /exchange-programs/internationalacademic-exchange-program/admissions

Ecole Polytechnique

- Can only do 3rd year of Ingenieur degree:
- Must take all 4 classes in your Programme
 d'Approfondissement (PA) (each = 9 Caltech units)
- Must take French Language for 3 HSS Caltech unitsplacement test is given. Can audit French lit, but exam is end of 3rd term so no credit.
- Can take hum or social science depending on offerings and schedule, usually 3 credits

Ecole Polytechnique Concentration Tracks

- <u>ACADEMIC TRACKS</u>
- Biology
- Bioinformatics
- Chemistry (Chem Eng also)
- Economics
- Electrical Engineering
- 21st Century Energies
- Computer Science

Ecole Polytechnique Concentration Tracks

- Technological Innovation
- Pure Mathematics
- Applied Mathematics
- Mechanics
- Physics
- Science of Cognition (CNS)
- Science for Environmental Challenges (GPS)
- Space Sciences

L'X Course Catalog

- 3rd year Ingenieur Program only:
- <u>https://www.polytechnique.edu/en/year-3-of-</u> <u>the-ingenieur-polytechnicien-program</u>

• Note again – 4 classes in one PA

Course Catalog

- STEM classes are 9 units each
- <u>https://moodle.polytechnique.fr/?la</u>
 <u>ngue=EN</u>
- Go directly to current year:
- <u>https://moodle.polytechnique.fr/cou</u> <u>rse/index.php?categoryid=787</u>

Application Process

Students must turn in all Caltech application forms as well as A French language evaluation form DUE JANUARY 25

Caltech Application Requirements

Application Form Core Course Checklist 2-3 Recommendation letters Proposal

- -Personal Statement
- -Courses needed to graduate
- -Program Fit
- -Proposed Course List

Ecole Polytechnique Requirements

Application Form Learning Agreement Form Curriculum Vitae An abstract of courses Language Evaluation A letter of statement in French

Online Application Forms for Ecole Polytechnique will need to be completed once you are nominated

DO NOT SUBMIT ANYTHING TO ECOLE POLYTECHNIQUE. EVERYTHING COMES TO FASA.

Avez-vous des questions?

