Mundus Program

This program allows non-French speaking students to obtain the Polytech Tours Engineering Master Degree after a 3 year-curriculum. The first year is adapted (see curricula on the next page). Year 4 and 5 are standard (see the curriculum of each speciality).

The students usually come from the following partner universities:

- Beijing Institute of Technology - China
- Beijing University of Chemical Technology - China
- University of Science and Technology Beijing - China
- Anna University - Chennai - India
- Beijing Forestry University - China
- Beijing Jiaotong University - China
- Northeastern University - China
- Harbin Engineering University - China
- University of Petroleum - Beijing - China
- Dalian Maritime University - China
- Vellore Institute of Technology - India
- City university of Hong-Kong - China
- Dalian University of Technology - China

The specialties you can enter are the following:

- Computer Sciences
- Electronics and energy systems
- Mechanics and system design
- Urban and Territorial Planning and Environment
Requirements to apply:

- be enrolled in a bachelor degree
- have started learning French (min TEF 200)
- a coherent professional project
- good academic results
- good English level
- An interview with Polytech professors regarding the motivation of the applicant and his / her level both in French and English is also compulsory.

More than 300 students have participated in the Mundus program over the last 10 years. All these programmes are submitted to an agreement between the two universities.

Computer science

**SEMESTER 5 - 200h**
- Algorithms
- Introduction to software engineering
- Project
- Illustration of an operating system: Unix
- Data bases
- Scientific English

**SEMESTER 6 - 200h**
- Object programming
- UML
- C++ programming
- Java programming
- Synchronizing tool
- Distributed systems
- English for specific purposes
- Project management, participative process
- Internship
Electronics and energy systems

SEMESTER 5 - 200h
Electrotechnics
Automated systems
Power electronics : DC-DC conversion
Fundamentals in electronic circuits
Basic functions of electronic systems
Practical works and CAD in electronics I : analogue and digital circuits
Scientific English

SEMESTER 6 - 200h
Flow and Resource Management
Sensors
Data acquisition
Production, transportation and distribution of electrical energy
Energetic system sizing
Project in electronics
English for specific purposes
Project management, participative process
Internship

Mechanics and system design

SEMESTER 5 - 200h
Electrotechnics
Automated systems
Material science
Mechanical construction
Scientific English

SEMESTER 6 - 200h
Flow and Resource Management
Sensors
Data acquisition
Fluid mechanics
Project in mechanical construction
Specifications
English for specific purposes
Each specialty curriculum is completed with a curriculum in French as a second language:

**Urban & territorial planning & environment**

**SEMESTER 5 - 200h**
- Ecology
- Environment laws
- Sociology
- Economics
- Theory of planning and urban design
- Drawing and spatial representation
- Scientific English

**SEMESTER 6 - 200h**
- Earth Sciences
- Hydrology
- Environmental evaluation
- Urban planning Laws
- Urban design
- Planning and project
- English for specific purposes
- Project management, participative process
- Internship

**Each specialty curriculum is completed with a curriculum in French as a second language:**

<table>
<thead>
<tr>
<th>SEMESTER 5 (200h)</th>
<th>SEMESTER 6 (200h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSL</td>
<td>FSL</td>
</tr>
<tr>
<td>Grammar</td>
<td>Grammar</td>
</tr>
<tr>
<td>Speaking workshop</td>
<td>Speaking workshop</td>
</tr>
<tr>
<td>Writing workshop</td>
<td>Writing workshop</td>
</tr>
<tr>
<td>Geography</td>
<td>Preparing for the TCF</td>
</tr>
<tr>
<td>History</td>
<td>Institutions</td>
</tr>
<tr>
<td>Life in France and intercultural issues</td>
<td>Current affairs</td>
</tr>
</tbody>
</table>
Testimony

Shang Lei

These three years in France have truly been like an adventure for me. It has been fulfilling on many aspects: science, linguistics, culture and perhaps also philosophy. When a person takes his place in a completely new environment, unforeseen things happen from all sides. It pushes him to think differently and therefore more globally. I absolutely love these experiences. Thankfully for me, the story goes on...