

## Post-Master's EnvIM INTERNATIONAL ENVIRONMENTAL MANAGEMENT

Academic year 2020-2021

*"Innovation and Environmental Management for a better future"*

*EnvIM "International Environmental Management"* is a Post-Master program designed for young graduates holding a Master's degree or young professionals who wish to complete their curriculum with a specialization in the field of environmental management, in an international context, and is open to applicants with diverse backgrounds and university curriculum.

This international training program is based on an innovative and practical pedagogy based on lectures and projects. Faculty, alumni, and professionals involved in this program provide students with a strategic and forward-looking vision, and introduce students to new concepts, latest scientific developments and innovative management practices, and what is at stake for a world in transition. Through these lectures, open discussions, by mean of various team projects on real-life professional situations and case studies, students have a direct feedback about complex environmental issues, considering holistic approaches, tools for assessment and decision making.



### An International Post-Master

EnvIM is based on a partnership between MINES ParisTech, Tsinghua University (China), INSA Lyon (France), and the University of Pennsylvania (USA), this program leads to a

**Post-Master's Degree in International Environmental Management**  
*Mastère Spécialisé MINES ParisTech, accrédité Conférence des Grandes Ecoles*

This program is proposed through two paths, EnvIM option Asia being the historical training 14-month programme, a unique training pathway in France and China, initiated in 2007. But since 2013 the option Europe, a 12-month program, has been designed for International or European students

### Academic Partnership

EnvIM training program was created in 2007 by Mines ParisTech, INSA Lyon (co-deliverers of the Post-Master for the French part), Tsinghua University in China, and the University of Pennsylvania, as a high-level academic program in these innovative fields.

MINES ParisTech was founded in 1793, and has 18 Research Centers. Its high academic excellence and innovative pedagogy, with a low student/professor ratio, guarantee individualized support and personal guidance, thanks also to professionals and experts from the world of industry. Within MINES ParisTech, the EnvIM program is

organized by ISIGE Institute, which belongs to the Earth and Environment Research Center situated on the Fontainebleau Campus. ISIGE aims to train students and professionals in subjects such as the planet and environmental protection, energy transition, ecological transition, from linear to circular economy, sustainable development and beyond...

Founded in 1911, Tsinghua University is located on the site of the former Tsinghua Garden in the Haidan District of Beijing, and welcomes today more than 30,000 full-time students. The School of Environment of Tsinghua University is well known in Asia for the high quality of its teaching and research, particularly in the fields of Water Management, Waste Management, and Industrial Ecology.

## Presentation

### EnvIM ASIA – a France /China pathway

This 14-month program in France and China, designed for students and young professionals who will acquire new knowledge's, competences, and best management practices from lectures and case studies in China and France that focus on environmental protection, climate change challenges and ecological transition.

The program begins in September with a brief orientation in Paris and a 3-month academic period at the School of Environment at Tsinghua University, followed by 4-month academic period in France at MINES ParisTech (Common program for ASIA and Europe options).

This academic pathway through France and China, leads to the MINES ParisTech post-master in International Environmental Management. In parallel, Tsinghua University offers the possibility for EnvIM students to apply to the Master of Engineering in Environmental Engineering.



- September 7 – 11: 2020 Welcome week, Paris, France
- September 14 - December 17, 2020: academic period in **China** offered by THU/SoE:
- January 4 - April 30, 2021: core academic period in **France**, at MINES ParisTech,
- A 6-month professional period in a company or organization, May to October, during which the student prepares a professional thesis and defends it in Paris and in Beijing, in November and December 2021

### EnvIM -Europe

This 12-month Europe program in France is designed for international, or European students, and young professionals who will learn about European practices and acquire new knowledge's and competences for their professional careers in Environmental Management. EnvIM Europe consists of :

- The 4-month common section in Paris and Fontainebleau (common with EnvIM – Asia students), January to April 2021,
- A month dedicated Project in May 2021

A 5-month professional period in a company or organization, preparing a professional thesis and its defense in Paris, December 2021.

### **Internship, professional Thesis and Defense**

Students have to find and complete a 6-month internship (5-month for EnvIM Europe) between June and December 2021 in a company or organization. The subject of this professional period is proposed by a company, industry, NGO, or Institution, to solve current issues related to environment, energy or sustainable development... For the student, this is a chance to build on his or her prior studies and to use recently acquired skills from the post-master's program by successfully carrying out a meaningful project in an international, professional setting.

The professional period can be organized in the frame of an internship, or a job period, or a "French International Internship Program" (V.I.E) for French students. Internships are possible in France mostly for French-speaking students, but internships in Europe or worldwide are a good way to strengthen an international experience.

On the basis of their internship period, each student has to write a professional Thesis which will be submitted and defended before a jury. Defenses are scheduled from the end of November to mid-December. Because this work leads to a thesis, it must constitute a significant contribution to the enterprise: students must show realism in the way they treat the subject, but also originality and innovation.



### **Hiring rates**

After this period, EnvIM students enjoy excellent hiring rates – on average more than 50% before graduation - and quickly integrate into leading industrial stakeholders, consultancy companies, small and medium enterprises, or NGOs... All students can also benefit from ISIGE and MINES ParisTech Alumni Network to move into top-management jobs, and enterprises offering meaningful work either in France or elsewhere.

### **Admission**

Students may have a wide variety of backgrounds in the sciences, engineering, business and economics, political science, and the environment and sustainable development. A high English proficiency is required, classes and projects are conducted in English:

- Young graduates holding a Master's degree or equivalent degree
- Bachelor's degree with at least 3 years of professional experience in environment or connected topics.
- Penn Master's Degree students: one year of graduate courses. Contact Prof. John Keene or Dr. Yvette Bordeaux
- Tsinghua Master Degree students, contact Prof. MING Zhao (School of Environment)

The application forms and information are downloadable from our web site:

<http://www.isige.mines-paristech.fr/formations/candidater/>

The admission period opens in December each year:

- Pre-selection based on the application files – from January to end of March for EnvIM Asia, (earlier for students who need to apply for a scholarship), and until end of September for EnvIM Europe
- Upon eligibility, a written test and an interview, conducted by a panel of professionals and professors, to get to know the applicant and his/her professional projects and goals, and to ensure coherence with each project and the program.
- Interviews can be held by video-conference for students abroad.
- Acceptance into this program is determined by academic achievements, motivation, test and interview, and space availability

## Tuitions and Fees, financing

The Tuitions and Fees for EnvIM Asia option include a round trip from Paris to Beijing, and field trips in China and France. In all cases, INSA Lyon accommodations are included.

- EnvIM Asia: €13,000
- EnvIM Europe: €9,000
- Both: registration fees €800

Not included are the travel expenditures to join the program in France, accommodations in Fontainebleau and Beijing, visa fees, insurance, and subway or train tickets in Paris and Ile-de-France.

### Financing the program:

Most students finance the cost of the program with their own funds or student loans. However, French banks generally require a guarantor located in France. In all cases, the 6-month period in a company or internship, is usually compensated and provides students with extra financial resources

Under certain conditions, some EnvIM students may find and undertake an internship with a French industrial partner to work on a specific study. In some cases, (in France usually and for specific studies linked to R & D only) the Company pays for part of the student's tuition in EnvIM Program.

Financing for international students: this joint program does not offer any possibility to apply to a scholarship directly, students have to contact “Campus France” in their country, see the webpage’s and scholarships fitting nationality and background:

<https://www.campusfrance.org/en>

## Alumni Association

One main asset of this Post-Master’s Program is its alumni network, through ISIGE Alumni, Mines ParisTech Alumni and Intermines. Created in 1864, the MINES ParisTech Alumni Network aims to represent the school in many countries, to help students in their administrative tasks, to assist the managing board in its strategic choices and to enhance the recognition of its programs. The Alumni Networks are administered by two associations: **ISIGE Alumni** and **Mines ParisTech Alumni**.

## Accommodations

### China - Beijing:

Tsinghua University’s international residence office welcomes students admitted in this program: the average cost for an accommodation in Beijing for the 3 months is 1,200€ - 1,500€. The application process for residences opens in July each year. See:

## France - Fontainebleau and Paris:

MINES ParisTech campus is located in Paris (Boulevard Saint Michel) and some projects or lectures are organized in Fontainebleau as well. The closest train station to the MINES Paris Tech campus from Paris' Gare de Lyon station - is "Fontainebleau - Avon" (40 minutes from Paris). The average cost for lodging in Fontainebleau or Avon (the Armade Residence in Avon for example) is 350€ to 400 €/month. It is often possible to share an apartment with other students in order to reduce costs.

Some websites where you can find information are: "Art et Métier Residence", or "Armade Residence" in Avon, These residences are close to the train and bus station and 10 minutes from the Fontainebleau Campus by bus:

<https://www.adele.org/en/residence/1728/residence-etudiante-d-armade-1728/avon>

<https://www.location-etudiant.fr/logement-etudiant/Avon-77014.html>

## Websites and Contacts

<http://www.isige.mines-paristech.fr/formation/envim/>

<http://www.mines-paristech.fr/Formation/Masteres-Specialises/Masteres-Specialises-temps-plein/ENVIM/>

<https://www.facebook.com/IsigeMinesParisTech>

### **ISIGE - MINES ParisTech PSL**

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## EnvIM Program

EnvIM proposes two options, with a semester in common, and specific projects and experiences. The Asia – France pathway a semester in China, the Europe pathway a month dedicated to specific case studies and projects on Environmental main challenge:

### EnvIM - Core program

Outstanding speakers from international firms, civil society, and various research areas, introduce students to the latest scientific developments, assessment tools and methodologies, and innovative management practices that are relevant to environmental challenges and sustainability.

The EnvIM core program is mostly organized through innovative blended learning sessions. Students work in teams on many case studies and real projects developed in cooperation with experts, leading Industrial companies, consulting firms or NGOs.

- The planet earth facing climate change, adaptation and resilience
- Energy and society transition
- Environmental laws
- Sustainable development principles, the planetary boundaries
- Environmental Assessment tools: Environmental and Social Impact Assessment (ESIA), LCA, Footprints, Tools for decision makers in complex environments
- New models for fair developments, the agro-ecology model
- From linear to circular economy, eco-conception and innovations, green techs
- Companies and environmental Project Management, Financial Tools, and “Green” Project Management
- French class, and lectures about intercultural relationships

Team Projects with experts and professionals: each project is unique and organized with dedicated lectures and teamwork, the purpose being to learn and apply methods and tools. Each project is also a time to experiment collective intelligence

- Environmental and Social and Impact Assessment (large infrastructure project)
- Geopolitic of water sharing
- Urban Sustainable Development Urban workshop
- GeoIntelligence for sustainable decision making (resources sector)
- Agro-ecology and challenges of feeding 9 billion people in the future
- Entrepreneurship, innovations and society for energy transition (development of renewable energy)
- INSA Lyon project: Environmental Management of Alternative Energy: lectures and projects on waste management, and recycling for the Circular Economy in cities

### Specific period for option EnvIM Europe Project

A month (May) dedicated to projects on Environmental issues, with advices and guidance from Professors, academic partners and experts such as:

- 2018 “Recycling versus Waste to Energy Approach to Solid Municipal Waste Management in Ghana”
- 2017 “Mining and society, remediation of polluted post-Mine area in France” with Geosciences and soil remediation experts

## EnvIM International Project

Students learn to work together as one team on a main project on an environmental topic, and learn from experience how to use project management tools. EnvIM Asia students have to organize a Workshop in China in December or an event in France in the end of January. This project is led by MINES ParisTech

- 2017 - Smart Fluxes and Big Data in Beijing for better mobility, and air and water management
- 2018 - Innovative Food Waste Management
- 2019 – Taking care of our things, uses and repairs of things in China

## Specific period for option : EnvIM Asia

*Part of the EnvIM Asia program, this 3 1/2 month in China period includes modules organized by Tsinghua University in Beijing.*

Modules are one or two week's duration, with field trips and projects:

The School of Environment of Tsinghua University provides a broadly based and high quality green education for sustainable development and environmental protection, and contributes to solving societal problems, promoting sustainable development in a country facing economic growth and addressing important global environmental challenges. For more information about SoE, its mission statements, exchanges and cooperative projects, see: <http://www.tsinghua.edu.cn/publish/enven/6269/index.html>

The Program addresses:

- Environment management and policies in China
- Sustainable management of water resources, Waste water and potable water treatment
- Solid waste treatment and site remediation
- Low-carbon technologies and management
- Air pollution control, and a case study of transportation in megacities
- Ecological quality assessment, Geographic Information Systems
- Industrial ecology and circular economy, material flow analysis
- Chinese culture and society, and Chinese language (each week)

Past field trips around Beijing in October, and in the south of China, in December:

- **2019** X'ian, Chengdu, and Shanghai

