

INTERNATIONAL ENVIRONMENTAL MANAGEMENT "ENVIM" MINES ParisTech Post Master

Academic year 2018-2019

"Innovation and Environmental Management for a better future"

The Post Master *International Environmental Management* EnvIM is a Post-Master degree program recognized and certified by the "Conférence des Grandes Ecoles" association in France since 2007, and co signed by MINES ParisTech and INSA Lyon. This Program is 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 environment in an International context. Faculty, Alumni and professionals will help gain a strategic and forward-looking vision.

Participants in this training program which is based on an innovative and practical pedagogy will have the rare opportunity to meet local and international players in Europe and Asia thanks to the wealth of available themed travel opportunities, thanks to industrial partners and experts involved in this program through projects, lectures, or case studies.



An international Post-Master with two options

EnvIM Double Degree 14-month program, built since 2007 and based on a partnership between MINES ParisTech, Tsinghua University (Beijing, China), INSA Lyon (France) and Penn University (USA), aims to obtain two degrees in **Environmental Management**

***International Post Master from MINES ParisTech and INSA Lyon (CGE)
And a Master of Degree of Tsinghua University Beijing***

And since 2013, designed for international students, a 12-month program "option Europe" aims to the Post Master Degree (Accredited by CGE) of MINES ParisTech and co-signed by INSA Lyon, two famous institutions in France.

Academic Partnership

This training program has been created in 2007, by its partners, Mines ParisTech, INSA Lyon (co-delivers the Post-Master for the French part), University of Tsinghua in China, and PENN University, as a willingness to exchange and share high level academic programs in these innovative fields, they co created and build and participated in this partnership from the very beginning, in strong partnership

Tsinghua University, founded in 1911, is located on the site of Tsinghua Garden in the Haidan District of Beijing, and welcomes today more than 30,000 full time students. Tsinghua University is one of the leading universities directly affiliated with the Ministry of Education of China. The School of Environment of Tsinghua Univ. is well

known in Asia for the highest quality of his teaching and research, particularly in the field of Water management, Waste management and Industrial Ecology.

MINES ParisTech has been created in 1793, gathers today 18 Research Centers, its high academic excellence and innovative pedagogy, with a low number of students per professors, guarantee individualized support and personal guidance, thanks also to professionals and experts from the world of industry. Within MINES ParisTech this program is organized by ISIGE Institute, which belongs to the Earth and Environment Research Center situated on the Fontainebleau Campus. This Institute aims to train students, graduated students and professional to environment, energy transition, circular economy, sustainable development all topics now in the core of companies' management and strategic decisions... through its Post Master Programs since 1992.

Presentation and program

EnvIM - Double degree

This 14-month program in France and China leads to two Master degrees, the Post Master's degree from MINES ParisTech and INSA Lyon, and the Master Degree in Environmental management from Tsinghua University. This program is designed for students and young professionals who will acquire new knowledge's, competences and good practices from lectures and case studies in China and France, committed to environmental protection and climate change.

This 14-month program begins in September with a 3-month academic period at the School of Environment Tsinghua University Beijing, followed by 4-month academic part in France at MINES ParisTech.



- September 3th - 7th MINES ParisTech, Welcome week, Paris, France
- September 9th - December 18th, 2018 **China**: 3 ½ months Program
- January 7th - April 30th 2019, MINES ParisTech **France**, 2 weeks organized by INSA Lyon
- A 6-month professional period in a Company or Organization, May to October, aiming to a professional thesis and its defenses in Paris and in Beijing, November and December 2019

EnvIM single Degree

This 12-month "Option Europe" program in France leads to the Post Master's degree from MINES ParisTech and INSA Lyon, designed for international students and young professionals who will benefit from this program in France to learn about European practices to acquire new knowledge's and competences for their professional goals either in their country or for their international career, in Environmental Management. It consists in a 4-month common part with EnvIM – Double degree students, and a 1-month dedicated to projects.

January 7th to end Mid April 2018, 4-month Program, two weeks organized by INSA Lyon

A 1-month (May) dedicated to projects on chosen Environmental issues:

- "Mining and society",
- "Water stewardship and circular economy",
- "Off grid sun power production in Nigeria for remote territories", "How developing environmental consciousness in Russia: design an eco village in Tverskaya region"

A 5-month professional period in a Company or Organization, from May to October, and Professional Thesis Defense in Paris, December 2019

EnvIM Program

Tsinghua University - School of Environment – double degree (Asia)

Part of the EnvIM double degree program, this 3 1/2 month in China period includes modules organized by and on the Tsinghua University Campus in Beijing.

Modules are one or two weeks each, with field trips and projects:

The School of Environment (SOE) of Tsinghua University (THU), provides a broadly based and high quality green education for sustainable development and environmental protection, and contributes to solving societal problems, promoting sustainable development of a country facing economic growth, and addressing important global environmental challenges. For more information about SOE, its mission statements, exchanges and cooperation's, see:

<http://www.tsinghua.edu.cn/publish/enven/6269/index.html>

Program :

- Environment management in China and policies
- Sustainable management of water resources
- Waste water & Drink water treatment
- Solid Waste Treatment and site remediation
- Low-Carbon technologies and Management
- Air Pollution Control, ex case study on Transportation in Megacity
- Ecological quality assessment, GIS
- Industrial ecology and circular economy, Material Flow Analysis
- Chinese culture and society, and Language Chinese (each week)

Field trips around Beijing in October, and in the South of China, in December

- **2015** and **2016** From Chongqing to Chengdu (Sichuan province) along the Yangtzi River

MINES ParisTech program – single and double degree options

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 in order to have a direct feedback about environmental challenges and sustainability. The EnvIM program is based on an innovative and operational pedagogy.

This core program is mostly organized through innovative blended learning sessions, students work per team on multiple case studies and real projects developed in cooperation with experts, leading Industrials, consultancy companies or NGOs with expertise in energy, water and infrastructure projects...

Key words: Green project management, introduction to tools for assessment and decision makings, major challenges, complex environmental context, from linear to circular and life cycle thinking, start up in the environmental sector.

- The planet earth facing climate change, adaptation and resilience, and the energy transition
- Main concepts for Environmental laws, European Institutions
- Sustainable development principles, and Tools for Decision Makers
- From linear to circular economy, Life Cycle thinking
- Environmental assessment: and System Analysis: are developed the knowledge's of main tools and their application perimeters and context, such as ESIA Environmental and Social Impact Assessment, Life Cycle Analysis, Eco Design concepts
- Initiation to environmental economics

- Companies and environmental Project Management, Financial Tools, and “Green” project Management

Projects per groups with experts and professionals, each project is unique and organized with dedicated lectures and team work:

- Environmental and Social and Impact Assessment Large Dam project
- Entrepreneurship, innovations and society for the energy transition
- Agro-ecology and challenges of feeding 9 billion people in the future
- Urban Sustainable Development, an Urban workshop
- Geopolitics and complex Decision making –sustainable development of natural resources in Africa

INSA Lyon program:

Environmental management of Alternative Energy: 2 weeks in Lyon in January, lectures and projects on waste management, and recycling for Circular Economy in cities

EnvIM International Project

Students learn to work together as one team, on a main project on an environmental topic, and learn to use project management tools by experience. They have to organize a Workshop in China in December or an event in France end of January. This project is lead by MINES ParisTech in collaboration with Tsinghua University.

- 2017 Smart Fluxes and Big Data in Beijing for better mobility, air and water management



Six months period of training

Students have to find and complete a 6-month, (5-month for the single Degree), period between June and December 2019 in a company or organization. The subject of this professional period is proposed by a Company, industry or ONG, to solve current issues they are facing related to the environment and energy or sustainable development... For the student, this is a chance to further develop his/her previous curriculum and to use recently acquired skills from the post master's program by successfully carrying out a meaningful work 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 ways to strengthen an international experience.

On the bases of this period each student has to study and write a professional Thesis which will be submitted to be defended before a Jury. Defenses are scheduled from end of November to mid December. The fact that this work leads to a thesis must in itself 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 option Asia students enjoy excellent hiring rates – on average 50% before graduation - and quickly integrate into leading industrial stakeholders. All students can also benefit from ISIGE and MINES ParisTech Alumni Network to evolve towards top-management jobs, either in France or abroad.

Admission

Are welcome students having a background in sciences, engineering, business & economics, political sciences, a strong interest for environment and sustainable development, a high English proficiency are required to be able to follow the classes and projects 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 Degree students, contact Pr. John Keene or Yvette Bordeaux
- Tsinghua Master Degree students, contact Pr MING Zhao (School of Environment)

Application forms and information are downloadable from our web site

<http://www.isige.mines-paristech.fr/formations/comment-etudier-a-lisige/postuler>

Admission procedures are open from December each year:

- Pre-selection based on the application files – from January to beginning of April, (earlier for students who need to apply for a scholarship)
- Written Test and an Interview, conducted by a panel of professionals and professors, to get to know the applicant, his/her professional projects and goals, and to ensure coherence between each project and the program.
- Interviews can be held by videoconference.
- Acceptance into this program is determined by academic achievements, motivations (application files), then test and interview, and space availability
- Admissions are closed end of June for the Double degree program, and end November for the single degree.

Tuitions and Fees, financing

The Tuitions and Fees for the double degree option include two round trips from Paris to Beijing, fieldtrips in China and France. In all cases INSA Lyon accommodations are included.

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| - EnvIM Double degree: | 13,000€ |
| - EnvIM Single Degree: | 9,000 € |
| - Both: registration fees | 800 € |

Are excluded the travel expenditures to join the program in France, the Fontainebleau and Beijing accommodations, visa, insurance, or subway or train ticket in Paris and Ile-de-France.

Financing the program:

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

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

Financing for international students: this joint program doesn't offer possibility to apply to a scholarship directly, (unless for the particular case of some Tsinghua Chinese students) students have to contact "Campus France" in their country, see the webpages and scholarships fitting nationality and background:

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

Alumni association

One main asset of this Post Master is its Alumni network, through ISIGE Alumni, Mines ParisTech Alumni and Intermines. Created in 1864, the MINES ParisTech Alumni Network aims are to represent the school among all the 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 gathered through two associations: **ISIGE Alumni** and **Mines ParisTech Alumni**.

Accommodation

China - Beijing:

Tsinghua University international residence welcome students admitted in this program: 1,200-1,500€ is an average for the accommodation in Beijing for the 3 months in China. Application process for the Residence opens in July each year

<http://www.tsinghua.edu.cn/publish/enven/index.html>

France - Fontainebleau and Paris:

MINES ParisTech campus is located in Paris (Bd Saint Michel) some projects or lectures are organized in Fontainebleau as well. The closest train station from Paris – gare de Lyon station - is "Fontainebleau - Avon" (40 min from Paris). 350 to 400 €/month is an average for lodging in Fontainebleau or Avon (ex Armade residence Avon for example...), it is often possible to share an apartment with other students in order to reduce costs.

Some websites where you can find information: "Art et Métier Residence", or "Armade Residence" in Avon are close to the train and bus station and 10 mins 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/international-environmental-management-Post-master>

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

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

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