# **GRADUATE PROGRAMME**

INTAKE: **September** CAMPUS: **Paris** LANGUAGE: **English** 



# Excellence, impact and innovation in sustainability

Established in Paris in

1919

**4,000** students

+160

international academic partners

**350** 

teachers and professional lecturers

**15,000** graduates

+800

corporate partners and public organizations

+40

students associations Established in 1919, ECE Engineering School in Paris excels in tech and digital education. Specializing in software development, network architecture, cybersecurity, data and AI, our educators use project-based pedagogy to enhance learning. As part of the OMNES Education Group, a top private institution in France, ECE leads in innovation and academic excellence.

Given the critical demand for adept professionals to address the challenges of climate change and energy transition, our MSc Sustainable Energy Futures programme provides comprehensive training. It equips students to take on key roles in sustainable energy and environmental preservation.

This programme not only imparts technical skills but also deepens understanding of sustainable energy's social, economic and policy dimensions. Through diverse coursework, students engage in cutting-edge research and gain practical experience in renewable energy, efficiency strategies and sustainable development.

#### **CAREER OPPORTUNITIES**

Upon completion of this programme, students will be professionals capable of meeting the needs of businesses, organizations and the public sector. They will be prepared for future careers as renewable energy project managers, consultants in energy efficiency and sustainable development, managers of smart energy networks, smart building project managers or embedded energy engineers.

# WHY CHOOSE THIS PROGRAMME

> This master programme addresses the basics of home automation, building thermal dynamics, energy transformation and storage, prevention and management of industrial risks, smart grids and smart cities or waste management and water treatment. It also covers the energy markets, sustainable digital transformation and environmental and energy law.

- > Through conferences, site visits and projects, students meet with energy professionals, thus building their networks.
- > Courses are held on ECE's campus, centrally situated in Paris, near iconic landmarks such as the Eiffel Tower and the Seine River.
- Students dive into sustainable energy, applying theoretical knowledge and discussing analyses with industry leaders.
- > Upon culmination of the programme, students may be conferred with a Bac+5 level diploma adorned with the prestigious MSc – Master of Science label accredited by the Conference of Grandes Écoles.
- > Students can obtain the international certificate of sustainability knowledge TASK™ (The Assessment of Sustainability Knowledge).

#### THE OBJECTIVES OF THE PROGRAMME

Our graduates will be able to:

- > Understand the challenges of climate change and energy transition.
- > Master energy technologies and systems.
- > Analyze the environmental impacts of human activities.
- > Develop sustainable solutions for energy production, distribution and consumption.
- > Manage complex energy and environmental projects.

### SUSTAINABILITY CAMPUS LABEL DD&RS



The training programmes of the ECE Engineering School are certified by the "Sustainable Development & Social Re-

sponsibility" label awarded by the Ministries of Sustainable Development and Higher Education, the Conference of Grandes Écoles and the Conference of University Presidents, as well as being ranked first in France in the "UI Green Metric World University Rankings", a global benchmark in terms of commitment towards universities and major schools.



ece.fr



# MSc SUSTAINABLE ENERGY FUTURES

May 2024

# Programme structure

# ENROLL OUR PROGRAMME



Applications from French or international students residing in France



Applications from international students residing outside France

The international admission procedure only applies to you if you are not a French national and live outside France.

#### CERTIFICATION



### YEAR 1

#### Semester 1 - 30 credits

Oil and Gas Industry

Applied Chemistry

Fossil Fuel Combustion

Renewable Energy I

Introduction to Energy Storage

Python Programming

Physics for Energy I

Thermal Machine

**Energy Markets** 

Master Class, Team Management, Budget Management, Sustainable Development

French courses FLE

Multidisciplinary Team Project

#### Semester 2 - 30 credits

Sustainable Development

**Electrotechnics and Power Electronics** 

Nuclear Energy

Renewable Energy II

Digitalisation O&M (Operation and Maintenance)

Physics for Energy II

Technologies for Smart

Development of Renewable Energy Projects

Individual Relationship Management, Social Dialogue, Corporate Management, Marketing in a Digital World, Manager Ethic's

French courses FLE

Multidisciplinary Team Project

#### 4-month internship (optional)

#### YEAR 2

#### Semester 3 – 30 credits

Nuclear Energy II

**Environmental Impact Assessment** 

Water Treatment and Waste Management

Indoor P\

Responsible Digital Technology

**Environmental and Energy Policy** 

**Energy Storage Systems** 

**Building Thermal Design** 

**Decarbonization Technologies** 

Industrial Risk Management

Cybersecurity

Change Management, Workplace Health, Fundamentals of supply chain management, Safety and Security, Job Interview Simulation

French courses FLE

Research Writing, Final Project

## Dissertation - 20 credits

## 6-month internship – 10 credits



A Corporate Social Responsibility Policy to embody the commitments of OMNES Education

The societal challenges of the contemporary world require new skills, new responsibilities and new professions, which OMNES Education aims to provide to its student audience. With a resolutely humanistic and universalist approach, OMNES Education seeks to unlock the abilities and aspirations of each individual through an innovative and multidisciplinary study programme.

# ENTRY REQUIREMENTS

- > A first-class undergraduate degree with honors in engineering, physics, chemistry, materials science, mathematics, economics, geography or related numerate disciplines.
- > English proficiency: the minimum score required is the upper intermediate B2 level, 4th level of English in the Common European Framework of Reference (CEFR).

#### TUITION FEES

#### French or international students residing in France

- > 10,700 €/academic year.
- > An application fee is payable at the time of the application submission: 90 €.

#### International students residing outside France

- > 11,190 €/academic year.
- > An application fee is payable at the time of the application submission: 50 €.















