

## PROGRAMME STRUCTURE & CONTENT:

### SEMESTR 1

#### Energy

- MODULES**
- M-1: Carbon Footprint, Decarbonation & Life Cycle Assessment (LCA)
  - M-2: Sustainable and Smart Cities
  - M-3: Energy Efficiency in Industry and Buildings
  - M-4: Energy Auditing and Energy Management Systems
  - M-5: Economic Evaluation of Energy Projects
  - M-6: Artificial Intelligence for Energy and Hydrogen Applications
  - M-7: English Language and Communication Skills

### SEMESTR 2

#### Hydrogen

- MODULES**
- M-1: Hydrogen Production and Water Desalination
  - M-2: Hydrogen Storage and Transportation
  - M-3: Industrial Applications of Hydrogen - Decarbonation
  - M-4: Industrial Applications of Hydrogen - Energy and Chemical Applications
  - M-5: Modelling, Optimization, and Economic Evaluation of Hydrogen Projects
  - M-6: Scientific Research Methodology
  - M-7: Leadership, Entrepreneurial Culture, and Communication Techniques

### SEMESTR 3

#### Governance

- MODULES**
- M-1: Green Hydrogen Value Chain and Decarbonisation
  - M-2: Production and Storage of New and Renewable Energies
  - M-3: Strategic and Operational Management of the Energy/Hydrogen Value Chain
  - M-4: Governance, Policy, Regulation and Certification
  - M-5: Green Finance and Accounting
  - M-6: Project Management Applied to Energy and Hydrogen
  - M-7: Data Analytics and Knowledge Management

### SEMESTR 4

#### Master's thesis

An applied research project conducted in partnership with industry or international academic institutions, aimed at solving a real-world decarbonisation problem based on green hydrogen and sustainable energy.

## COURSE FORMAT

- Language**  
French & English
- Location**  
ENSMR, Rabat, Morocco
- Duration**  
2 years (120 ECTS)
- Delivery**  
On-site and hybrid
- Exchange Opportunity**  
Hochschule Anhalt University of Applied Sciences (Germany)

## OUR PARTNERS



## CONTACT PROGRAMME COORDINATOR

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# MASTER

GREEN HYDROGEN, SUSTAINABLE ENERGY & DECARBONISATION  
ADVANCE YOUR KNOWLEDGE

- GREEN HYDROGEN
- SUSTAINABLE ENERGY
- DECARBONISATION
- SMART CITIES
- GOVERNANCE
- DUAL DEGREE

## ABOUT THE PROGRAMME

The Master in Green Hydrogen, Sustainable Energy and Decarbonisation (HVEDD) prepares the next generation of professionals to address global challenges in energy transition, industrial decarbonisation, and climate resilience.

Aligned with Morocco's strategic vision and international climate commitments, the programme combines advanced technical expertise with management, innovation, and sustainability to develop future leaders in the low-carbon economy.

## WHY CHOOSE HVEDD?

- Integration of AI, Smart Cities, and digital solutions

- Opportunities for mobility and collaborative research

- Specialised training in green hydrogen and sustainable energy

- Industry-oriented projects and applied learning

- Multidisciplinary approach combining engineering, management, and policy

- Strong focus on decarbonisation and low-carbon technologies

- International academic and industrial partnerships

## INTERNATIONAL PERSPECTIVE

Hosted by the École Nationale Supérieure des Mines de Rabat (ENSMR), the programme benefits from partnerships with leading international institutions, including Hochschule Anhalt - University of Applied Sciences (Germany), and collaboration with industrial and research stakeholders.

Students gain practical experience through seminars, applied projects, internships, and interactions with national and international experts.

## WHO CAN APPLY?

Bachelor's, (Bac +3 or equivalent) in Fundamental Studies

Professionals and executives seeking advanced expertise in sustainable energy and hydrogen technologies

**With specialisations in:** Physics, Electrical Engineering, Process Engineering, Renewable Energies, Electronics, Electrical and Automation Engineering, Mechanical and Energy Engineering or any equivalent degree

## CAREER OPPORTUNITIES

### Engineering & Sustainable Energy Systems

Energy Systems Engineer  
Sustainable Energy Solutions Engineer  
Low-Carbon Systems Integration Specialist

### Energy Transition, Decarbonisation & Smart Solutions

Energy Transition Project Manager  
Decarbonisation & Climate Strategy Consultant  
Energy Efficiency and Energy Audit Expert  
Energy-Climate Policy Analyst  
Smart Cities & AI for Energy Specialist

### Green Hydrogen & Value Chain

Green Hydrogen Engineer  
Hydrogen Production, Storage & Transport Specialist  
Hydrogen Infrastructure Project Manager  
Green Hydrogen Supply Chain & Optimisation Expert

### Governance, Strategy & International Cooperation

Energy Policy and Transition Expert  
International Cooperation Project Officer  
Energy Strategy Consultant  
Project Manager for Sustainable Energy and Hydrogen Initiatives