



InnoEnergy Master's School European Master's in Nuclear Energy

Engineering. Environment. Society. Study nuclear energy in context



MSc EMINE: the launchpad for your career in nuclear energy

Career opportunities in engineering, research and regulation

A dynamic sector around the world

A vital role in the low-carbon future

The programme for tomorrow's nuclear engineers, MSc EMINE integrates the technical aspects of nuclear power with key environmental, economic, regulatory and social issues.

Through project-based learning and case-based teaching at two different universities, the programme strengthens your engineering and management skills, develops your awareness of the nuclear sector and connects you to a network of key industry players.

Universities and Business Schools

MSc EMINE is operated by some of the leading European institutions in their field

- **G-INP:** Grenoble Institute of Technology, France
- **KTH:** Royal Institute of Technology, Sweden
- PS: Université Paris-Saclay, France
- **UPC:** Universitat Politècnica de Catalunya BarcelonaTech, Spain
- **GEM:** Grenoble École de Management, France

More than half of your time on the two-year programme is spent with industry partners. You'll work closely with professionals who are already solving real-life challenges at contemporary facilities. MSc EMINE gives you the valuable insight you need – and ensures your studies are relevant to the career you choose.



Your international study journey

What you study

Whether it's leading the design of new reactor types, managing the safe decommissioning of older plants, developing innovative new policy, or planning effective waste management, MSc EMINE equips you to meet the challenges facing the global nuclear industry.

In the first year, you take core modules in the fundamentals of nuclear engineering, safety and radiation protection, as well as design and management of power plants in your first year. In the second you can specialise in one of the following:

- Materials science for nuclear energy
- Nuclear reactor physics and engineering
- Nuclear plant design
- Operations
- Fuel cycle
- Decommissioning and waste management



Summer School at Grenoble École de Management

All MSc EMINE students get together for a summer school for three weeks of debate, discussion, and industry interaction. This is a chance to build skills and make connections, drill down into the hot topics of the day, and broaden your understanding of the role of nuclear energy.

You'll analyse and dissect innovative solutions, attend guest lectures given by experts from the nuclear industry, attend field visits to nuclear, research and manufacturing facilities – and work on your own challenge-based projects.

The emphasis is on innovation, entrepreneurship and the development of valuable soft skills such as intercultural management, or pitching a new business or product idea.

At all of the many MSc EMINE events there are lots of industry partners and start-up representatives that tell us their stories. I've also really enjoyed the project-based learning – we've had some very interesting projects that allow us to use our own creativity to solve real-life problems. And getting to work on an actual nuclear reactor in France? Amazing, That hands-on learning really helps you understand. It's a totally different perspective from just looking at slides of the site."

It's a demanding course, but a life-changing experience. The programme was full of technical tours to provide us with a better understanding of our studies – very important for engineers! I remember our visit to Ascó nuclear power plant and the ITER fusion reactor. I probably would never have had a chance to see that anywhere else. The programme is designed with amazing technical visits like these, so you study the physics and then you can see them applied. That's a real education."

Chirayu Batra

Nuclear engineer at the IAEA, and MSc EMINE graduate

Hanna Schlegel, Second-year MSc EMINE student

Innovative Industry Partners

MSc EMINE has strong partnerships with all the leading players in the European nuclear industry who actively participate in the programme:



MSc EMINE carries the label of the European Institute of Innovation and Technology (EIT) – a certificate of quality that is awarded only to excellent educational programmes.



www.innoenergy.com/master-school





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