

# University of Paris-Saclay

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The first of January 2020, the **Paris-Saclay University** replaced the Université Paris-Sud and the Communauté d'universités et établissements "Université Paris-Saclay" and will include as component institutions the Institut des sciences et industries du vivant et de l'environnement (AgroParisTech), CentraleSupélec, the École normale supérieure Paris-Saclay and the Institut d'Optique Graduate School. It also integrates the Institut des hautes études scientifiques, a research organisation and foundation recognised as being of public utility. It is profoundly transforming the French higher education and research landscape by intensifying a policy of training, research and innovation open to the world. Université Paris-Saclay is thus becoming a major player in higher education and research.

## NUCLEAR TRAINING AT THE UNIVERSITY OF PARIS-SACLAY

The **master degree in nuclear engineering** is a two-year course open to both French and international students. The course is taught entirely in English. Created in 2009 by a consortium of 8 academic institutions (Paris-Sud University, Chimie ParisTech, Ecole des Ponts ParisTech, Ecole Polytechnique, ENSTA ParisTech, Mines ParisTech, Centrale Supélec, and CEA/INSTN), with the active support of EDF and ORANO, the Master's degree in nuclear engineering is a national and international reference in terms of training in the nuclear energy sector. Five courses are offered in the second year, covering all professions in nuclear engineering:

- Nuclear reactor physics & engineering;
- Nuclear plant design;
- Fuel cycle;
- Operations;
- Decommissioning and waste management.

The courses are all taught in English by professors and founding members, by researchers from the CEA and the CNRS, and by speakers from our industrial partners such as Andra, ORANO, EDF and ENGIE. The **professional degree in energy physics (TPE)** is intended for students wishing to specialise in the production, consumption and control processes of energy. Six main subjects are taught: production/distribution/storage of electricity, heat and associated technologies, materials, properties and applications, fluids: flows and energy transfers, nuclear energy and radiation protection. This training can be carried out in alternation; the students are then sometimes in class and sometimes in the company. The courses on nuclear energy are taught by professionals from ORANO, EDF, CEA and IRSN. These companies regularly recruit students on a sandwich course. Numerous site visits are organised throughout the school year. After this degree, students can apply for positions as senior technicians in radiation, risk prevention, nuclear fuel and nuclear facility logistics.

## Research

Thanks to the potential of its members and laboratories, research at the University of Paris-Saclay is based on a dynamic that focuses on major fields, from fundamental research to applied sciences and industrial interests. With 275 laboratories shared with the CEA, CNRS, IHES, Inrae, Inria, Inserm and Onéra, the University of Paris-Saclay represents 13% of the French research potential.



### Key figures

65,000 students  
4,600 PhD students  
9,000 teachers &  
professors  
350,000 jobs in research and  
development  
15,000 scientific publications  
per year  
275 research laboratories  
13% of French research