Université Paris-Saclay

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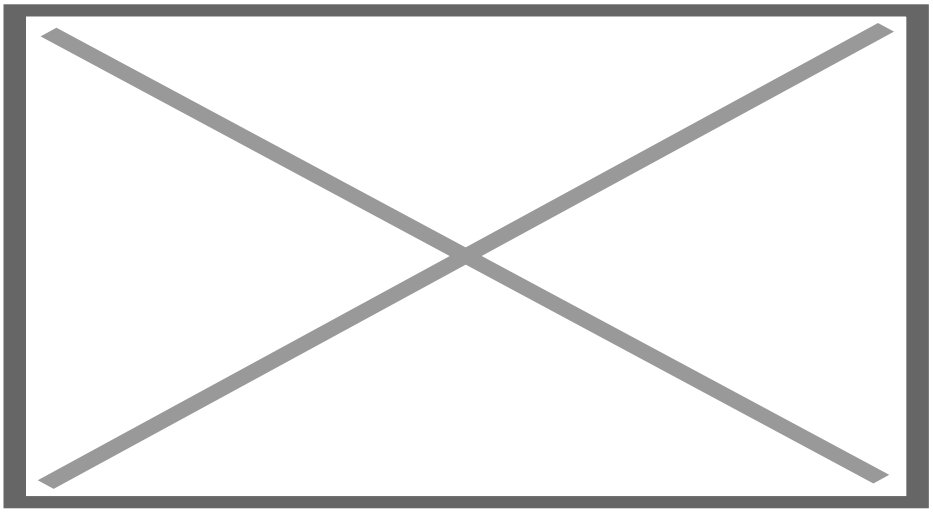
LDD3 Engineering Sciences – École normale supérieure Program

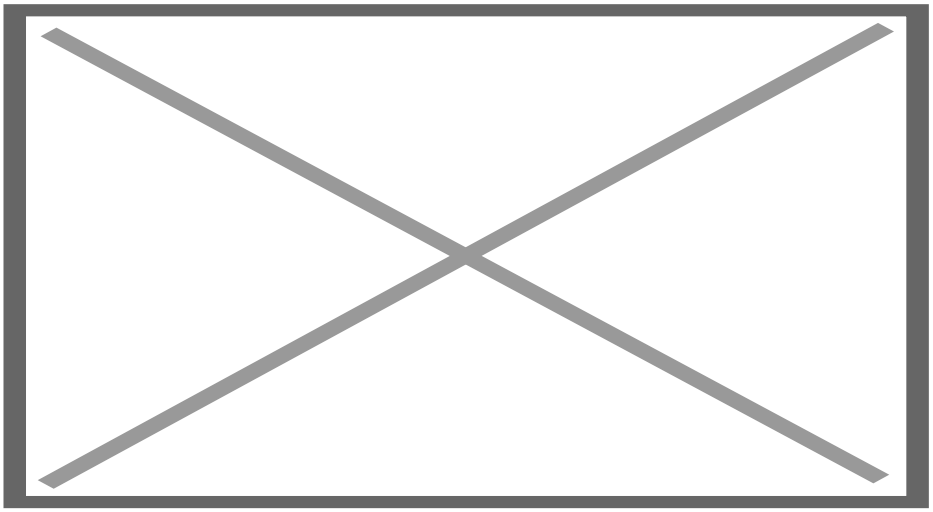
Licence Double-Diplôme (Undergraduate double degree)
Specialisation Mathématiques, Physique et Sciences pour l'Ingénieur
Enrolment type
Formation initiale
Language(s) of instruction
French

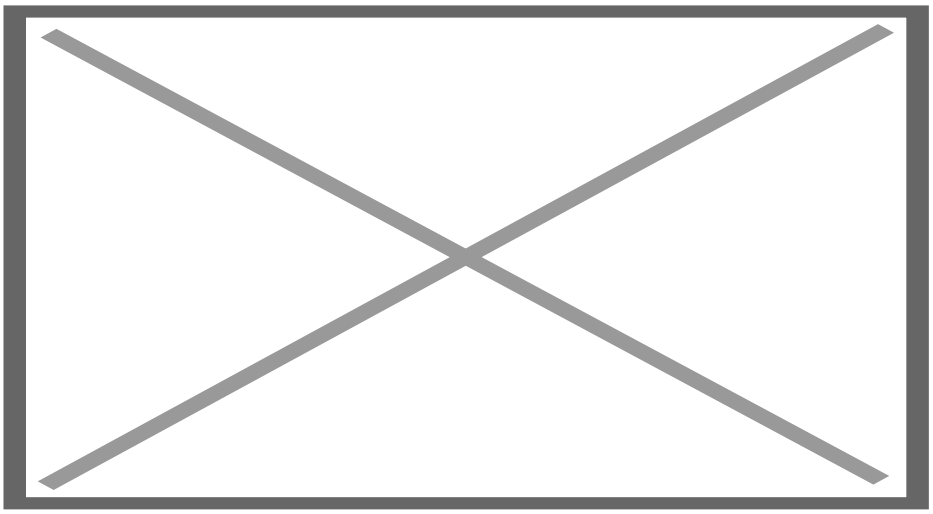
The 3rd year of the Dual Degree Bachelor's Program in Engineering Sciences prepares students for graduate studies (master) in civil, electrical or mechanical engineering, particularly within the Magistère program of University Paris-Saclay or the ENS Paris-Saclay diploma. The curriculum builds a solid foundation in cord scientific, mathematical, modeling and computational methods, while gradually guiding students toward specialization in one of the three fields.

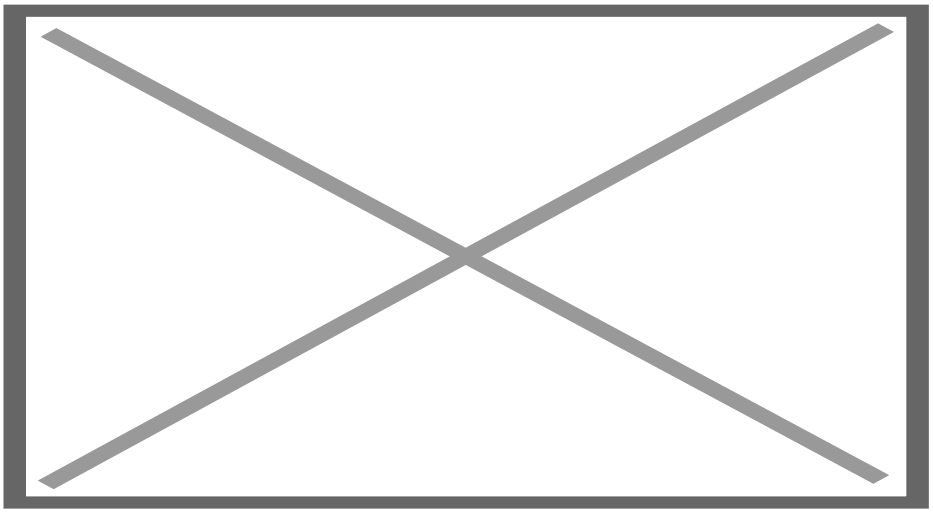
The 3rd year of the Dual Degree Bachelor’s Program in Engineering Sciences is organized around : a) a bachelor's degree component consisting of : a common scientific foundation to consolidate the basics of Engineering Sciences (mathematical, digital, and modeling tools) and two blocks of pre-orientation and disciplinary specialization ; b) a university diploma component (or reinforcement of the first year of the ENS Paris-Saclay diploma) consisting of : technological initiation projects and disciplinary option modules at the beginning of the year to help guide students progressively toward their areas of interest. Once a specialization is chosen, students engage in a long-term disciplinary project, which introduces them to project-based work focused on addressing scientific, technical, or interdisciplinary research challenges.

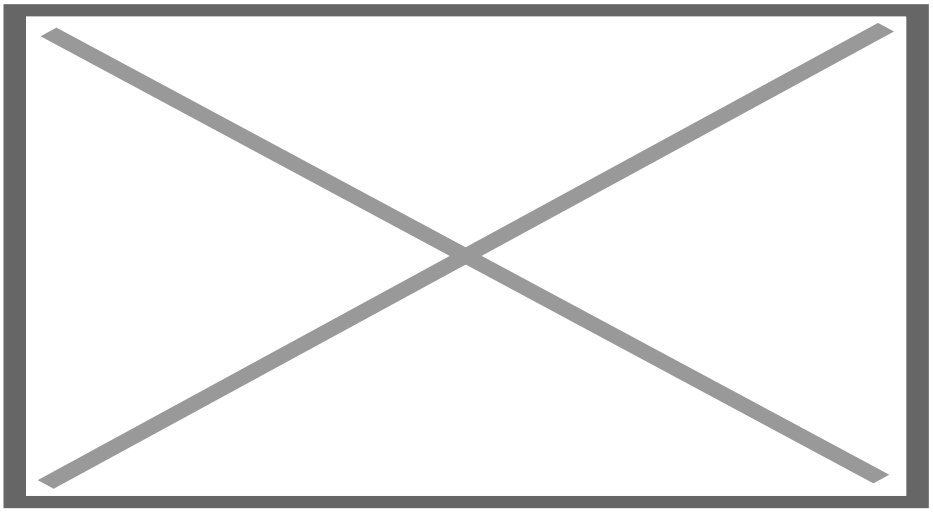
Télécharger la fiche détaillée











Information

- Overview
- Application requirements
- Schedule

Présentation

Skills

The skills to be acquired during the 3rd year of the Dual Degree Bachelor’s Program in Engineering Science include :

- Modeling, simulating, and experimenting to address scientific and technological challenges.
- Developing analytical and design approaches for complex systems.
- Organizing and managing individual or group projects.
- Communicating, sharing, and disseminating knowledge effectively.

These skills will continue to be developed in the master’s programs that this curriculum naturally leads to, such as civil engineering, mechanical engineering, mechatronics, electronics, electrical energy, and automation.

Objectives

The 3rd year of the Dual Degree Bachelor’s Program in Engineering Sciences aims to provide students with scientific knowledge and skills applied to engineering science issues, through the learning of tools for:

- modeling the physical phenomena involved
- describing the multiphysical behaviors of associated materials
- mathematics for modeling and simulating these phenomena

- programming and numerical resolution of these phenomena

Practical activities (experimental or numerical practical work, projects,etc) make up over 60% of the training and aim to develop a scientific mindset, problem-solving abilities for complex systems, and transversal skills (teamwork, communication, project organization) through real-life contexts.

English language training is an integral part of the curriculum, as it is essential for academic and professional development in an international context.

This program fully equips students to pursue advanced degrees, particularly in research-oriented programs.

This year is also a pivotal moment for academic orientation, allowing students to explore and define their interests within the major fields of Engineering Science.

The structure of the program is specifically designed to foster exposure to the three main engineering disciplines—civil, electrical, and mechanical—while helping students understand their industrial, societal, and sustainability-related challenges. Around 70% of the curriculum is dedicated to in-depth disciplinary training.

The program is further enriched by disciplinary conferences and career-oriented events, which support students in building their academic and professional plans through critical reflection and informed decision-making.

Débouchés

Further Study Opportunities

Master’s Degree in Engineering or Mechanical Engineering
Master of Electronics, Electrical Energy, Control
Master's track in Civil Engineering

Calendar

Start of programme (indicative date)
01/09/2026
End of programme (indicative date)
09/07/2027
Admission

Admission Route

Physics
Electronics, Electrical Energy, Control
Mechanics
Civil Engineering

Engineering Sciences
Undergraduate double degree Mathematics - Physics

Capacity

Available Places

84

Target Audience and Entry Requirements

Students admitted to the 3rd year of the Dual Degree Bachelor's Program in Engineering Science may come from a variety of academic backgrounds, including :

- Students from Classes Préparatoires aux Grandes Écoles (CPGE), primarily from PSI, PT, TSI tracks, and possibly MP, Info or PC tracks,
- Students from University Bachelor of Technology programs (BUT) in Engineering Science,
- Students who have completed two years of university-level science studies (L2 or equivalent),
- Other students with L2-level (or equivalent) training from engineering schools.

Programme

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class
Bloc Outils mathématiques (Licence)	0	2	22,5	7,5				
Bloc Outils numériques (Licence)	0	2	22,5	7,5				
Bloc Modélisation et comportement (Licence)	0	2	22,5	7,5				
Bloc Ouvertures disciplinaires (Diplôme)	0	2	22,5	7,5				
Bloc Pré-orientation (1 pré-orientation au choix parmi les 3 disciplines) (Licence)	0	3	22,5	7,5				
Bloc Spécialité (1 spécialité au choix parmi les 3) (Licence)	0	3	22,5	7,5				

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class
Bloc Transverse (Diplôme)	0	2	22,5	7,5				

Teaching Location(s)

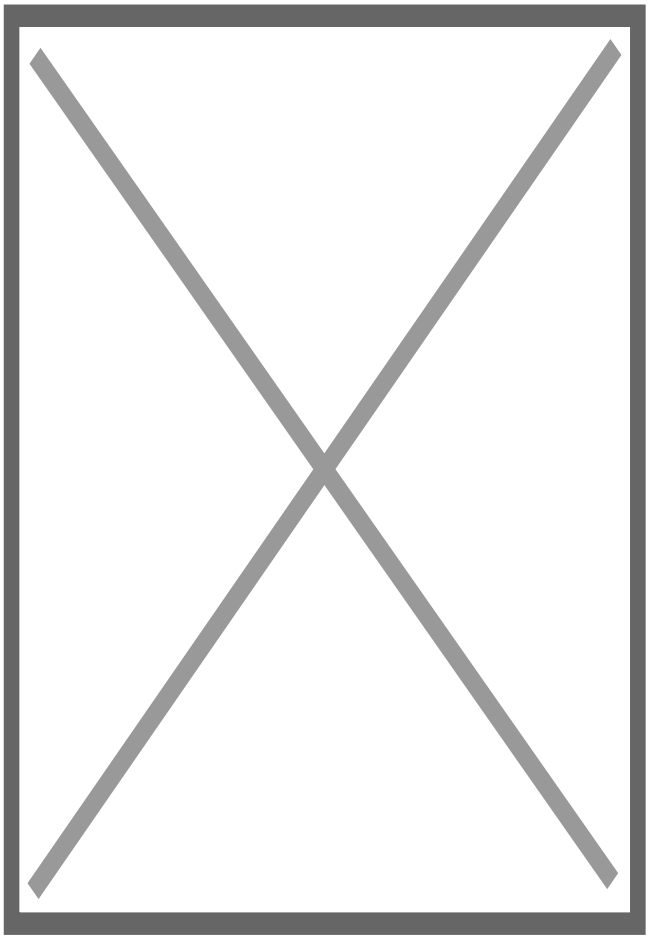
GIF SUR YVETTE

Academic Partner(s)

Université Paris-Saclay

Training campus

Javascript est requis pour visualiser cette carte.



Saclay Moulon

Saclay / Gif-sur-Yvette / Orsay
Bus 4606 / 4609 / 4611 / 5154
RER B Le guichet
Voir
Student restaurant (CROUS)
Library
Sports facilities
Student residence

Contact

- **Joline BÉRAL**

  secrétariat pédagogique de la formation

- **SAPHIRE Direction**

  Équipe de direction de la formation

http://www.universite-paris-saclay.fr/formation/licence-double-diplome/mathematiques-physique-et-sciences-pour-lingenieur/ldd3-sciences-pour-lingenieur-cursus-ens