ENSEA

Beyond Engineering

Ecole Nationale Supérieure de l'Electronique et de ses Applications

Graduate School in Electrical Engineering, Computer Science and Communication Networks

General Presentation

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Status & accreditations

Public Graduate School created in 1952.
CTI's Accreditation (National Accreditation of Official Engineering Degrees) & Eur-Ace accreditation

« Bienvenue en France » accreditation from Campus France (quality of the international relations services), 3 stars (best evaluation)

Part of the national consortium AMPERE composed of 7 major Engineering Schools in the IT field.

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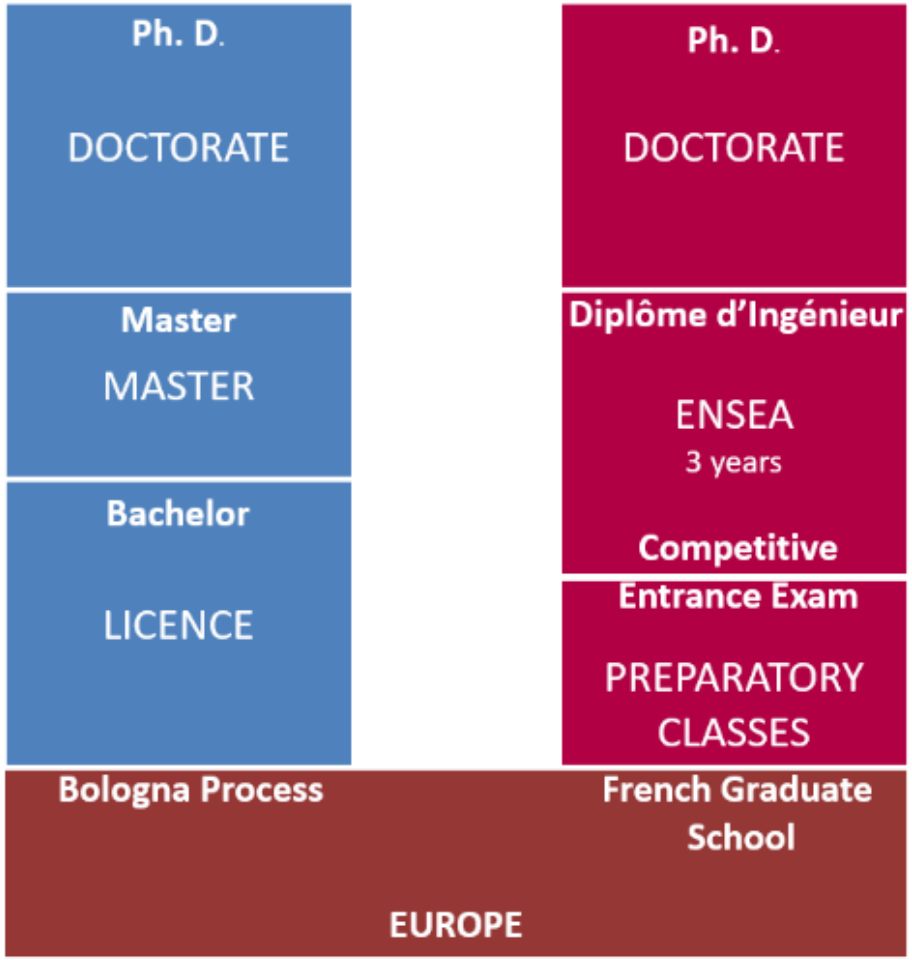
ENSEA, a « Grande Ecole »



ENSEA is part of the French system of the « **Grandes Ecoles** » (Graduate Schools implying a selection process through a competitive entrance exam), the best students are selected throughout a national academic contest after spending two to three years in specific preparatory classes (CPGE) or at the University.

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Cergy

Located on the Campus of Cergy-Pontoise

One of the largest academic centers of the region

14 academic institutions (5 Engineering Schools,
1 Business School, 1 University…)

30km from Paris

Easy and direct access to Paris city center by train (RER A)

Direct bus line to Charles de Gaulle Airport

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A community

More than 8000 engineers trained at ENSEA (Alumni association)

900 students

90 permanent teachers, 180 trainers from affiliated companies

More than 30 student associations

80 PhD students and researchers

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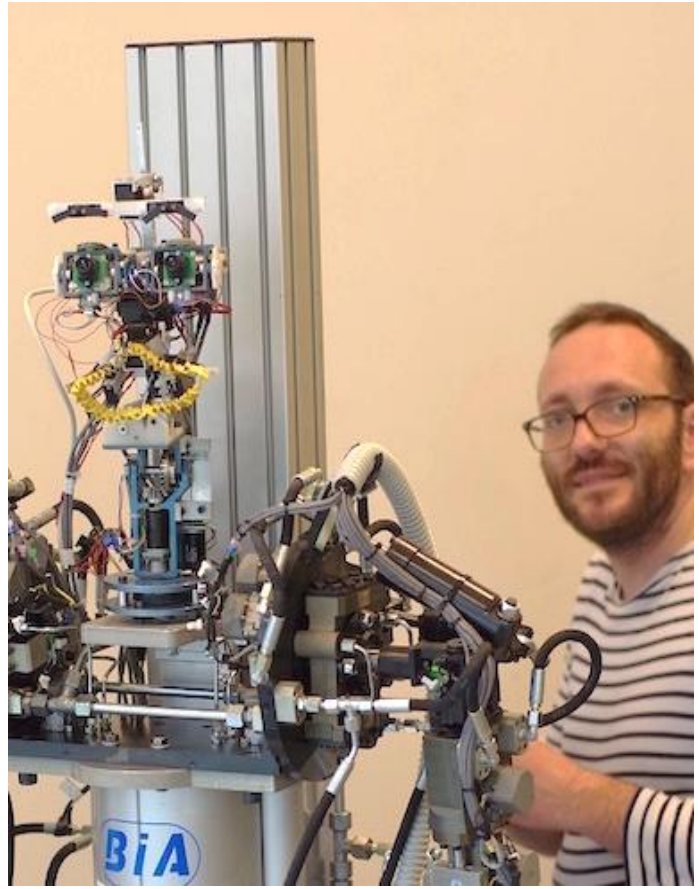
Research

27 teaching laboratories,
2 research centers, and many research groups :

ETIS
Information, Communication, Imagery
Multimedia Indexing and Data Integration
Artifical Intelligence and Robotics
Electronics, Reconfigurable Computing and Image Processing

QUARTZ
Systems Conception, Analysis and Control
Material/Structure Dynamics
Mechatronics and Complex Systems
Informatics, Mechanics, Mathematics
Cyber Physical Systems (CPS), Internet of Things (IoT), Semantic web



Industrial Partners

Every year, students from our second and third year join ENSEA's wide corporate network through curricular internships.

100% of our students sign a permanent contract within 6 months after graduating.

Some of our main partners:

ALSTOM · ALTRAN · AREVA · BULL · DASSAULT SYSTEMES · EADS · EDF · PSA · RENAULT · SAFRAN · SAGEMCOM · SFR · SIEMENS · THALES · Valeo

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Academic training

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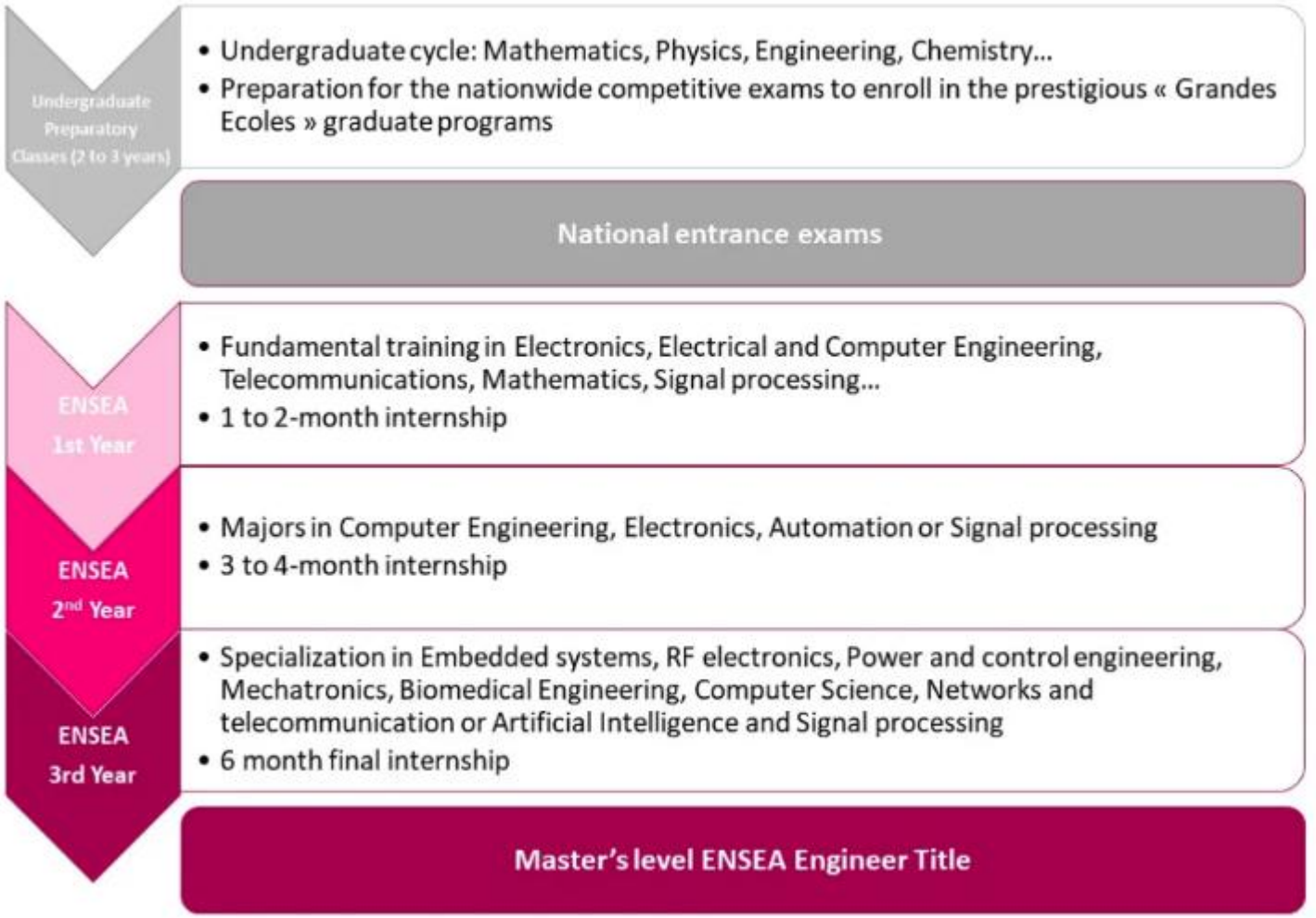
Studying at ENSEA

Degree students

Double-degree 2 years at master's level

Exchange studies 1 or 2 semesters



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Second Year / Master 1

First Semester		Second Semester	
Computer Science & Engineering (maj./min.)	6/4 ECTS	Electronic Systems (maj./min.)*	6/4 ECTS
Signal Processing (maj./min.)	6/4 ECTS	Signal Processing (maj./min.)	6/4 ECTS
Electronic Systems (maj./min.)	6/4 ECTS	Management & Project	4 ECTS
Automation (major or minor)*	6/4 ECTS	Languages : French & English	4 ECTS
Management & Project	6 ECTS	Engineer Assistant Internship: 3 to 4 months in a company or lab	6 ECTS
Languages : French & English	4 ECTS		
		Elective Subject : Electrical Vehicles Drones Defense & Security Multiphysics & Systems Microelectronics Electronics and signal for musical applications Internet of Things Security of Information Systems and Data Innovation and Entrepreneurship Artificial Intelligence and Big Data Image and Virtual Reality Human-centered design	6 ECTS
	30 ECTS		30 ECTS
*Each student chooses two « major » subjects (6 ECTS) and two « minor » ones (4 ECTS)		*Each student chooses one « major » subject (6 ECTS) and another « minor » one (4 ECTS)	

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Third Year / Master 2 (classes only during autumn semester!)

First Semester : each student chooses one of the 8 specialization tracks

Power Electronics and Control of Systems		**Biomedical Engineering**		**RF Engineering**		**Embedded Systems**		**Computer Science and Systems**		**Mechatronics**		**Networks, Telecommunication & Safety**		**Signal processing & AI**	
Energy	5	Biomedical Panorama	6	RF Communication Systems	6	Microcontrollers	5	Digital circuits	5	Mechatronic System Control	6	Digital Communication	5	Advanced Signal Processing	6
Automation & Diagnosis	5	Sensors	5	Electronics for High-Speed Communication	5	Sensors & Actuators	5	SoC	5	Mechatronics: Embedded Systems	6	Wireless Communication	4	Artificial Intelligence	3
Identification & Control	4	Acquisition	5	Acquisition Systems	5	Real-time Embedded Systems	5	Systems & Networks	5	Design and dimensioning of mechanical systems	4	Networks	6	Digital Image Processing	6
Actuators	5	Signals	5	RF Device Design	4	Embedded Systems Fundamentals	5	Algorithmics	5	Robotics	4	Security	5	Deep Learning and Hardware	5
Project	6	Image processing	4	Project	5	Advanced electronics	5	Software Engineering	5	Project	5	Project	5	Project	5
Management & Languages	5	Management & Languages	5	Management & Languages	5	Management & Languages	5	Management & Languages	5	Management & Languages	5	Management & Languages	5	Management & Languages	5

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Studying at ENSEA

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International Programs

International English-taught tracks	
3° year ENSEA (first semester)	
Network and Telecommunication option	**Biomedical engineering option**
Digital communication	Biomedical Panorama
Wireless Communication	Sensors
Networks	Acquisition
Security	Signals
Project	Image processing
Management & Languages	Management & Languages
2° year ENSEA	
First semester	**Second semester**
Signal processing (maj.)	Signal processing (maj.) OR Electronic engineering (maj.)
Computer Science (maj.)	Electronic engineering (min.) OR Signal processing (min.)
Automatics and control (min.)	Elective subject : Drones, IoT, AI & Big Data, Human Centred Design
Electronic engineering (min.)	Business Management & Project
Business Management & Project	Languages
Languages	Assistant engineer internship

The English-taught international class offers the same academic training as part of the regular Engineering cycle curriculum but entirely taught in English.

Mobility students in Second and/or Third Year of ENSEA's general study plan can have access to the International track taught in English as well as some volunteering local students in order to create mixed groups.

The application for the international study track is made through the general application form.

Both **Exchange students** and **Double-Degree** mobility students can join the English-taught study path.

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Academic calendar & applications

Autumn Semester: Beginning Sept. – Mid-Jan.
Spring Semester: Mid-Jan. – Mid-April
+ summer internship

Nomination & Application deadline:
June 1st for following autumn semester
October 15th for following spring semester

Double-degree: always start in September

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French Courses & Cultural Life

ENSEA offers weekly classes of “French for Foreigners” for mobility students and most of the teachers are fluent in English

All ENSEA students can speak English

Students joining the English-taught track don’t have to present any certification of French mastery, however, keep in mind that a B1 level is often required for Visa if needed (non-EU students)

Cergy is surrounded by beautiful natural landscapes and the campus is based near a large natural park with aquatic sports equipment and leisure activities facilities.

The train station, in the very center of the campus allows easy access to Paris historic city center, Versailles, Saint-Germain-en-Laye and even Disneyland!

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Housing

A bedroom in private a shared apartment near the school :
500-800€/month

Cost of living in Cergy :
around 750-950€/month

A room in one of Cergy Campus public residences:
300-700€/month

The international office can pre-book accommodation for international students if needed.

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Student associations

More than 30 associations created and managed by the students :

Many different fields: music, culture, sports, robotics, videogames, cooking, debate club, entrepreneurs, humanitarian projects, events, dance, astronomy, foreign student integration…

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International Relations Office

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