# ENTER A DOUBLE DEGREE PROGRAM WITH A FRENCH PARTNER SCHOOL

Earn a Graduate Engineer Degree from a French top-ranked School of Engineering and Applied Sciences

















Double-degree programs of the Institut Polytechnique de Paris

ENSTA Paris Telecom Paris

International admissions



ip-paris.fr

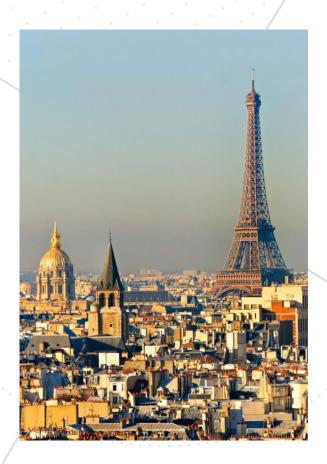
### WHY ENTER A DOUBLE DEGREE PROGRAM?

- •French engineering schools offer many programs that will have you gain a valuable skillset in your area of choice.
- •You get to study in two different countries, master two languages and experience two cultures.
- •It enables you to develop your academic and professional networks at the global scale (through internships).
- •It gives you an advantage over other candidates for any position / PhD program.
- •It is a real asset to work later in a field where international exposure is key.



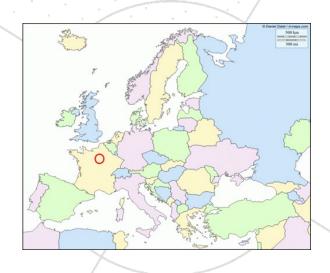
### WHY CHOOSE FRANCE?

- •Excellence of the Higher Education system (20% of the national budget is devoted to education)
- •French is the 3<sup>rd</sup> most important language for business in the world after English and Mandarin Chinese
- •France is the 5<sup>th</sup> Economic Power in the World
- •The country combines arts, history and quality of life with science, high technology & innovation
- •7<sup>th</sup> destination in the world for international students
- •9 out of 10 international students recommend France as first study destination



### **WHY CHOOSE PARIS?**

- •7<sup>th</sup> Named World's Best Student City (QS)
- •6th most innovative city in the World
- •70 000 foreign students (20% of students in Paris area)
- •95 500 researchers
- •816 000 companies & 1/3 of the foreign companies in France
- •1st Region in Europe for R&D



### WHY IP PARIS?

### A MODERN AND GREEN CAMPUS CLOSE TO PARIS



#### **TO STUDY**



#### **TO LIVE**



### **TO INNOVATE**



### **EXCELLENCE IN EDUCATION**



#### **Excellence since 1741**



World's top 50 universities (QS, CWUR)
Shanghai world ranking: Math 37th, Physics 28th, Statistics 42nd



> 95%
Employability rate 4 months after graduation



**50 000 euros/year**Average gross **salary** after graduation



**30% international** faculty members





### **EXCELLENCE IN RESEARCH AND INNOVATION**





Cross-disciplinary research



Leader in world-class research activities



Close collaboration with companies



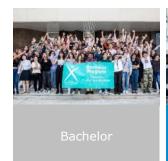
Among **top 8 innovation clusters**In the world



High level of entrepreneurship



### THE DIPLÔME D'INGÉNIEUR











Cycle ingénieur









































### THE DIPLÔME D'INGÉNIEUR

- Master's Degree recognized worldwide
- High level education based on a highly selective system
- Multidisciplinary education:
  - Fundamental sciences: mathematics and physics particularly, chemistry
  - Engineering sciences
  - Economics
  - Business, management, innovation and entrepreneurship
- Soft skills: communication, critical thinking, social environment
- International skills: languages, geopolitics, mobilities
- Strong interaction with companies: several opportunities to carry out internships
- Personalized curriculum
- Possible combination with the PhD-track



#### **BRAZIL - FRANCE DUAL DEGREE MOBILITY Brasilian** Diplôme d'ingénieur University curriculum curriculum Vestibular Preparatory classes Classes préparatoires International **Admission Process** ENSTA ENSAGE TELECOM Surpair Engineer Y2 Year 4 **Engineering graduate school** Ecole d'ingénieur Engineer Y3 Year 5 **Master of Science** Diploma de in Engineering engenheiro Diplôme d'ingénieur

### REQUIREMENTS

✓ Ongoing studies in Science or Engineering at a partner institution with a double degree agreement with us





- ✓ Excellent background in **Mathematics**, **Physics** and **Engineering sciences**
- √ French or English proficiency
- √ Global awareness
- √ Nomination by your University



### **International admission process**

#### One Admission process:

- Online application and nomination by your University: July to Sept 30 https://admission.ip-paris.fr/
- Notification of eligibility: October 8
- o Interviews for pre-selected candidates: October 11 to October 29
- Selection of school preferences: October 30 to November 3
- o Final acceptance from one school: November 15
- o Reception of acceptance letters: December 2021 to March 2022
- Term starts: September 2022

### Tuition fees, cost of living and scholarships

Tuition fees per year	ENSTA	TELECOM Paris
Non-EU students	4 650 €	4 150 €
EU students	2 650 €	2 650 €
Dual Degree students	Y1: 930 € Y2: 1395 €	Y1: 0 Y2: 2 650 €

Estimated cost of living: 800 € / month

- Fees are revised every year by each school and can be subject to modification
- Schools provide scholarships and or tuition fees reductions/exemptions (see websites)
   Grants, scholarships or loans can be available based on excellence or social criteria
- Other scholarship programs: Eiffel excellence scholarships, French Government scholarships (contact French Embassies), other programs (CSC, BRAFITEC...)
- Internships lasting more than 2 months must be paid.

### **A MULTIDISCIPLINARY CURRICULUM**







	Chemistry, Biology and Health			
	Economics and Quantitative Sociology			100
	Actuarial Science			
	Energy	$\checkmark$		
	Nuclear Engineering	$\checkmark$		
С	omputer Science and Artificial Intelligence	$\checkmark$	$\checkmark$	/
Inf	formation and Communication Engineering	$\checkmark$	✓	
	Mathematics, statistics, Data Science	$\checkmark$	$\checkmark$	100
	Engineering Mechanics	$\checkmark$		
	Physics	$\checkmark$	$\checkmark$	
	Transport, Mobility	$\checkmark$		
	Innovation, Entrepreneurship	$\checkmark$	✓	



### **ENSTA Paris at a glance**

#### Founded in 1741

800 students
~250 graduates every year
30% international students
2 offshore campus
30% women
6000 alumni

135 faculty members650 lecturers (70% from industry)











430 apartments on the IP Paris Campus

#### **Education:**

Transportation
Energy
Complex Systems Engineering
Mathematical Engineering

#### **Cross-disciplinary Research:**

Applied Mathematics
Mechanical Engineering
Computer Science & Systems Eng.
Chemistry and Chemical Eng.
Applied Optics
Applied Economics



### **Engineer curriculum at ENSTA**

### YEAR 2 - 1 Major & 1 Minor

#### **Mechanical Engineering**

Sustainable energy Mechanical modelling Smart systems

#### **Applied mathematics**

Mathematical engineering Mechanical & physical models

#### **ICST**

Artificial intelligence & cyberphysics Software & cyber security

Law, economics, management, communications & languages Research project





#### YEAR 3 - Specialization

10 specialization tracks among 4 major fields:

Transportation
Energy
Mathematical Engineering
System Engineering

Law, economics, management, communications & languages

**Graduation project** 



### **Year 3 - Specialization at ENSTA**

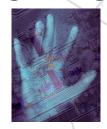
**Transportation** 



**Energy** 



Complex Systems Engineering



**Engineering Mathematics** 



1 specialization Smart mobility and vehicle eng.

Offshore transport and energy structures
Energy production and management
Nuclear power eng.

Robotics
Artificial intelligence
Cybersecurity

Optimization and data sciences
Modelling & simulation
Quantitative finance

3 "profiles"

Engineering and design Research and innovation Entrepreneurship and Management PhD track
Additional Master's degree from IP Paris







### **Telecom Paris**

150 professors 1600 students including 44% international students 17 500 alumni

630 international publications per year 50% of research funded by companies 153 active patents

# INNOVATE AND FOSTER ENTREPRENEURSHIP IN A DIGITAL WORLD



www.telecom-paris.fr

# We train top level professionals in digital by combining the fields:

- Applied mathematics
- Computer science & engineering
- Physics, electrical engineering
- Economics & social sciences

#### according to 3 main profiles:

- Transformers
- Entrepreneurs
- Inventors

# Our research addresses the major issues of the digital revolution:

- Data science & Artificial intelligence
- Digital trust: cybersecurity, risk, reliability
- Mathematic modeling
- Image and signal processing
- Human-machine interaction
- Internet of things
- Very large networks & systems
- Digital innovation



### **Telecom Paris**



### Innovation in training

Project-based teaching methods

Free access spaces: design studio, e-Lab, FabLab

Student innovation events

Nb. 1 public French incubator in digital technology

(since 1999, over 440 start-ups created, 86% in activity, over €300M

funding raised, 3,000 jobs created)

### Close links with industry

More than 300 partner companies

25 teaching and research chairs

12 joint laboratories

500 guest speakers from the business world

100 activities with companies for students

#### An internationalized graduate school

100 partners in 39 countries

42 dual degree agreements in 18 countries

34% of international professors

34% of 1<sup>st</sup> jobs abroad

1 international shared campus in Shanghai: SPEIT

programs taught in English

Diplôme ingénieur Post-master

#### Grafton Architects, Pritzker Prize 2020



www.telecom-paris.fr

#### The French leading graduate school in ICT

Awarded professors: ERC starting & consolidator, best scientific paper, edX Prize, etc. Famous Alumni: UBER, SIRI, LinkedIn, Google TV, ALTICE, Nao and Pepper robots

#### THE

201-250<sup>th</sup> world university 126-150 in computer science 126-150 in engineering

#### QS

64<sup>th</sup> worldwide in Computer Science 218<sup>th</sup> in Engineering Technology 301-350 in Mathematics

### **Engineer curriculum at Telecom Paris**

### YEAR 2

A tailor-made Program

#### **Courses**

- 2x192h : 2 study tracks
- Scientific and Technical courses
- Personal & professional skills courses
- Projects
- Social Sciences
- Languages (2 to 3)
- Athens week

# 1 to 2 month internship (Non mandatory)



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#### **Data Science**

- Signal Processing for Artificial Intelligence
- **■** Image
- Stochastic processes and scientific computing
- Applied Algebra : Cryptography, Quantum information, Coding theory
- Mathematics, Theoretical Computer Science and Operation Research
- Distributed Software Systems
- 3D & Interactive systems
- **Embedded Systems**
- Infrastructures and Networks Security
- Large Digital Infrastructures
- Telecom: from data to systems
- Wireless networks and IoT
- Markets, Organizations, Data, Strategies
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#### YEAR 3

A career Preparation

- Technological innovation
  - 1 study track
  - + a Research & Innovation Project
  - + complementary elective courses (sciences, languages, humanities, etc.)

#### Areas of specialization:

- AI, Image and Data Sciences
- Fundamentals of Mathematics & Computer Science
- Networks, IOT and Cybersecurity
- Digital systems
- Innovation

OR

- Dual Degree of Science and Engineering
  - Master degree with a French leading partner institution

6 month internship

### A global Alumni Network: ENSTA Paris Alumni

#### A Wide Variety of Career Paths





Head of US
Technical
Account
Management at
Criteo



Adriano Oliari Negris (2015)



Advisor for innovation and digital transformation, Prefeitura de Salvador





Wind Energy Engineer at Bureau Veritas Group

### A global Alumni Network: Telecom Paris Alumni

- V. B. (Eng. UNICAMP 2010, Ing. Telecom paris 2010) : Product Manager at Google, San Francisco
- J.P. P. (Eng. EP-USP 2011, Ing. Telecom Paris 2011) : Senior Software engineer at Microsoft, Redmond, Washington
- F. (Eng. EP-USP 2012, Ing. Telecom Paris 2012, Mes. ITA (2016): Product Development Engineer at Embraer, São Paulo
- E. de C. (Eng. PUC-Rio 2013, Ing. Telecom Paris 2012, Mes. PUC-Rio 2016): Manager at Deloitte, Rio de Janeiro
- I. M. G. (Eng. EP-USP 2013, Ing. Telecom Paris 2013): Product Owner at ENGIE Brasil, Rio de Janeiro
- B. L. (Eng. PUC-Rio 2019, Ing. Telecom Paris 2018): Graphics Programmer at Beenox Activision Québec, Canada
- R. P. B. (Eng. EP-UFRJ 2019, Ing. & MSc. Telecom Paris 2019): PhD Student at CEA Saclay Medical Imaging and MRI Physics Teacher Assistant at Paris-Saclay University

### **Questions and answers**

www.ip-paris.fr
https://admission.ip-paris.fr/

dd-admission@ip-paris.fr



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