Recrutamento Coordenado 2023 – BRASIL

PROMOCAO IN SITU (MAIO 2023)





Nosso Recrutamento

Nossas Escolas

Institut National des Sciences et Industries du Vivant et de l'Environnement (**AgroParisTech**) École Nationale Supérieure d'**Arts et Métiers** (ENSAM) École Nationale Supérieure de **Chimie** de Paris (Chimie ParisTech-PSL) École Supérieure de Physique et de Chimie Industrielle de la ville de Paris (**ESPCI** Paris-PSL) Institut d'Optique Graduate School (**IOGS**) École Nationale Supérieure des **Mines** de Paris (ENSMP)

Informações Práticas



Nosso Recrutamento

> NAO SE TRATA DE UM CONCURSO :

Trata-se de um processo de seleção, realizado conjuntamente com os parceiros no Brasil.

> NAO ENVOLVE EQUIVALENCIA DOS ESTUDOS NA FRANCA E NO BRASIL :

Cada estudante se candidata a tópicos disciplinares / modelos pedagógicos / estágios que, a priori, não estariam ao seu alcance na universidade de origem.

> BUSCA UMA BOA ARTICULACAO ENTRE PARCEIROS :

Após seu retorno à universidade de origem, cada estudante não deveria retomar seu curso de engenharia / ciências exatas exatamente no ponto em que o deixou... (>> importância dos acordos, dos programas de estudos, minimizando na medida do possível a duração final requerida para a obtenção dos dois diplomas).

> NAO ENVOLVE A ATRIBUICAO DE BOLSA DE ESTUDOS :

Uma vez concluída a fase de seleção, cada estudante participa de um ou mais processos de candidatura à uma bolsa de estudos (Eiffel na França, CAPES no Brasil, fundações das escolas, bolsas industriais, etc).



« Grandes Ecoles » e principais especialidades

	AgroParisTech	Arts termine et Métiers	i PSL★	ESPCI 🖲 PARIS PSL*		HINES FARES
Mathematics & applications						
Information and communication sciences and technologies					(🗸)	~
Life sciences, Food engineering	 		 	~		
Earth sciences and environmental engineering	 					~
Physics, optics				 ✓ 	\checkmark	 Image: A second s
Chemistry			 	 ✓ 		
Energy		\checkmark	\checkmark			\checkmark
Material science, mechanics and mechanical engineering		~	~	~		~
Industrial engineering		~				
Transport		~				~
Economics and social sciences, management, statistics	~					~



Calendarios escolares





The added value of the « Diplôme d'ingénieur »

Learning through

Practical exercises (+30-50% of the courses)Internshipsdefining and solving problems designing, prototyping, testing and validating S&T solutions, processes, products, systems, services	Team work Project management	Research-driven teaching
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in close contact to businesses

The « diplôme d'ingénieur » enables you to work in any domain (production, R&D, consulting, services) The « diplôme d'ingénieur » opens very interesting professional opportunities with very good wages The « diplôme d'ingénieur » opens the doors to an international career





The best way to international businesses...





AgroParisTech 1





AgroParisTech is a French public institute with a rich history that spans over **180 years**. Its **forward-looking approach** is aimed at addressing the **main global challenges of the 21st century:**

- Feeding the population in a sustainable way
- Protecting natural resources
- Fostering innovation
- Developing the bioeconomy

- Internationally renowned for the high quality of its training programmes & research activities
- Research-based training
- Focus on innovation & entrepreneurship
- Two key missions:
 - 1. To offer high quality training to students and professionals in the different curricula delivered by AgroParisTech,
 - 2. To advance scientific knowledge, in close association with public and private research centers, main relevant technical-vocational centers and industrial partners.
- QS Top Universities ranking in the field of "Agriculture & Forestry" 2021: 1st in France, 3rd European wide and 4th Worldwide
- Shanghai Ranking's Global Ranking, Academic Ranking of World Universities 2020: As leading French HEI in agricultural and environmental sciences and component institution of Paris-Saclay University, AgroParisTech is a key contributor to its success: rank 12 in Agriculture, 35 in Biotechnology, 51-75 in Food
- Ranking of all Engineering Higher Education Institutions in France
 2020: 1st in the field of "Agriculture"





4 main fields of scientific expertise:

- o Agricultural production and forestry
- Food and non-food transformations
- Sustainable management of natural resources and the environment
- o Human health





5 Departments of Education and Research:

- Agronomy, Forestry, Water and Environmental Sciences and Technology
- Life Sciences and Health
- o Sciences and Engineering for Food and Bioproducts
- Social Sciences, Economics and Management
- Modelling: Mathematics, Informatics and Physics



Diplôme d'Ingénieur



A wide range of choices during the second year:

- o 4 different study tracks
 - Sustainable production, sectors, and territories
 - Engineering of food products, biomolecules, and energy
 - Environmental engineering and management
 - Engineering and health: human, bioproducts, and the Environment
- **Core-curriculum:** engineering sciences and mathematic modelling, economic and social sciences, management
- o 7 modules with a choice of more than 100 course-units
- Apprenticeship track for engineers

Many opportunities during the third year:

- 20 specialties in 10 fields e.g.: BioTech, Agricultural Development, Forestry management, Products development, Nutrition, Economics and Company management...
- Possibility to join one of the 44 Master's programmes offered by AgroParisTech and its partners
- Possibility to join a **Master's programme** from **another institution**

And also:

- □ Team projects, sports, languages, etc.
- □ **Compulsory international mobility:** 200 partnerships with 155 foreign universities from over 47 different countries
- Compulsory internships: l'Oréal, Danone, Nestlé, Veolia, Suez...

Job prospects:

- → +80% of students get a job less than 2 months after graduation and 8% pursue a PhD
- □ Entry level salary: 38K€/year
- Main fields: Agriculture/Forest e.g. professional agricultural organizations; Services e.g. consulting firms; Industry e.g. food-processing; Public Sector and Research







Student Life

- AgroParisTech is composed of 7 campuses located across France in attractive cities and with vibrant student life. Engineering students can especially study in Palaiseau (Paris-Saclay), Nancy or Montpellier.
- 2,300 students (16% degree-seeking international students)
- Student organisations and events will shape your student life: sports organisations, cultural and professional venues, student unions, buddy programmes...
- AgroParisTech international students are given priority to rent a room in our student accommodations ideally located throughout our campuses at affordable prices.
- Administrative support from the International and European Relations Office (including for scholarships).



AgroParisTech

- > POSSIBILIDADES DE FINANCIAMENTO:
- A. bolsas Eiffel (Campus France, governo francês) !
 - -- Muita concorrência, mesmo entre excelentes estudantes (primeiro da turma, etc);
 - -- Valor mensal de ~1300 euros (bolsa + auxilio moradia), e passagem aérea
- **B. bolsas CAPES / BRAFAGRI (governo brasileiro) :**
 - -- Programa re-iniciado em finais de 2022 !!!
 - -- Valor mensal de ~1300 euros (bolsa + auxilio moradia), e passagem aérea

C. auxilio da Fondation AgroParisTech :

- -- Concorrência, para estudantes sem bolsa de estudos;
- -- Valor de 8000 euros (« one shot »)

D. alternância (« apprentissage », « apprenticeship ») :

- -- Seleção interna à escola, identificação da empresa, etc;
- -- Salário durante os estudos na França

> RESIDENCIAS AGROPARISTECH



Arts et Métiers

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Paristech

Arts Sciences et Technologies et Métiers

Talent booster for industry of the future, Arts et Métiers' mission statement: deliver solutions to the needs of every sector of industry



Key figures

- ➢ 6000 students
- 1000 international students
- > 170 partner universities worldwide

For over two centuries (1780), Arts et Métiers has been spearheading scientific progress and supporting each industrial revolution.

COURSES ANTICIPATING SOCIETY'S TECHNOLOGY NEEDS from undergraduate to doctorate level

- ► Arts et Métiers ParisTech Grande École engineering programme (level 7)
- ► 10 Specialised engineering programmes (level 7)
- Bachelor's degree in technology (level 6)
- ► + 20 National master's programmes (level 7)
- Doctoral programme (level 8)
- Lifelong skills development (Specialised Masters...)

EXCELLENCE LABEL FOR TRANSFERRING OUR RESEARCH TO THE INDUSTRIAL WORLD: Carnot Institute

Research applied to **5 major factory of the future sectors: Transport/ Energy/ Health tech/ Construction/Manufacturing**

15 LABORATORIES pioneering scientific expertise in Industry 4.0 (corobotics, advanced manufacturing systems, innovation & production systems, virtual & augmented reality, biomechanics, additive manufacturing...)

- Member of EIT Manufacturing
- Six research chairs in health, environment, clean mobility and smart industrial systems
- Real-scale Technology platforms (20 Technology hubs)



Arts Sciences et Technologies et Métiers

SUPPORTING TOMORROW'S ENTREPRENEURS

- Arts et Métiers talent pipeline and incubator for the high-tech industry
- Training : business creation & development expertise, technological innovation and entrepreneurship



www.artsetmetiers.fr

STRATEGIC PARTNERSHIPS WITH INDUSTRIAL ORGANISATIONS

11 locations, spread all over in France, for building even **closer ties and insights with industry**

Workplace integration METZ Training HALONS EN CHAM ANGERS Innovation BORDEAU Arts et Métiers AIX-EN-PROVENC campuses Institutes •edf assystem MANN+ ATALIAN HUMMEL GLOBAL SERVICES COLAS WE OPEN THE WAY Schneider EUROVIA lectric



Arts et Métiers ParisTech Grande École engineering programme

- Strong background in Mechanical and Industrial Engineering
- ✓ Pedagogical approach combining theory & practice
- Multiple and varied choices of specialised final year courses
- ✓ Mandatory immersion in companies
- ✓ 83,5% work < 6 months after graduation; other 9,5% pursue their studies
- ✓ 63% students employed before graduation
- ✓ Top sectors of employment: Eng services & consulting (34%), transportation aeronautics, automotive, rail (13%), construction (10%), ICT...
- Top working functions: Production & quality control (34%), R&D – Innovation (21%), Consultancy (15%)
- ✓ Average entry salary 41.5K€/year

> 2nd year - core courses (all campuses):

1 semester Mechanical and Industrial Engineering:

Solid Mechanics/ Materials/ Management/ Product Design/ Product Manufacturing/ Industrial Organisation/Project - Research

1 semester Energy and Industrial Engineering: Electronics/Automatics/ Energetics/ Math – Computer Science/ System Design/ System Manufacturing/ Industrial Organisation Project - applied

> **3rd year** (the campus depends on the specialised course):

1st semester

Specialised course (to be chosen among over 33 offered) in the field of new energies for sustainable development, aeronautics and space eng., management of technological innovation, advanced materials, electrical eng., bioengineering, advanced manufacturing, production systems, virtual & augmented reality, additive manufacturing, fluid mechanics, mechatronics, business creation...

Management of the Logistic Chain/ Strategical Management Project in laboratory

2nd semester

6-month internship in company (mandatory)

Throughout each year: Foreign Languages, Professional Project Initiative





8 campus in France

- International relations offices& administrative support, tutoring
- ➢ Halls of residence
- Documentation Center and IT room with Internet access
- Infrastructure (gymnasium, climbing wall,...) which allow students to take part in numerous team and individual sports
- National Students' association: sport (sailing, football, rugby, tennis, handball, golf, athletics, skiing, rally...), cultural, scientific, humanitarian or business activities (Shell Eco Marathon, robotics projects, Business lunches...)
- Biggest Alumni in Europe (34 000 alumni)
- Student & alumni mentoring

WHY ARTS ET METIERS?

- > One of the best and renown Engineering institution in France
- Get in touch with the industry and acquire business contacts. Arts et Métiers has strong links with companies and, with 11 sites, is close to the economic players. Each campus organises regular meetings with companies (business lunch...)
- Work on our real-scale technology platforms
- Prospect for a PhD at Arts et Métiers by making the most of our labs and research teams which offer a wide range of research areas
- Become part of the biggest Engineering Alumni Association in Europe
- Experience the French language and culture and take advantage of our sites.













Fundamental & applied research to tackle societal challenges











NSTITUT

IPGG Microfluidique

CARNOT





Modeling and simulation





Catalysis Sustainable processes **Chemical Engineering, flow chemistry** & microfluidics







INSTITUT PIERRE-GILLES DF GENNES



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Exc. à 515nm

Fin de l'exe 11



Exc. à 515nm

Imaging and characterization

STM



Training top level professionals in chemistry

3 years of training 12 months of mandatory internship

Regular meetings with industrials (conferences, workshops, visits) Engineering Diploma conferring the grade of Master of Sc in Engineering

Year 1 Fundamentals towards engineering

Basic courses Team projects & Soft skills Management, Economy Language and Cultures Worker internship 1-2 months

ParisTech

Year 2 New applications & innovation

Basic courses & applications **Projects (innovation) Management, Economy** Language **Paid internship - 5 months** Year 3 Specialization & entrepreneurship

Projects Engineering Innovation/entrepreneurship Paid Master internship - 6 months

Year 3: possibility of paid apprenticeship through an agreement with a company for 2 semesters









ESPCI R PARIS | PSL





~ 500 SCIENTIFIC PUBLICATIONS FACH YEAR, OR MORE THAN ONE PER DAY

 ${}^{\circ}$ 85 STUDENT-ENGINEERS PER GRADUATING CLASS

> JOINT RESEARCH LABORATORIES

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522 RESEARCHERS. PROFESSOR-RESEARCHERS, POSTDOCTORAL AND PHD STUDENTS

START-UPS CREATED ANNUALLY

70% **OF STUDENT - ENGINEERS** CONTINUE WITH A PHD



Pierre Curie Marie Curie (Associate Prof.) (Researcher) **Physics Nobel Prize** (1903 - discovery of radium)



(ESPCI graduate) Chemistry Nobel Prize (1935 - artificial radioactivity)



Paul Langevin (ESPCI graduate, Director 1925 to 1946) Professor at Collège de France (sonar, theory of magnetism, etc.)



Marie Curie (Researcher) **Chemistry Nobel Prize** (1911 - isolation of pure radium)



Pierre-Gilles de Gennes (Director 1976 to 2002) **Physics Nobel Prize** (1991 - polymers, liquid cristals, soft matter)



Georges Charpak (Distinguished Prof.) **Physics Nobel Prize** (1992-particle detection chambers)

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www.espci.psl.eu





Multidisciplinary Engineering Training through Physics, Chemistry & Biology

Quantum MaterialsOrganic & Inorganic synthesis Mesostructures Solid State Physics Soft MatterAcoustics Imaging Complex Materials Mesostructures Soft MatterAcoustics Imaging Bioengineering Complex Materials EnvironmentSoft Nanotechnology Artificial Intelligence

Mentoring

80 ESPCI Teachers and Professors 100+ Classes by scientists < 300 students in total Lectures: 90 students Problem solving: 30 students Advanced topics: < 10 students



ESPCI R PARIS | PSL *

Innovation

- 3 start-ups per year
- Multidisciplinary approach
- Incubator within ESPCI





ESPCI 😨 PARIS | PSL😿

ParisTech

Research



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A LUMINE MOTUS – INSPIRED BY LIGHT, SINCE 1917



Paristech #Connect #Innovate #Share Physics of light and its interaction with matter

Widest offer of course in our field

- Ray optics and aberrations, optical system design
- Advanced wave optics
- Instrumentation, Photometry, Detection
- Imaging, image processing and AR/VR
- Lasers and electro-optics, non-linear optics, optical fibers, optical telecommunications
- Biophotonics, Nanophotonics
- Quantum optics, atom optics
- ✓ Space optics, X-UV optics
- ✓ Solar energy
- Mathematics, electronics and computer science for

signal and image processing

Track in innovation and entrepreneurship





A LEADING INSTITUTION IN OPTICS & PHOTONICS

- 2017: celebrated 100 years of research and education in optics and photonics
- 3 campuses: **Paris-Saclay**, Bordeaux, Saint-Etienne
- A rich history since 1917



Charles FABRY 1st Director General (1917-1945)







Alain ASPECT Augustin Fresnel Chair Professor & Scientific Advisor, Nobel Prize in Physics 2022





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• 3 campuses:

- PS= Paris-Saclay
- Bdx= Bordeaux
- StE= Saint Etienne
- 35% of MScEng graduates continue towards PhD

• Top employment industries:

- Optics, electronics and IT sectors
- Engineering and IT consulting firms
- Transportation and mobility sectors
- Defense and security industry

COURSE CURRICULUM OF THE MSCENG PROGRAM (DIPLÔME D'INGÉNIEUR)

1 st year = Bachelor final (PS)	2 nd year = Master 1st (PS or Bdx or StE)	3 rd year = Master 2nd (PS or Bdx or StE)		
General inter-disciplinary education	General inter-disciplinary education	General inter-disciplinar education		
General scientific education	General scientific education	Wide range of openings and specialisations		
	<i>Paris Saclay</i> : Light-Matter Interactions, Signal and Image Sciences, Nanosciences, Extreme (X and UV) Optics			
Photonics related courses	<i>Bordeaux</i> : Photonics and Digital Sciences, Virtual Reality, Cognitive Sciences, Physics and Modelling			
	St Etienne : Photonics for Imaging, Lighting, Energy			
(1 month internship)	3 month internship	4-6 month internship		









Master in Science and Executive Engineering (Diplôme d'ingénieur)

International Masters

PhD

Advanced Masters programs

Innovation and entrepreneurship

- Department Management, Society, Economy
- Specialisation « Innovation and entrepreneurship
- Chair « Theory and Methods of Innovative Conception »
- Interdisciplinary Institute of Innovation (i3)

7 M In software commercialization activity

14%

27%

74 Patents

Companies

20

created



Our research environment

1st

University in France for the amount of contractual research

2 Nobel prizes

Maurice ALLAIS -Economics - 1988 Georges CHARPAK – Physics - 1992







5 departments, **18** researchs labs

- Energy and process engineering
- Earth sciences and environment
- Mathematics and complex systems
- Materials and mechanics
- Economy, management and society

Research oriented to the economic world

- Top research at the intersection of multiple fields
- Very broadly invested key research areas (energies of the future, new materials) but also some niche research areas (health and environment, innovation and competitivity)
- Emergence of new disciplines (geostatistics, mathematical morphology, control of flat systems)





Our learning environment

Strong background in fundamental courses,

Mathematics, physics, mechanics ...

with a multidisciplinary approach:

Social sciences, Languages, Sports, Economy and management, Innovation and entrepreneurship

and the possibility to customize your curriculum with 16 fields of specialization

Healt	n Energy and Environment	Mathematics and Digital Sciences	Materials Sciences	Social and Economic Sciences
60% students employed before graduation	 Soils and subsoils Geosciences Processes and Energy Machines and Energy 	 MAREVA (Applied Mathematics, Robotics, Vision and Automation) Geostatistics and Applied Probability Digital Engineering of Complex Systems Information Systems Management 	 Atomic engineering Sciences and Material Sciences 	 Public Affairs and Innovation, Industrial Economics, Scientific Management, Conception Engineering Production and Logistic Systems

prepared to become managers, in any kind of companies, all over the world.



51 k average salary (first position)

> 800 9 to 21 lecturers from months in corporate internship world









Our living environment





- A residence 5 minutes walk from school, affordable rent around 340 €/month
- A rich student and cultural life
- Accessibility to many services and facilities (restaurant, library, sports facilities)
- Administrative services at your disposal through the PSL Welcome Desk (health care, visa, scholarships) and buddy system for internationals
- Living costs covered generally by scholarship from the Foundation of Mines Paris of 700€/study month (or other scholarships like Eiffel) and paid internships



For more information, please contact: international@minesparis.psl.eu

informações práticas 1



Nosso Recrutamento

inscrições abertas a partir do dia 10 de junho : portal "STUDY WITH US" !!!

-- <u>https://studywithus.paristech.fr/fr/le-diplome-dingenieur/paristech-international-admission-program/brazil-admission-programme</u>

- -- todo o processo está inteiramente explicado em português
- -- inclui exemplos de questões do teste que será aplicado online dia 29 de setembro
- -- inclui informações sobre taxas escolares
- webinar internacional dia 06 de junho ! inscrições em andamento !!!

> PRINCIPAL OBJETIVO DA ENTREVISTA DE MOTIVACAO:

-- avaliar a maturidade do candidato com vistas à mobilidade

> PRINCIPAL OBJETIVO DO TESTE :

-- avaliar a coerência entre o curso seguido na universidade de origem e o projeto de mobilidade para uma ou mais escolas de nosso grupo



Recrutamento internacional





Recrutamento internacional





ParisTech Schools	Double degrees	Individual applicants	
AgroParisTech	Argentina, Brazil, Colombia (public partner universities): 0€ China (DD and partner universities): 1786€ in the 2nd year and 4341€ in the 3rd year	4341€ per year – fees may be adjusted on a case-by-case basis up to a full exemption	
Arts et Métiers	Waived if paid at home institution	601€/year	
Chimie ParisTech - PSL	Argentina, Brazil, Colombia, China: 0€	3570 € per year (1785 € per year for scholarships recipients from their home country)	
ESPCI Paris - PSL	Waived if paid at home institution + 150 € students association	No agreement: 850€ = 700 € + 150 € (students association) per year	
Graduate School	2900 € per year (the regular rate for non-European students is 5000 € per year) Brazil, Colombia: can be reduced to minimum rate of 665 € if a specific DD agreement is signed	2900 € per year for students from partner universities (the regular rate for non-European students is 5000 € per year)	
Mines Paris - PSL	Depending on each agreement. AR, BR, COL, CN: Fee waiver for the 1st and 2nd year of studies in France	3500 € per year for European, 5 500 € per year for non European students	

Contatos

Juri de admissão: brazil-admission@paristech.fr

AgroParisTech: incomers@agroparistech.fr

Arts et Métiers: admissions@ensam.eu

Chimie ParisTech - PSL: international@chimieparistech.psl.eu

ESPCI Paris - PSL: international@espci.fr

Institut d'Optique: international@institutoptique.fr

Mines Paris - PSL: international@minesparistech.psl.eu





