

# Paris Tech Doctoral Programmes

PhDs with a high innovation potential











ParisTech is deeply committed to promoting the value of the doctoral programmes of its twelve 'Grandes Écoles'. High-quality research, international collaboration and technical innovation are at the heart of doctoral studies.

At ParisTech, doctoral candidates are assured of being educated to the highest standards, benefitting from funding support over three years and close relationships with the economic world.

Each ParisTech 'Grande École' has its own doctoral programme and is responsible for selecting students. Doctoral degrees are awarded by ParisTech 'Grandes Écoles' or by partner universities.

In 2007, the ParisTech Doctoral Institute was created to enhance the international outlook of ParisTech doctoral studies. All doctoral programmes are linked through the Doctoral Institute. We have 40 % of international students and 90 different nationalities, and are proud of our diverse community and strongly encourage prospective students to join.

## **KEY FACTS**

ParisTech Doctoral Programmes offer

- Dedicated supervision
- Transferable skills programmes (languages, professional, scientific and personal development skills)
- A highly-prized doctorate to prepare your career in academia or in the corporate world (more than 85% of our PhDs have found their first job less than 4 months after obtaining their PhD 2010 Survey).

## REQUIREMENTS FOR DOCTORAL STUDY AT PARISTECH

- ► Master's degree or equivalent academic qualifications
- ► Motivation for research work
- ► Good command of English

## APPLICATION PROCEDURE

Admission to doctoral studies is decided by each ParisTech 'Grande École' according to its research activities and financial resources.

Applications of international students from partner universities are subject to deadlines. ParisTech Doctoral Institute international partnerships and application information are available online at the following address:

## www.institut-doctoral.paristech.fr

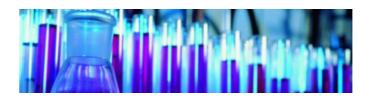
Other international students are advised to contact a potential supervisor before making formal application. An overview of the thesis subjects is available on the ParisTech Doctoral Institute website. We strongly encourage prospective students wishing to enroll to apply as soon as possible and no later than March.

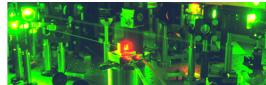
Registration fees of approximately 400 euros per year are to be paid on arrival. There are no additional tuition fees.

## **SELECTION PROCEDURE**

An overall assessment will be made of the applicant's suitability to complete doctoral studies. Selection is done by each 'Grande École' through:

- application forms, supporting documents and CV
- ► face to face interviews





## PARISTECH DOCTORAL INSTITUTE IN FIGURES

**125** LABORATORIES

MORE THAN **3,000** ACADEMIC STAFF MEMBERS

**40%** INTERNATIONAL STUDENTS

**30%** WOMEN

AVERAGE DURATION OF A THESIS AT PARISTECH: 3 YEARS

MORE THAN **500** DOCTORATES AWARDED EACH YEAR

## RESEARCH AT PARISTECH

Research potential covers 12 areas:

- Mathematics and their applications
- Information and Communication Science and Technology
- Physics, Optics
- Chemistry, Physical Chemistry and Chemical Engineering
- Materials Science, Mechanics, Fluids
- Design, Industrialization
- Life and Health Science and Technology
- Environment Science and Technology, Sustainable Development, Geosciences
- Energy, Processes
- Life Science and Engineering for Agriculture, Food and the Environment
- Urban Planning, Transport
- Economics, Finance, Management and the Social Sciences

These 12 fields correspond to either scientific disciplines or themes.

## **BUSINESS-ORIENTED RESEARCH**

Research activities at ParisTech range from the most fundamental scientific questions to the development of applied research.

ParisTech is heavily involved in joint research. In 2010, ParisTech had nearly **2,900** research contracts with companies and more than **60** teaching and research chairs.

ParisTech is also involved in clusters of excellence and innovation. ParisTech and its schools actively create and support start-ups arising from their research.

#### SCIENTIFIC PRODUCTION

ParisTech 'Grandes Écoles' produce more than **4,000** scientific publications per year. The HAL ParisTech open archive provides access to these publications. <a href="http://hal.archives-ouvertes.fr/paristech">http://hal.archives-ouvertes.fr/paristech</a> and to ParisTech theses: <a href="http://pastel.archives-ouvertes.fr">http://pastel.archives-ouvertes.fr</a>

## **DOCTORAL PROGRAMMES AT PARISTECH**





www.agroparistech.fr/abies/en



Biomechanics, Fluid Engineering (flow simulation, turbomachinery), Mechanical Engineering, Materials Engineering (wood, metal, polymers, laser treatment), Manufacturing Processes & Machines, Product Design, Production Systems Engineering, Control, Automotive, CAD/modeling, Industrial Engineering. www.ensam.fr/en/formation initiale/doctorat



Organic & Bioorganic Chemistry, Solid State Chemistry & Materials Science, Theoretical Chemistry, Nuclear Chemistry, Chemical & Process Engineering, Risk Management. www.enscp.fr/spip.php?rubrique134



Transportation, Civil & Environmental Engineering, Mathematics & Finance, Mechanics & Materials Science, Industrial Engineering & Logistics, Town & Country Planning. www.enpc.fr/english/academics/acad\_prog.htm?sr=2



Physics & Applied Physics, Mathematics & Applied Mathematics, Computer Science & Electrical Engineering, Mechanics, Quantitative Economics & Finance, Biology, Chemistry. www.ecoledoctorale.polytechnique.edu/jsp/accueil.jsp?CODE=64425506&LANGUE=1



Economics & Econometrics, Quantitative Economics & Finance, Statistics, Actuarial Science. www.ensae.fr/ensae engl//content/view/79/360/



Chemical Engineering, Electronics & Computer Engineering, Applied Mathematics, Mechanical Engineering, Applied Optics.

www.ensta-paristech.fr/en/Advanced\_Education/PhD/



Physics, Chemistry, Biology, Analytical & Environmental Chemistry, Organic Synthesis, Bioengineering & Biophysics, Optics, Acoustics & Imaging, Soft Matter & Complex Materials Engineering, Chemical Engineering, Microfluidics & Soft Nanotechnology.

www.espci.fr/en/educational-programs/doctoral-studies/



Finance, Human Resources & Organization, Accounting & Management Control, Marketing, Strategy, Supply Chain Management.

www.hec.edu/Ph.D



Physics & optical sciences: Atom optics, Quantum optics, Nanophotonics & electromagnetism, Non-linear materials & application, Lasers & biophotonics, Optical components & systems. www.institutoptique.fr/en/recherche/Inscription-en-these



Energy & Chemical Engineering, Materials Science & Engineering, Systems & Control Engineering, Applied Mathematics, Earth & Environmental Sciences, Computer Science, Social & Economics Sciences. www.mines-paristech.eu/Academics/Post-master-degree-/-Doctoral-Programme/Presentation/



Information Technology, Telecommunications, Digital Communications, Optical Communications, Electronics, Computer Science, Networks, Mobile Signal & Image Processing.

www.telecom-paristech.fr/eng/internationalstudies/phd/edite-de-paris-doctoral-school.html