RESEARCH IN FRANCE

> THE DOCTORATE, STEP BY STEP
Doctoral candidates in France are trained within a research team or unit (known as a UR) that is attached to a doctoral school or department (ED). The department is led by a director who also supervises candidates’ research. Training takes place over 3 years and culminates in the defense of a dissertation.

> DOCTORAL SCHOOLS
In 2019, there were 265 doctoral departments across France. They are housed within universities or other approved institutions.

> HOW DOCTORAL SCHOOLS ARE ORGANIZED
Doctoral schools are accredited by the French government and assessed every 5 years by Hcéres, France’s high council for the evaluation of research and higher education. Each doctoral school is accredited in specific scientific fields.

Doctoral schools are led by a director, who is assisted by a council.

• The director serves as the link between doctoral candidates, the host institution, and the laboratory.
• Half of the members of the council are representatives of the participating educational institutions and their research units and teams. 20% of the members are doctoral candidates within the department and are elected by their peers.

France’s doctoral schools (known as EDs) are collections of research units and laboratories. They oversee the recruitment of doctoral candidates, monitor the quality of their research, and help them launch their careers. They also participate in the activities of international scientific cooperation of their host university.

Directory of doctoral schools: https://doctoral.campusfrance.org
The doctoral schools fulfill an essential role in higher education or research institution. Each school is associated with a university or other higher education host institution accredited to deliver Doctoral Degrees. Each doctoral department is affiliated with a university or other higher education host institution accredited to deliver Doctoral Degrees.

Candidates are guided and supervised by a supervisor of the successful candidate's dissertation. The doctoral candidate, the department, and the research team have rights and responsibilities of each party. The contract helps ensure quality by setting forth the doctoral candidate's rights and responsibilities. The thesis contract represents the agreement of the doctoral candidate, the department, and the research team. The dissertation is written and defended during the candidate's time in France. A summary of the dissertation must be provided in French.

The dissertation director is a key figure. He or she is responsible for the development and evolution of the doctoral plan over the 3-year training period and is the candidate's direct supervisor in the lab. To supervise doctoral research, individuals must have earned a specific qualification known as Habilitation à Diriger des Recherches (HDR).

Institutions authorized to confer doctoral degrees are required to report all dissertations that are successfully defended. Candidates must submit their dissertation to the degree-granting institution. This official submission serves to archive the dissertation. National dissertation database: www.theses.fr

In addition to his or her independent research work, the candidate undergoes approximately 160 hours of coursework offered by the doctoral school. A portion of that coursework is required by the school, the rest consists of electives chosen by the candidate. Topics include research methods; French language; business and innovation; disciplinary courses; teaching; and presenting science to lay audiences. Candidates must also meet the department's requirements related to publications and participation in seminars.

For more information:
- "Doctoral studies in France" www.campusfrance.org
- Resources center
- Educational and research programs
- Degree descriptions

THE ESSENTIALS OF DOCTORAL TRAINING

Unfolding over a period of 3 years (or, exceptionally, as many as 6), doctoral training consists of performing research within a research unit under the supervision of a dissertation director. It culminates in the preparation and defense of a dissertation that describes the scientific work performed and makes it available to the scientific community.

Following a successful defense of their dissertation candidates are awarded the Doctoral Degree. After earning a European Master or equivalent degree, aspiring doctoral candidates and researchers join a doctoral program, where they will undergo a training period and is the candidate's direct supervisor in the lab. To supervise doctoral research, individuals must have earned a specific qualification known as Habilitation à Diriger des Recherches (HDR).

> BEST PRACTICES: GOOD ADVICE FROM ANDES

ANDES, France’s national association of doctoral recipients, publishes descriptions of best practices for planning and executing a doctoral research project. https://andes.asso.fr/loupe/

> WANT TO DO YOUR DOCTORATE IN ENGLISH?

- Proficiency in French is not required to pursue a French doctorate in the exact sciences, including engineering and biology.
- Meetings with the dissertation director are conducted in English.
- Courses in French language are offered during the candidate’s time in France.
- The dissertation is written and defended in English.
- A summary of the dissertation must be provided in French.

French proficiency (usually level B1 or B2 of the Common European Framework of Reference for Languages) is required to begin a doctorate in humanities or social sciences (anthropology, geography, history, linguistics, philosophy, psychology).

Requirements vary for the following disciplines: business, marketing, political science, communications, law.
Admission to a doctoral program is a selective process. Candidates must:
> hold a European master or the equivalent (5 years of postsecondary study, 300 ECTS credits)
> demonstrate that they possess financial means of at least a thousand euros per month for 3 years, except in the humanities and social sciences
> possess a certain level of proficiency in English and/or French
Each doctoral department has its own admission requirements and processes.

> ADMISSION

Admission decisions are based on a research proposal that will be supervised by the department’s dissertation director. Because of the financial support so often required as a condition for admission, research topics are often proposed by training entities (doctoral schools, research laboratories, corporations, and national, European, and international research programs) as a function of the funding available. In the exact sciences (physics, chemistry, mathematics, biology, engineering), where demonstrated financial support is a condition for admission, prospective candidates may apply directly for topics proposed by a dissertation director. Those topics often carry funding.

In the humanities and social sciences (history, law, political science, philosophy, and geography, among others), where financial support is not necessarily required, it is always possible to propose a topic to a dissertation director, who will submit it to the doctoral department for approval.

> TUITION

The annual tuition for French doctoral programs is €391.

> VISA

The type of visa required depends on how the period of doctoral study will be organized.
- Long-stay visa (VLS) marked « passeport talent-chercheur » (researcher-talent passport)
  This visa is issued to foreign doctoral candidates who hold a master’s degree or the equivalent and have entered into a host agreement (and formal doctoral contract) with a research entity in France.
- Long-stay visa and residency permit (VLS-TS) / multiyear residency permit (CSP)
  This visa is issued to doctoral candidates who will not receive a salary under a doctoral contract but who have demonstrated that they possess sufficient means of support to cover their period of study in France. The multiyear residency permit is issued after the first year of study in France and is valid for 2–4 years, depending on the candidate’s program.

For more information:
https://france-visas.gouv.fr
www.campusfrance.org

> APPLYING, STEP BY STEP

- Identify the scientific fields and specializations most closely related to your master’s work
- Identify the doctoral departments and research organizations active in those areas
- Visit their websites to apply for posted dissertation projects or to propose a topic of your own
- Contact the dissertation director
- Verify that your topic carries funding, or find funding on your own
- After reaching agreement on a topic with a dissertation director, apply for admission to the doctoral department
- Upon notification of acceptance from the doctoral school and dissertation director, sign the dissertation agreement (charte des thèses)
DOCTORAL CONTRACTS

EXTENDED STAY SCIENTIFIC VISA

derived research projects. The agreement to share responsibility for research
involves 

persons:

under the supervision of 2 PhD advisers. The responsibilities of research
are shared, candidates have the opportunity to conduct their research
within a faculty panel from the doctoral school in which the student wishes to enroll.

Doctoral contracts have a term of three years and offer full social benefits as well as a minimum gross monthly salary of €1,700. Doctoral contracts are open to Master’s grade students who wish to continue on for a doctorate. The number of contracts awarded varies each year.

A partnership of French and European Joint Doctoral Programs enables doctoral candidates to conduct research in another country.

A diploma that bears the name and title of both of the advisers is awarded jointly by the two institutions (joint diploma) or 2 separate degrees (double diploma).

Jointly supervised doctoral contracts must have their own agreement depending on the terms reached specifically for the applicant’s case.

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions

DOCTORATE FOR RESEARCH PERFORMED IN A CORPORATE SETTING

The CIFRE mechanism (the acronym stands for industrial agreements for training through research), managed by ANRT, the French national agency for research and technology, offers financial incentives to French corporations that employ doctoral candidates in a program of collaborative research with a publicly funded laboratory. The period of employment lasts 3 years and ends with a dissertation defense. The firm proposes a research goal that becomes the subject of the dissertation of the employed doctoral candidate. The research lab oversees the research work of the doctoral candidate, who is enrolled in the doctoral department with which the lab is affiliated.

Some offers of employment may pertain to specific countries (e.g., India, Morocco) or to specific programs (such as CIFRE EIDigital).

www.anrt.asso.fr/fr/cifre-7843

DOCTORATE AWARDED FOR ACQUIRED EXPERIENCE

It is possible to be awarded a doctorate on the basis of one’s prior experience. Interested candidates should approach an appropriate doctoral school to discuss the possibility. www.vae.gouv.fr

DOCTORATE FOR RESEARCH PERFORMED IN A CORPORATE SETTING

THE DOCTORAL CONTRACT

recognizing the professionalization of doctoral training

The possibility of entering into a doctoral contract is open to all doctoral candidates. Contracts are for a period of 3 years. They offer a guaranteed minimum monthly salary of €1,750 (gross) and all of the benefits of a formal employment contract. The terms are identical across all institutions of higher education and research, issued and managed by the doctoral departments. doctoral contracts reinforce the professional aspect of the research endeavor.

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions

DOCTORATE FOR RESEARCH PERFORMED IN A CORPORATE SETTING

THE DOCTORAL CONTRACT

THE DOCTORAL CONTRACT

THE DOCTORAL CONTRACT

THE DOCTORAL CONTRACT

NEW

Doctorates are now entered into France’s national register of occupational qualifications (RNCP), thus facilitating recognition of the competencies that doctoral students acquire while performing their research. www.cnpq.gouv.fr

FINDING A DISSERTATION TOPIC, A DOCTORAL DEPARTMENT, AND FUNDING THE RESEARCH PORTAL

A one-stop shop to plan your research project

A guide to European and international funding programs

Information and contacts for research organizations and laboratories

News about research in France

Campus France profiles

> doctoral departments, including a description of the school, contact information, associated laboratories, practical advice on preparing a dissertation

> degrees, including international joint doctorates

research fields in France, with information on how they are organized and their current areas of focus

www.campusfrance.org

> Researchers; or > Resources center

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions

For more information: “International dual degree PhD (cotutelle)”

www.campusfrance.org > Resources center > Educational and research programs > Degree descriptions
> PROPOSED DISSERTATION TOPICS

Proposed dissertation topics are posted on various websites:
- On the sites of individual doctoral schools and research organizations
- On the site of the French national agency for research and technology, for opportunities to pursue a doctorate while working in a corporate lab: www.anrt.asso.fr/fr/cifre-7843
- On the site of the network of doctoral schools, which publishes calls for proposals and applications for funded research topics: www.adum.fr
- On https://euraxess.ec.europa.eu for the funding programs of the European Union
- At the Campus France research portal, a one-stop shop for international students considering a period of research in France: www.campusfrance.org

> SEVERAL FUNDING OPTIONS ARE POSSIBLE

1. Funding from the host institution. Each year, French doctoral departments, laboratories, research organizations, and firms publicize on their websites dissertation topics that they are willing to fund.
- Doctoral contract: The doctoral school draws on its own budget to fund the topic agreed on with the applicant, either entirely or in the amount needed to supplement the candidate’s own funds.
- Contract with a research organization (CNES, CNRS, CEA, etc.): The topic is funded by the research organization.
2. Funding from the candidate’s government. Some countries provide funds for overseas doctoral study by their nationals. Candidates may obtain information from the French embassy in their country.
5. Personal funds. Prospective candidates may state in their application that they intend to meet their living expenses from their own funds.
Once they have earned their doctorate, many consider a postdoctoral contract in France to gain real professional research experience and get their career started. Fixed-term postdoctoral contracts are designed to permit holders of a doctorate (typically those who earned their degree within the past 10 years) to spend a short period of time in France (usually between 12 and 24 months) engaged in a research activity.

During their stay, the postdoc works as a full-time researcher in a laboratory and participates fully in all research-related activities: publishing articles, attending seminars, participating in conferences. Often short absences are financed by the researcher’s home lab, but there are other possibilities as well.

> SHORT-TERM RESEARCH MOBILITY

Short periods of mobility are an important part of the research enterprise, whether they involve spending a few months performing research in a foreign lab, traveling in connection with a cooperative work project, or attending lectures or summer sessions. Often short absences are financed by the researcher’s home lab, but there are other possibilities as well:

- Country-specific mobility grants: for information, contact the French embassy
- IFRE grants from joint international units of the CNRS: www.fiee.fr/bourses
- AUf grants within the French-speaking world: www.auf.org

> OBTAINING A POSTDOCTORAL CONTRACT

All of France’s research organizations, university laboratories, and corporate R&D departments announce opportunities for postdoctoral contracts on their websites. Many sites collect, compile, and republish such announcements, often in specific fields or for certain geographical areas.

> FRANCE

- Association Bernard Gregory (ABG) www.abg.asso.fr
- Indeed, an employment search platform www.indeed.fr/post-docs
- Operation Postes, a job-search platform run by research faculty in mathematics: http://postes.smai.ens.fr/postdoc/(Mathématiques)
- The Campus France research portal www.campusfrance.org/researchers

> EUROPE

- Academic Positions, the job portal for academic and research positions in northern and central Europe: http://academispotions.fr
- Research Science Jobs and Postdocs in Europe: www.eurosiencejobs.com/job_search

> WORLD

EURAXESS, a European initiative to support mobile researchers, has developed a platform called EURAXESS Jobs that publishes position openings and funding opportunities around the world: https://euraxess.ec.europa.eu/jobs

> THE HUBERT CURIEN PARTNERSHIPS (PHC), A FRENCH INITIATIVE TO SUPPORT THE MOBILITY OF INTERNATIONAL RESEARCHERS

Financed in equal parts by France and a foreign partner and managed by Campus France, PHCs reinforce scientific and technological exchanges of excellence. Funds are allocated to research teams to enable them to fund mobility (travel and living expenses) by members of the team. These programs act as a springboard for development of research projects—and sometimes even for the initiation of new projects. They are designed for public or private labs, academic or corporate, in all fields of science.

The allocations are made for a period of two years. Campus France also manages other research mobility programs targeted on specific geographic areas, such as Brazil (COFECON Brésil) or Asia (STIC-Asie).

For more information: www.campusfrance.org

> Researchers > Research programs
Short thematic sessions organized annually—often in summer—by research organizations, universities, and laboratories are designed to promote interdisciplinary thinking around pressing scientific questions. They provide opportunities for researchers to transmit fundamental knowledge and exchange ideas.

The sessions generally feature guest lecturers from France or abroad. CNRS offers more than a hundred such sessions each year. Details are available on the CNRS site.

www.cnrs.fr

Campus France: France Excellence summer sessions. Contact: phdsummerschool@campusfrance.org

Other examples:

• CNES, France’s national space studies center: www.cnes.fr Nous rejoignons l’École d’été d’Alpbach 2020

• EHESS (school for advanced study in the social sciences) summer session: www.ehess.fr/fr

• Université Grenoble Alpes, Institut Fourier: www.fourier.ujf-grenoble.fr activités scientifiques

In many places (e.g., UK, Belgium, Norway), pre-doctoral preparation sessions called “doctoral training” or “PhD training” seem to have taken hold. These short research experiences enable future doctoral candidates to get a sense of what research is all about. They also allow research directors to put future candidates to the test. Although pre-docs are not yet common in France, a few programs have nevertheless begun to surface.

• The Mathematical Sciences Foundation of Paris is a federation of 14 mathematics labs employing 1,800 researchers, including 5 Fields medal winners. Alongside its doctoral and postdoctoral programs, the foundation offers predoctoral sessions.

www.sciencesmaths-paris.fr/en/the-foundations-research-chair-244.htm

• FIER, French international experience in research:

http://ec.europa.eu/research/mariecurieactions

http://ec.europa.eu/info/funding-tenders
RESEARCH IN FRANCE IN FIGURES

74,000 doctoral candidates in France

2nd in the world in Fields medals received

42% of postsecondary students are international

4th in Nobel prizes awarded

€49.8 billion in R & D investment

3rd in international doctoral candidates (OECD)

CAMPUS FRANCE IN FIGURES

220 staff in France

500 around the world

260+ Campus France offices in 125+ countries

56 events staged by Campus France each year

30,000 mobile students and scholars under management

20+ institutional publications

80 websites

32 languages

720,000 visitors

1.7 million followers on social networks

300,000 alumni in the France Alumni social network

260+ European projects managed

8 as a lead agency

1.72 million in fund under management

200+ Campus France offices in 125+ countries

85 international agreements with foreign institutions and governments

€122 million in fund under management

20,000 visitors

20 million visits/year

260+ European projects managed

8 as a lead agency

1.72 million in fund under management

200+ Campus France offices in 125+ countries

85 international agreements with foreign institutions and governments

€122 million in fund under management

20,000 visitors

20 million visits/year