

GEOGRAPHY

2009

Situated between the natural and human sciences, geography is a discipline that is literally open to the world, one that shares borders with many other fields: regional development, urban planning, environmental studies, cartography, tourism, and sociocultural studies. The new science of geomatics, a fusion of geography and information science, is uncovering new fields of application that make use of geographic information and positioning systems. Some of those applications are in telecommunications, agronomy, water resources, natural and technological risks, defense, and geomarketing. Few decision makers—whether business and political leaders, investors, military officers, or architects and planners—can afford to be indifferent to geography.

Field: Humanities and social sciences.

Also see the following profiles: *Environment, History and archaeology, Tourism, Agriculture and agri-food industries, Urban and regional planning.*

Professional opportunities: teaching, public service, land-use planning, building and public works, environment, urban planning, local development, tourism, consulting on land-use and other development projects for local governments.

ORGANIZATION OF STUDIES IN FRANCE

Universities

Most programs in geography are found in the universities—from the licence to the doctoral level.

The path begins with the licence, with majors available in geography, geographic sciences, geography and development, and geography and environment. Students explore physical features (relief patterns and soil composition), societies (demographic geography and the geography of societies, regions, and nations), and the relations between people and their surroundings. Premature specialization is discouraged. The first year of the 3-year licence curriculum is devoted to common core studies, with an emphasis on statistics, cartography, and earth sciences. Specialization begins in the third year. Some possibilities are geomatics, human geography, and regional planning and development.

Students are advised to continue their studies for 2 years after the licence. Many different professional and research master's programs are available. Students in professionally oriented programs spend part of their time working for a firm or organization before beginning a career in land-use planning or environmental engineering.

A research master prepares the graduate to conduct specialized research toward a doctorate. Dissertation topics include regional and urban development, cartography, environmental issues, and mathematics applied to geography. The choice of research topic is often determined by the path the student chooses at the master's level.

Specialized schools

- The École Nationale des Sciences Géographiques (ENSG), <http://www.ensg.ign.fr/>, in Marne-la-Vallée, trains many students who go on to serve with the Institut Géographique National (IGN). ENSG recruits applicants with scientific backgrounds. To be admitted, applicants must pass a rigorous examination.

The 300 or so students admitted each year (directly from secondary school or after 2 years of postsecondary preparation) are trained for careers as draftsmen, cartographers, geometers, or geographical engineers. The latter specialize in the collection and automated processing of data and receive a degree recognized by CTI, the French national commission on engineering degrees.

ENSG also offers professional master's programs in geographic information systems and geomatics in partnership with universities, as well as sixth-year specialized master's programs in photogrammetry, positioning and measurement of deformation, GIS architecture, land-use and surveying systems, and localized information systems for regional planning. Both types of programs draw a large number of international students, as does the geomatics program. The two professional master's programs include internships abroad.

- The École Nationale de la Météorologie (ENM) in Toulouse, <http://www.enm.meteo.fr/>, admits students on the basis of their performance on an entrance exam. Most graduates go on to work for Météo-France, the French weather service.

ENM admits international students from outside the European Union to programs that prepare meteorological engineers and technicians, under agreements with weather services in the applicants' countries.

Other schools and institutes

- The Ecole Nationale des Ponts et Chaussées (ENPC, national school of roads and bridges), <http://www.enpc.fr>, is a school of engineering and part of the ParisTech group. International students make up 30% of ENPC's enrollment (50% at the doctoral level). The school offers a research master in urban transport and the environment and professional master's programs in transport and sustainable development and in treatment and management of water, soil, and waste products. Joint-degree agreements are in force with universities in Germany, Brazil, Canada, Spain, Greece, Hungary, Italy, the Czech Republic, Romania, Portugal, and Singapore.

- École Normale Supérieure de Paris (ENS), <http://www.ens.fr>

Department of Geography: <http://www.geographie.ens.fr/>

Professional master in geopolitics, offered in cooperation with the University of Paris I.

- Bio-Geophile is a component of CNRS mixed research unit 5600 on environment, city, and society. It is housed in the ENS faculty of letters and humanities, <http://biogeophile.ens-lsh.fr/>

- Sciences Po, Paris, <http://www.sciences-po.fr>

Professional masters in regional and urban strategies (students may opt to pursue a joint degree with the London School of Economics) and in urbanism.

- IFP, formerly the École du Pétrole et des Moteurs, Rueil-Malmaison,

<http://www.ifp-school.com>

Research master in the economics of sustainable development.

- Institut Supérieur d'Agriculture de Beauvais (ISAB), <http://www.isab.fr>

Engineering degree program in geology and environment.

- FESIA is a group of 4 schools of agriculture, <http://www.fesia.org/>, that also are concerned with soil and water management and the preservation of the environment and our natural heritage. FESIA's member schools are:

- ISA, Institut Supérieur d'Agriculture de Lille, <http://www.isa-lille.fr>

- ESA, École Supérieure d'Agriculture d'Angers, <http://www.groupe-esa.com>

- ESAP, École Supérieure d'Agriculture de Purpan, <http://www.esa-purpan.fr>

- ISARA, Institut Supérieur d'Agriculture Rhône-Alpes, <http://www.isara.fr>

RESEARCH THEMES

Geographic research leads to new perspectives and career possibilities in emerging fields that are grappling with vital problems of environmental quality and sensible, sustainable land use.

INTERNATIONAL INFLUENCE

Contemporary French geographers have shaped a discipline that, in the words of Armand Frémont, allows us to decipher the present. Notable examples include Jean Gottman, inventor of the notion of the megalopolis, and Paul Claval, leader of the humanist geography movement. Others are Roger Brunet, who founded the reviews *L'Espace géographique* and *Mappemonde*; Yves Lacoste, author of the influential 1976 essay on the link between progress in geography and war-making and founder of the review *Hérodote*; and Pascal Lorot, a specialist in geo-economics: the study of international economic strategies and forces and the economic stakes that underpin international relations.

Web sites

General information:

- European Journal of Geography, <http://www.cybergeogeo.eu>

- Hérodote, <http://www.cairn.info/revue-herodote.htm>

- The francophone geomatics portal, <http://georezo.net/>

- Société de Géographie, <http://www.socgeo.org/>

- La Géographie, <http://www.lageographie.fr/>

- Géoéconomie,

<http://choiseul-editions.com/revues-geopolitique-Geoeconomie-14.html>

- GéoPortail, <http://www.geoportail.fr/>,

Research bodies:

- Bureau of geological and mine research (earth sciences portal),

<http://www.brgm.fr>

- CNRS, the national center for scientific research, <http://www.cnrs.fr>

- IGN, the national geographic institute, <http://www.ign.fr>

- National institute of demographic research, <http://www.ined.fr>

- Institute of development research, <http://www.ird.fr>

- CNRS mixed research unit 8504 on geography and cities,

<http://parisgeo.cnrs.fr/>

Keywords

aquatic mediums – archaeology – archaeo-sciences – building – biodiversity – biology – Carthagéo program – cartography – cities – civil engineering – climate – coastal zones – construction – cross-border relations – culture – development – digital – earth sciences – ecology – economics – energy – engineering – environment – evolution – fuel – geobiosphere – geo-environment – geography – geology – geomarketing – geomatics – geometrician – geophysics – geopolitics – geosciences – geosystems – governance – habitat – humanities – hydrogeology – identity – industry – informatics – landscape – land use – law – logistics – management – mathematics – Mediterranean region – memory – metric imaging – migration – mobility – globalization – mountains – nature – natural risks and catastrophes – natural and cultural heritage – ocean – physics – photogrammetry – policy – politics – regional planning – remote detection – resources – rural settings – social sciences and humanities – space sciences – society – soil – space – strategy – sustainable development – technology – territory – topography – tourism – transportation – urban planning – urbanism – water –