Agriculture Agronomy

France is the European Union’s largest agricultural producer, followed by Germany, Italy, and Spain. With over 500,000 farms, agriculture accounts for more than 1 million jobs in France. Most of these are in the sectors of cereal production and dairy farming, but also in market gardening, viticulture, arbiculture, and horticulture. The arable crop sector is composed primarily of cereals (wheat, barley, corn, etc.), oilseeds (sunflower, colza, soy, etc.), and protein crops (peas, beans, etc.).

The census of agriculture reveals the richness and diversity of French agriculture: cereals, fruits, garden farming, wines, livestock, etc. With regard to medium and large farms, 30% specialize in cattle, 23% in arable crops, and 15% in viticulture. Organic farming is also growing in France with more farmers involved in on-farm processing and short food supply chains. Thousands of jobs will need to be filled in agriculture, agribusiness, and forestry. From trees to wood products, the wood-forest sector includes diverse fields such as silviculture, logging, wood furniture, construction, sawing, woodwork, and the paper and cardboard industry.

Programs in agriculture are broken down into 8 subject areas: production, processing, spatial planning and environmental protection, equipment, marketing and sales, services, equestrian activities, and animal husbandry and care.

International

Europe is the world’s leading agricultural power in terms of production value and the share of the working population employed in agriculture. France is the 8th agricultural power in terms of production value and the share of the total value of global agricultural production. French agricultural production is valued at €76 billion, far ahead of Germany (56 billion), Italy (49 billion), and Spain (43 billion). France is also a global leader in exports of wheat, seeds, alcohols, wines, and spirits.

Useful links

- Agrodoc: French national resource center for organic agriculture: www.agrodoc.com
- Agrenum: www.agrenum.org
- Agreste (French national association for agricultural employment and training): http://agreste.agriculture.gouv.fr
- ANEFA (French national association for agricultural employment and training): www.anefa.org
- APEODT (French association for managers, engineers, and technicians in the agricultural and agri-food industries): www.apoicota.com
- Brevet de technicien supérieur agricole (BTSA): https://cholorofil.fr/diplomes/secondaire/btsa
- Chlorofil: www.cholorofil.fr
- CIRAD (agricultural research for development): www.cirad.fr
- FNAB (French organic agriculture federation): www.fnab.org
- France Agro3: www.franceagro3.org
- French Ministry of Agriculture: http://agriculture.gouv.fr/Enseignementagricole
- INRAE (national institute of research on agriculture, food, and the environment): www.inrae.fr
- Long-term higher education courses and diplomas: https://cholorofil.fr/diplomes-et-ressources-pour-lenseignement/superieur
- Training for jobs in agriculture, forestry, nature, and land management: www.educagri.fr
- UNREP (national rural union for education and promotion): www.malformationagricole.com
- Young farmers: www.jeunes-agriculteurs.fr

Agriculture - Environment

BREVET DE TECHNICIEN SUPÉRIEUR AGRICOLE (BTSA)
NATIONAL DIPLOMA – 2 YEARS OF HIGHER EDUCATION – L2
120 ECTS credits

The BTSA is offered in private and public secondary schools. 16 BTSA concentrations (options) are available:

> Land Use: Rural land use; Forestry; Water control and management;
  Natural resource management and conservation.

> Business: Technical and commercial specializations: Forest and wood products (PFPFB); Wine, beer, and spirits (VBS); Garden products and companion animals (UJAC); Agricultural goods and services (BSA); Food and beverages (A&B).

> Agricultural Machinery and Equipment: Engineering of agricultural machinery.

> Production: Agronomy–Plant crops; Aquaculture; Analysis, management, and strategy for agricultural enterprises; Agricultural development in hot climates; Animal production; Horticultural production; Viticulture–oenology.

> Service: Development and organization in rural areas.

> Processing: Agricultural, biological, and biotechnological analysis; Food sciences and technologies with specializations in: Food processing, Grain products, Dairy products, Meats and fish products.

Brevet de Technicien Supérieur Maritime (BTSM, maritime technician certificate) in fisheries and marine environment management.

www.campusfrance.org > Resources center > Panorama of Higher Education and Research in France > Degrees > Le Brevet de Technicien supérieur Agricole (BTSA)

PROFESSIONAL LICENCE
NATIONAL DIPLOMA – 3 YEARS OF HIGHER EDUCATION – L3
180 ECTS credits

The Licence Professionnelle, a French national diploma, may be earned in the following concentrations related to agriculture: Agronomy; Rural land use; Commercialization of food products; Management of agricultural and agri-food enterprises; Agri-food industries; Ocean- and sea-related occupations; Health-related occupations (nutrition, diet); Natural resource and forest occupations; Wood-related occupations; Animal production; Plant crops; Exploitation of agricultural resources.

www.campusfrance.org > Students > Studying > Find your programme

BACHELOR OF SCIENCE AND ENGINEERING
BACHELOR LEVEL – 3 YEARS OF HIGHER EDUCATION – L3
180 ECTS credits

Bachelor in Agricultural Ecology and Food Systems:
  • Agriculture, Digital and Onboard Technologies: www.unilasalle.fr
  • Sustainable Agrobusiness: www.unilasalle.fr
  • Agricultural Ecology and Food Systems: www.groupe-esa.com
  • Agricultural and Sustainable Agri-Food Industries: www.purpan.fr

MASTER
NATIONAL DIPLOMA – 5 YEARS OF HIGHER EDUCATION – M2
120 ECTS credits

Several academic programs offer a Master with concentrations (mentions et spécialités) in the environment:

> Science, Technology, and Health: (1) concentration in agrosciences, environment, land management, and forestry, with the following tracks: transition, environment, agriculture, natural surroundings, agricultural ecology, awareness, land and society; agrosciences, environment, landscapes, forests, from agronomy to ecology, soil management and ecosystem services; (2) concentration in nutrition and food science, tracks in agricultural sciences and techniques, nutrition, and environment; analysis of food-related sanitary risks; (3) concentration in water sciences, track in water and agriculture; (4) concentration in agricultural, alimentary, and environmental sciences and technologies, with the following tracks: agronomic, genetic, and qualitative improvements in crop production; agri-food production and innovation; sciences and techniques of ecosystems; quality management of crop production; engineering applied to fruits and vegetables; agronomic and environmental sciences; climate change, agriculture and development; plant health.

> Law, Economics, and Management: tracks in agricultural law and agri-food industries; economics of sustainable food production.

> Sea and Coastal Sciences: concentration in applied economics, track in agriculture, sea, environment.

> Humanities and Social Sciences: concentration in geography, land use, and development, track in new rural areas, agriculture, and local development; concentration in land management and local development, track in territorial dynamics, agriculture, and rural land use.

www.campusfrance.org > Students > Studying > Find your programme

Programs Taught in English:
70 programs related to agriculture: Agribusiness, Agroecology, Agrifood, Agro-biomedical, Biodiversity, Food engineering, Forestry, Nutritional, Organic agriculture, Plants, Seafood, Wood, ...

www.campusfrance.org > Programs Taught in English
http://taughtie.campusfrance.org/tie/search/#/catalog

TITRE D’INGénIEUR DIPLOMÉ (ENGINEERING DEGREE)
MASTER LEVEL – 5 YEARS OF HIGHER EDUCATION – M2
120 ECTS credits

Below are French institutions sponsored by the Ministry of Agriculture that offer engineering degrees accredited by the CTI (Commission des Titres d’Ingénieur):
  • Bordeaux Sciences Agro (national higher school of agronomic sciences of Bordeaux): www.agro-bordeaux.fr

Beyond the Master level

MASTère Spécialisé® (MS)
INSTITUTION’S DIPLOMA – 1 YEAR OF HIGHER EDUCATION

> Labeled by the Conférence des Grandes Écoles, the Mastère Spécialisé program enables students to earn an institutional credential attesting to dual competence in specialized areas in agriculture: public action for the sustainable development of land and agriculture; international management of forests, nature, and society; vineyard management; equine sciences and management.

www.campusfrance.org > Resource center > Panorama of Higher Education and Research in France > Degrees > The Mastères spécialisés® programs
List of MS programs:
www.cge.asso.fr/formations-labelisees/liste-formation-ms/

www.agroparistech.fr
www.groupe-esa.com
www.isa-lille.fr
www.unilasalle.fr
www.univ-brest.fr/esiab
www.univ-brest.fr/esia
www.ensat.fr
www.ensia-lyon.fr
www.isara.fr
www.institut-agro.fr
www.oniris-nantes.fr
www.purpan.fr
www.agro-bordeaux.fr
www.cti-commission.fr/accreditation

December 2022