



## AGRICULTURE OF TOMORROW



École Nationale Supérieure des Sciences Agronomiques

de Bordeaux Nouvelle-Aquitaine www.study.agro-bordeaux.fr



MINISTÈRE DE L'AGRICULTURE ET DE L'ALIMENTATION HIGHER EDUCATION ¬ RESEARCH TECHNOLOGY TRANSFER



THROUGH ITS MISSION OF EDUCATION,
RESEARCH AND TECHNOLOGY
TRANSFER, BORDEAUX SCIENCES AGRO
IS MEETING THE AGRICULTURAL, FOOD
AND ENVIRONMENTAL CHALLENGES OF
TOMORROW



A HIGH-LEVEL

**AGRONOMIC INSTITUTE** 

AT THE HEART OF

BORDEAUX CAMPUS

SUSTAINABILITY

EXCELLENCE

- ¬ 6 education/research/transfer departments
- 1 vocational training office
- 12 research units
- 3 technology transfer units
- 11 000 sq meters (118 360 sq ft) of teaching facilities and laboratories
- **350 student housing units** on a 17-hectare campus
- 1 29-hectare wine estate
- Sporting facilities

   (1 gymnasium, 2 sporting fields,
   1 dance studio...)



France's foremost agricultural and agrifood region



BORDEAUX AND COGNAC WINE REGION:

INNOVATION

QUALITY]





## A UNIQUE LIVING ENVIRONMENT, A SUSTAINABLE CAMPUS

In a calm and green environment only a few minutes away from downtown Bordeaux, the school provides its students with the best living conditions during their studies.

Very aware of sustainable development, the school has undertaken the implementation of the Agenda 21 Program.



The largest cultivated forest in Europe

## LOCAL ROOTS

Bordeaux Sciences Agro has developed a close partnership with the university and science campuses in Bordeaux (the University of Bordeaux, the University Bordeaux Montaigne, INP, INRA, CNRS, INSERM, IRSTEA, etc...), where it is **the only institute of higher education in AGRONOMY**.

In this context, it is helping forge the excellence of the Bordeaux campus:

Bordeaux Sciences Agro is a founding member of Excellence Initiative (IdEX), Laboratory of Excellence (LabEx), Equipment Excellence (EquipEx), digital campus, the COMUE (Community of Universities and Education Institutions) of the Nouvelle-Aquitaine. It also belongs to clusters and competitive hubs:

- > INNO'VIN, the Nouvelle-Aquitaine region wine sector cluster,
- > AGRI Sud-Ouest Innovation, a competitive agrichain hub for the Nouvelle-Aquitaine and Occitanie regions,
- > XYLOFUTUR, the competitive hub for the Nouvelle-Aquitaine forestry-wood-paper commodity chain.

## A NATIONAL **NETWORK**

As a public institution under the authority of the French Ministry of Agriculture, Bordeaux Sciences Agro collaborates with the other French Agricultural Sciences Institutes, notably in the framework of joint courses and international program cooperation.

Bordeaux Sciences Agro is also a member of the IAVFF-Agreenium that unites French actors in research and higher agricultural and veterinary education.

## AN INTERNATIONAL OUTLOOK

Bordeaux Sciences Agro has an international outlook in all of its activities:

- > Education, through mobility programs and the development of international curricula,
- Research, through joint supervision of doctoral studies, researcher mobility, and projects conducted within international partnerships,
- > Knowledge transfer, by transmitting its know-how abroad.

#### Château LUCHEY-HALDE

### BORDEAUX SCIENCES AGRO'S WINE ESTATE > AN EXCEPTIONAL WORKING TOOL

Bordeaux Sciences Agro has its own wine estate: Château Luchey-Halde, ideally located on 29 hectares of exceptional land at the center of the renowned appellation, Pessac-Léognan. In 1999, the school began re-developing the estate.

In the space of a few years, the vineyard restored

its reputation for excellence and began producing high quality red and white wines. This estate provides students studying the wine industry with an exceptional working tool, and beautifully showcases the school's know-how and commitment.



www.luchey-halde.com





# HIGHER EDUCATION, VOCATIONAL TRAINING & APPRENTICESHIP:

**INNOVATIVE COURSES** 

FOR MANAGERS IN THE FIELD

OF LIFE SCIENCES



- **610 students**, 467 pursuing post-graduate studies
- 450 interns taking continuing education courses
- 4000 alumni
- ¬ 46 professors
- ¬ 400 professional speakers
- ¬ 90 administrative, scientific and technical staff

#### **PROMISING FIELDS**

- AGROECOLOGY
- ¬ VITICULTURE − ENOLOGY
- **¬** FORESTRY
- FOOD, NUTRITION & HEALTH
- ¬ SUSTAINABLE LIVESTOCK
- ¬ SUSTAINABLE DEVELOPMENT TERRITORIES
- MANAGEMENT BUSINESS MANAGEMENT
- INFORMATION SYSTEMS AND ICT FOR AGRICULTURE
- **¬** QUALITY, HEALTH, ENVIRONMENT

#### THE AGREAUX FOREST

This thousand hectare estate, located in Retjons (40120), is a host site for higher education, professional training, and research projects related to sustainable forest management and forest product optimisation

The aim of the forest is also to support the development of a higher education network and scientific projects of excellence in the Nouvelle-Aquitaine forestry-lumber sector.





#### **EDUCATION**

## HIGH-LEVEL DEGREES AWARED BY BORDEAUX SCIENCES AGRO

- ¬ Post-graduate in Agronomy (Grandes Écoles)
- ¬ International Master of Sciences Vineyard and Winery Management
- ¬ Mastère Manager de domaines viticoles
- ¬ Speciality certifications

## ASSOCIATED PARTNER IN SEVERAL MASTER'S DEGREES

- ¬ Master's in "Biology, Agrosciences" (with the University of Bordeaux)
- ¬ Master's in "Land Management and Local development" (with the University Bordeaux Montaigne)"
- Master's in "Biodiversity, Ecology and Evolution" (with the University of Bordeaux)
- Master's in "Winery Management"
- ¬ Vinifera EuroMaster (with the institutions in the EMaVE consortium)
- "Vine and Wine" Master's (jointly offered with Montpellier SupAgro)

#### PhD WITH OUR SCIENTIFIC PARTNERS

 Bordeaux Science Agro scientists are directly involved in two topical areas: Agrosystem Management, and Agro-industry, Nutrition and Health.

#### LIFELONG EDUCATION

- ¬ Short continuing education courses
- ¬ Validation of learning from experience (VAE)

#### **COURSES WITH HIGH ADDED VALUE**

- ¬ Focusing on a hands-on, learn-by-doing approach
- ¬ Several individual internships, collaborative projects, pratical work, field visits...
- ¬ Promoting multidisciplinary approaches
- ¬ Human and social sciences courses related to societal and agricultural challenges
- Economic and environmental sustainability of agricultural models

## BACKED BY RESEARCH, TRANSFER AND NEW TECHNOLOGIES

- ¬ Computer sciences including programming, statistics, cartography, ITC...
- ¬ Experimental approach, design and implementation
- Project-based internships from defining problems, reviewing literature, choosing assumptions and methods, acquiring, processing and analysing data to assessing outcomes

## CONNECTING WITH PROFESSIONALS OF THE AGRICULTURAL INDUSTRY SECTOR

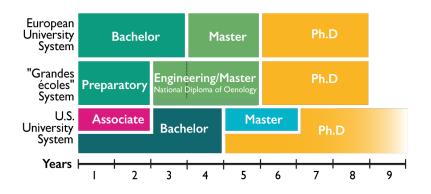
- ¬ Contact-based internships and projects
- ¬ Professional speakers

#### WITH AN INTERNATIONAL OUTLOOK

- ¬ Visiting professors addressing agricultural challenges on a global scale
- ¬ 3-month mandatory internships in France or abroad, plus study abroad and a sabbatical year
- ¬ Advanced English skills and a second language offered

#### FRENCH HIGHER EDUCATION SYSTEM







Bordeaux Sciences Agro, Montpellier SupAgro and IRSTEA are officially introducing the Digital Agriculture Chair, supported by the SupAgro Fondation. The Chair seeks to promote the dissemination and interoperability, or the ability to exchange and use information, of digital technologies for agriculture. This objective shall be pursued by collaborating closely with training programmes.

# COURSES BACKED BY INTERNATIONAL RESEARCH

IN LINE WITH

SOCIETAL NEEDS



- Innovate through research and development to resolve the major issues facing tomorrow's agriculture,
- Provide its expertise to socioeconomic actors through research transfer units,
- ¬ Foster ties with companies for better professional integration for students.

## A CLOSE RELATIONSHIP WITH COMPANIES

For 50 years, Bordeaux Sciences Agro has been able to forge privileged relationships with companies. These ties increase the relevancy of the courses to business.

In return, sharing field experience strengthens student ability to take initiatives and be immediately operational.

Businesses also benefit from collaborative projects conducted by students, vocational training courses, and technology transfers through multistakeholder clusters and chairs.

#### THE SCHOOL-BUSINESS LINKS

- ¬ Professional consortia to discuss industry stakeholders' needs
- ¬ 400 professionals contributing to the courses
- → Events bringing students and businesses into contact with each other: career day, the Agro'n Job Forum
- ¬ Vocational training education courses for companies' employees
- ¬ Apprenticeships leading to engineering degrees
- ¬ Research transmission structures.

## RESEARCH TRANSFER

Bordeaux Sciences Agro helps transfer knowledge to professional circles with its research transmission activities. The institution has a **Computing and** 

Management Laboratory that develops software for the agricultural milieu. It also participates in the activities of Vitinnov, an expertise and scientific and technical oversight unit for viticulture.



## BORDEAUX RESEARCH ECOSYSTEM

Bordeaux Sciences Agro's research professors and scientists work in 12 research units in collaboration with the **University of Bordeaux**, **INRA**, **IRSTEA**, **CNRS** and **INSERM**. They address topics based on the major challenges of our time: the ecology of agrosystems, the effects of human practices on the environment, the influence of nutrition on health, precision agriculture, sustainable territorial management, etc.

Involved in three Laboratories of Excellence (LabEx) at the University of Bordeaux, Bordeaux Sciences Agro notably facilitates students' access to doctoral studies.



## BORDEAUX SCIENCES AGRO'S RESEARCH UNITS (UMR)

- ¬ Chemistry and Biology of Membranes and Nano Objects (CBMN)
- ¬ Pathophysiology of Declarative Memory
- Herbivores
- ¬ Vine Health and Agroecology (SAVE)
- ¬ Atmosphere Plant Soil Interactions (ISPA)
- ¬ Environment & Geological Resources (GE)
- ¬ Ecophysiology and Grape Functional Genomics (EGFV)
- ¬ Enology
- ¬ Material and System Integration (IMS)
- ¬ INRA Governance of Cooperatives, Territories, the Environment and Agricultural Enterprises (GAIA)
- ¬ Bordeaux Institute of Mechanics and Engineering (I2M)
  - ¬ The Africas in the World (LAM)
  - ¬ Sciences Action Development Activities Products Territories (SAD-APT)

#### **AN EXCEPTIONAL LOCATION**

#### IN THE CENTER OF EUROPE

The Nouvelle - Aquitaine Region is one of the most famous wine and spirit regions in the world and accounts for 20% of the vineyard area of France with Bordeaux, Cognac and Armagnac. While most of the region's exports come from the agricultural and food sector, leading industries in aerospace, chemistry and ecoindustry, are important clusters as well. You can enjoy surfing on the Atlantic coast, hiking in the Landes forest, visiting the prehistoric sites of the Périgord, trekking or skiing in the Pyrenees, going to music concerts and theater shows throughout the year, and discovering typical French culture marked by its regional traditions, local gastronomy and historical villages.





















