Bachelor's degree in Agronomic Science Engineering

On the bachelor's degree in Agronomic Science Engineering (which merges the content that had until now been taught on the bachelor's degrees in Agricultural Engineering and Agricultural, Environmental and Landscape Engineering), you will acquire the scientific and technological knowledge to design, plan, supervise and manage processes related to agricultural and livestock production; food quality control and safety mechanisms; the economic viability of farming companies; actions for environmental and landscape preservation and improvement; spatial planning; and fruit and vegetable production.

You can choose between two majors:

**Horticulture and Gardening.** You will receive multidisciplinary training in areas such as environmental management systems; water use; landscape design; implementation of green spaces; ecosystems and biodiversity; fruit and vegetable production; and plant propagation and nursery techniques. You will also learn the fundamentals of engineering technology, which will enable you to design green spaces and carry out environmental conservation and improvement, landscaping and fruit and vegetable production projects.

**Agricultural Production.** You will receive training in animal health, nutrition and welfare; livestock production systems; extensive farming and fruit and vegetable production; irrigation technology; agricultural machinery and buildings; crop protection; waste management; agroecology; and organic food production.

**Majors**
- Horticulture and Gardening
- Agricultural Production

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**GENERAL DETAILS**

**Duration**
4 years

**Study load**
240 ECTS credits (including the bachelor's thesis). One credit is equivalent to a study load of 25-30 hours.

**Delivery**
Face-to-face

**Fees and grants**
Approximate fees per academic year: €2,551 (€3,827 for non-EU residents). [Consult the public fees system based on income (grants and payment options).](#)

**Location**
Barcelona School of Agricultural Engineering (ESAB)

**Official degree**
Recorded in the Ministry of Education's degree register

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**ADMISSION**

**Places**
60

**Registration and enrolment**
What are the requirements to enrol in a bachelor's degree course?

**Legalisation of foreign documents**
All documents issued in non-EU countries must be legalised and bear the corresponding apostille.

PROFESSIONAL OPPORTUNITIES

Professional opportunities
- Technical management of agricultural and livestock farms and plant nurseries.
- Freelance work: projects, consulting, advice, appraisals, site management, environmental studies, surveying applications, occupational health and safety studies, etc.
- Public administrations (European Union, Spain, autonomous communities, city councils): rural development; spatial planning and management of rural areas; planning and management of green spaces and sports areas; management and use of municipal waste; and restoration and recovery of natural spaces.
- Agricultural service companies: agricultural and livestock facilities, rural infrastructure, agricultural machinery, seeds, pesticides, fertilisers, irrigation systems, computer technologies for agriculture, quality control, etc.
- Management and handling of water resources for agricultural use and agroenergy resources and use of agricultural waste.
- Management of agricultural companies and cooperatives and marketing and sales.
- Environmental and landscaping service companies: environmental impact and restoration studies and design of gardens and green spaces.
- Research and development in companies and public bodies: agricultural biotechnology, rural development, agricultural economics, food engineering, rural engineering, environmental management, and animal and crop production.

ORGANISATION: ACADEMIC CALENDAR AND REGULATIONS

Academic calendar
General academic calendar for bachelor's, master's and doctoral degrees courses

Academic regulations
Academic regulations for bachelor's degree courses at the UPC

Language certification and credit recognition
Queries about language courses and certification

Barcelona School of Agricultural Engineering (ESAB)

CURRICULUM

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| Earth Sciences | 6 | Compulsory |
| Mathematics II | 6 | Compulsory |
| Physics II | 6 | Compulsory |
| Plant Biology | 6 | Compulsory |

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| | Earth Sciences | 6 | Compulsory |
| | Mathematics II | 6 | Compulsory |
| | Physics II | 6 | Compulsory |
| | Plant Biology | 6 | Compulsory |
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| | Earth Sciences | 6 | Compulsory |
| | Mathematics II | 6 | Compulsory |
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| | Mathematics II | 6 | Compulsory |
| | Physics II | 6 | Compulsory |
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<td>Entrepreneurship in the Agri-Food Sector</td>
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<td>Life-Cycle Assessment of Products and Processes</td>
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EIGHTH SEMESTER

Projects | 6 | Compulsory
Treatment and Use of Waste and Water | 6 | Compulsory
Bachelor's Thesis | 18 | Project

Major in (Eng) Menció Producció Agropecuària + Hortofructicultura i Jardineria +

Projects | 6 | Compulsory
Treatment and Use of Waste and Water | 6 | Compulsory
Bachelor's Thesis | 18 | Project

Major in (Eng) Optativitat Menció Hortofructicultura i Jardineria

Projects | 6 | Compulsory
Treatment and Use of Waste and Water | 6 | Compulsory
Bachelor's Thesis | 18 | Project

Major in (Eng) Optativitat Menció Producció Agropecuàri

Projects | 6 | Compulsory
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