Bachelor’s Degree in
AGRICULTURAL ENGINEERING

Modern agriculture, efficient and technologically advanced based on the respect for the environment and animal welfare

Productive and quality agriculture, organic agriculture, local food, …
INTRODUCTION

The bachelor's degree in Agricultural Engineering will provide you with the scientific and technological knowledge necessary to design, plan, manage and organise processes related to agricultural and livestock production, quality control and food safety mechanisms, and the economic viability of agricultural business. You will receive multidisciplinary training in vegetable production techniques and their application to the management of agricultural and horticultural farms, in animal production techniques and their application to the management of livestock farms, and in the technological foundations of engineering for designing agricultural production facilities and agro-industrial buildings.

Professional recognition
Technical agricultural engineer

Duration
4 years

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

Delivery
Face-to-face classes.

PROFESSIONAL OPPORTUNITIES

- Technical management of agricultural and livestock farms.
- Freelance work: projects, consultancy, advice, appraisals, site management, environmental studies, etc.
- Rural development, spatial planning and management in the public administration.
- Agricultural service companies: agricultural and livestock facilities, rural infrastructure, agricultural machinery, seeds, fertilisers, pesticides, irrigation systems, etc.
- Design and management of water resources for agriculture and agro-energy projects.
- Quality control and food safety.
- Environmental impact assessment and agricultural waste management.
- Finance, marketing and management of Agro-business.

COURSE STRUCTURE

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<th>FALL</th>
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<tr>
<td>1st year</td>
<td>FIRST SEMESTER</td>
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<tr>
<td>General Biology (6)</td>
<td>Plant Biology (6)</td>
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<td>Drawing for Engineering (6)</td>
<td>Earth Sciences (6)</td>
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<tr>
<td>Physics I (6)</td>
<td>Physics II (6)</td>
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<tr>
<td>Mathematics I (6)</td>
<td>Mathematics II (6)</td>
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<tr>
<td>Chemistry I (6)</td>
<td>Chemistry II (6)</td>
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| 2nd year | THIRD SEMESTER | FOURTH SEMESTER |
| Economics and Business Administration (6) | Animal Production (6) |
| Statistics (6) | Plant Production Systems (6) |
| Hydraulics (6) | Geomatics (6) |
| Energy Systems and Components (6) | Market Analysis and Agricultural Valuation (6) |

| 3rd year | FIFTH SEMESTER | SIXTH SEMESTER |
| Agricultural Mechanisation (6) | Irrigation Technology (6) |
| Animal Anatomy and Physiology (6) | Animal Production Techniques (6) |
| Animal Production Systems (6) | Grain and Biomass Crops (6) |
| Horticulture: Vegetable and Ornamental Production (6) | Genetics and Breeding (6) |
| Horticulture: Fruit Production (6) | Construction and Structural Design (6) |

| 4th year | SEVENTH SEMESTER | EIGHTH SEMESTER |
| Crop Protection (6) | Organic Waste Treatment and Use (6) |
| Bachelor's Thesis or Project (24) | Bachelor's Thesis or Project (24) |
| Work Placement (12) | Work Placement (12) |
| National and International Mobility: Sicue, Erasmus... (up to 24) | National and International Mobility: Sicue, Erasmus... (up to 24) |
| ELECTIVE COURSES: (up to 24) | ELECTIVE COURSES: (up to 24) |
| Viticulture (6) | Advanced Statistics (6) |
| Extensive Animal Husbandry (6) | Local Food Processing (6) |
| Organic Agriculture (6) | |