

### **Bachelor's degree year 1 - semester 1**

Tools for mathematics and physics 1 (6 ECTS), including:

\*\* Tools for mathematics (2 ECTS)

\*\* Tools for physics (4 ECTS)

Atoms and molecules (6 ECTS)

Animal and plant biology (6 ECTS), including:

\*\* Animal biology (3 ECTS)

\*\* Plant biology (3 ECTS)

Origin, structure and function of Earth systems (3 ECTS), including:

\*\* Origin of the Universe, solar system, and Earth (1.5 ECTS)

\*\* Structure and function of Earth systems (1.5 ECTS)

Algorithm and computer software: initiation (3 ECTS)

Language techniques (3 ECTS)

English (3 ECTS)

### **Bachelor's degree year 1 - semester 2**

Chemical reactivity (6 ECTS)

Tools for mathematics and physics 2 (6 ECTS), including:

\*\* Tools for mathematics (3 ECTS)

\*\* Tools for physics (3 ECTS)

Cellular biology 1 (3 ECTS)

Structural biology (6 ECTS)

Language techniques and professional project (3 ECTS)

Transdisciplinary option (3 ECTS)

English (3 ECTS)

Preparation to veterinary and agronomy schools entrance exams

### **Bachelor's degree year 2 - semester 1**

Plant physiology and histology (6 ECTS)

Statistical tools (3 ECTS)

Animal development biology (3 ECTS)

Molecular biology and applications (6 ECTS), including:

\*\* Molecular biology (4 ECTS)

\*\* Applications in biology (2 ECTS)

Energetic metabolism (3 ECTS)

Mineralogy and petrology (3 ECTS)

Resources and natural hazards (3 ECTS)

English (3 ECTS)

Preparation to veterinary and agronomy schools entrance exams

### **Bachelor's degree year 2 - semester 2**

Eukaryotic genetics (3 ECTS)  
Ecology and evolution 1 (3 ECTS)  
Animal biology 2 (3 ECTS)  
Cell biology 2 (3 ECTS)  
Option (3 ECTS), choose between:  
\* Cell and gene technologies (3 ECTS)  
\* Tissue biology (3 ECTS)  
Sedimentary process (3 ECTS)  
Homeostasis and membrane physiology (6 ECTS)  
Microbiology 1 (3 ECTS)  
English (3 ECTS)  
Preparation to veterinary and agronomy schools entrance exams

### **Bachelor's degree year 3 - semester 1**

Tectonics and metamorphism 1 (3 ECTS)  
Tectonics and metamorphism 2 (3 ECTS)  
Animal biology 3 (6 ECTS)  
Cell communication and its main functions: basics (5 ECTS)  
Plant physiology (5 ECTS)  
Molecular biology and immunology for teaching (5 ECTS), including:  
\*\* Molecular biology for teaching (2.5 ECTS)  
\*\* Immunology for teaching (2.5 ECTS)  
English (3 ECTS)

### **Bachelor's degree year 3 - semester 2**

Physiology and neuroscience for teaching (8 ECTS)  
Animal development (2 ECTS)  
Didactics in Earth and life science and school internship (2 ECTS)  
On-site training in geology/plant biology (3 ECTS)  
Plant biology and development (4 ECTS)  
Regional geology (2 ECTS)  
Geochronology (3 ECTS)  
Magmatic processes (3 ECTS)  
English (3 ECTS)