**ENGLISH COURSES( only available at Master level)**

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| **MASTER LEVEL** | **COURSES** |
| **02AC: Agri-Food Engineering** (Agroingeniería) | FIRST SEMESTER- Automation and control of agro-food processes (3 ECTS)- Applied electronics (3 ECTS)- Robotics, applied to agriculture (3 ECTS)- Web services and applications in the agro-food systems (3 ECTS)- Precision agriculture (3 ECTS)- Physical properties and quality of agriculture products (3 ECTS)- Research methodology (3 ECTS)SECOND SEMESTER- Systems dynamics and modelling (3 ECTS)- Oral presentation and communication techniques (3 ECTS)- Electrical Systems in agri-food facilities (3 ECTS)- Geographical Information Systems (3 ECTS) |
| **02AH: Agroforestry Biotechnology** (Biotecnología Agroforestal) | FIRST SEMESTER- Genomics of plant-associated microorganisms (4 ECTS)- Plant biophysics (4 ECTS)- Scientific seminars (9 ECTS)SECOND SEMESTER- Plant immunity and resistance to pathogens (4 ECTS)- Plant-insect interactions: control strategies (4 ECTS)- Virulence factors in plant pathogens (4 ECTS)- Biotechnological applications of rhizobacteria (4 ECTS) |
| **02AI: Agricultural, Food and Natural Resource Economics** (Economía Agraria, Alimentaria y de los Recursos Naturales) | FIRST SEMESTER - Economics (4 ECTS)SECOND SEMESTER- Agricultural Policy (4 ECTS)- Agri-environmental Policy and Law (4 ECTS) - Water Economics and Policy (4 ECTS) |

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| **STUDY** | **COURSES** |
| **02AE: Physics of Complex System** (Física de los Sistemas Complejos) | The possibility of making a training schedule 30 ECTS in English is available. The subjects that can be studied in English are: FIRST SEMESTER- Chaos workshop (6 ECTS)- Cellular automata (3 ECTS)SECOND SEMESTER- Fractal growth (3 ECTS)- Fractal and multifractal geometry: applications (3 ECTS)- Complex networks in ecology (3 ECTS)- Semi-classical methods in chaotic systems (3 ECTS)  |
| **02AJ:** **Agro-Environmental Technology for Sustainable Agriculture (**Tecnología Agroambiental para una Agricultura Sostenible) | FIRST SEMESTER- Agricultural chemical analysis (4 ECTS)- Models for analysis of agro-environmental systems (5 ECTS)- Crop ecology and technology: productivity and resources uses (4 ECTS)- Process of soil degradation (3 ECTS)- Diffuse agricultural pollution (4 ECTS)- Integrated pest management in plant protection (5 ECTS)- Advanced seminars (9 ECTS)SECOND SEMESTER-Risk management in agriculture in a context of global change (4 ECTS)- Pedometrics: mathematical techniques and modeling (4 ECTS)- Experimental design and statistical data analysis (4 ECTS)- Soil quality and growing media (5 ECTS) |
| **02AK**: **Technology for Human Development and Cooperation** (Tecnología para el Desarrollo Humano y la Cooperación) | Although the courses aren’t taught in English, they offer to the exchange students:**- Material in English - Tutoring in English - Exams in English** |

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| **STUDY** | **COURSES** |
| **02AM: Plant Genetic Resources Conservation** (Recursos Fitogenéticos) | FIRST SEMESTER- Ex situ conservation of plant: resources (6 ECTS)- Plant genetic resources: origin and systematic (6 ECTS)- Habitat conservation and characterization (4 ECTS)SECOND SEMESTER-Plant genetic resources characterization I (4 ECTS)- Plant genetic resources characterization II (4 ECTS)- In vitro culture techniques applied to plant genetic resources conservation (4 ECTS)- Design and analysis of experiments (3 ECTS)  |