

OFERTA ACADÉMICA PARA ESTUDIANTES EN MOVILIDAD

Los estudiantes en movilidad IN que van a estudiar en la Escuela Politécnica Superior (EPS) pueden incluir en su ACUERDO DE ESTUDIOS (AE) cualquier asignatura de las tres titulaciones que se imparten en nuestro centro, independientemente del área para la que está firmado el convenio de movilidad y de su nivel de estudios (grado/máster). También es posible recoger en el AE créditos de prácticas y/o estancias de investigación con el fin de realizar trabajos experimentales destinados al Trabajo Fin de Estudios o Proyecto Fin de Carrera, que podrá ser defendido en la UZ o en su universidad de origen. Interesados, ver: <https://eps.unizar.es/en/internships> / <https://eps.unizar.es/investigacion>

Por otra parte, teniendo en cuenta que la mayoría de las asignaturas deben impartirse en la EPS (caso en que el convenio de movilidad esté firmado con nosotros), es posible incluir en el AE algún curso de otra Facultad/Escuela de la Universidad de Zaragoza (excepto aquellos con restricciones). No obstante, se recomienda estudiar bien la logística (horarios, distancias, etc.) ya que nuestra Escuela pertenece al Campus de Huesca (a 75 km aprox. de Zaragoza) y está ubicada a 3 km aprox. del centro de la ciudad de Huesca.

Oferta de la Escuela Politécnica Superior

Ver tablas más abajo.

Oferta del Campus de Huesca

Estudios de Grado: <https://campushuesca.unizar.es/gradoshuesca>

Estudios de Máster y Doctorado: <https://campushuesca.unizar.es/master>

Facultades/Escuelas: <https://campushuesca.unizar.es/centros-del-campus-de-huesca>

Oferta general de la Universidad de Zaragoza

Estudios de Grado/Máster/Doctorado: <https://estudios.unizar.es/>

Facultades/Escuelas: <http://www.unizar.es/estructura/centros>

COURSE CATALOGUE FOR EXCHANGE STUDENTS

Students in mobility IN who are going to study at the Technological College: Agri-food and Environment (EPS) may include in their LEARNING AGREEMENT (LA) any course of the three degrees that are taught in our College, regardless of the area for which the exchange agreement is signed and of their level of studies (bachelor/master). It is also possible to include in the LA ECTSs of internships and/or research stays in order to carry out experimental works for the Bachelor/Master Theses, which may be defended at the UZ or at your home university.

If you are interested, see: <https://eps.unizar.es/en/internships> / <https://eps.unizar.es/investigacion>

In addition, even when you should choose the majority of your courses from the faculty/college that has the exchange agreement with your home institution (EPS, in our case), you may also look for suitable courses for your LA from other Faculties/Colleges of the University of Zaragoza (except the ones with restrictions). However, please note that you must study well logistics issues (schedules, distances, etc.) since our College belongs to the Campus of Huesca (75 km approx. from Zaragoza) and is located 3 km approx. from the center of the city of Huesca.

Courses at the Technological College: Agri-food and Environment (EPS)

See tables below.

Courses at the Huesca Campus

Bachelor: <https://campushuesca.unizar.es/gradoshuesca>

Master and Doctorate: <https://campushuesca.unizar.es/master>

Faculties/Colleges: <https://campushuesca.unizar.es/centros-del-campus-de-huesca>

Courses at the University of Zaragoza

Bachelor/Master/Doctorate: <https://estudios.unizar.es/>

Faculties/Colleges: <http://www.unizar.es/estructura/centros>

PROGRAMA DEL GRADO EN CIENCIAS AMBIENTALES

Más información de las asignaturas en: <https://estudios.unizar.es/estudio/ver?id=100>

Horarios y calendario de exámenes en: <http://eps.unizar.es/academico/horarios-ccaa>

Listado de asignaturas dentro del English Friendly Program (EF) en: <https://eps.unizar.es/subjects-asignaturasef>

| Curso | Sem. | Asignatura | Tipo | ECTS | EF | Curso | Sem. | Asignatura | Tipo | ECTS | EF |
|-------|------|--|------|------|----|-------|------|---|------|------|----|
| 1 | 1 | 25200 - Bases químicas del medio ambiente | B | 6 | ✓ | 1 | 2 | 25205 - Administración y legislación ambiental | B | 6 | |
| 1 | 1 | 25201 - Biología | B | 6 | ✓ | 1 | 2 | 25206 - Bases físicas del medio ambiente | B | 6 | ✓ |
| 1 | 1 | 25202 - Fundamentos de geología para el estudio del medio ambiente | B | 6 | ✓ | 1 | 2 | 25208 - Edafología | B | 6 | ✓ |
| 1 | 1 | 25203 - Fundamentos matemáticos para el estudio del medio ambiente | B | 6 | | 1 | 2 | 25251 - Botánica | B | 6 | |
| 1 | 1 | 25250 - Medio ambiente y sostenibilidad | Ob | 6 | ✓ | 1 | 2 | 25252 - Zoología | B | 6 | ✓ |
| | | | | | | | | | | | |
| 2 | 1 | 25211 - Ecología I | Ob | 6 | ✓ | 2 | 2 | 25215 - Ecología II | Ob | 6 | ✓ |
| 2 | 1 | 25253 - Sociedad y territorio | Ob | 3 | | 2 | 2 | 25255 - Análisis químico en el medio ambiente | Ob | 6 | |
| 2 | 1 | 25254 - Cartografía y sistemas de información geográfica | Ob | 9 | | 2 | 2 | 25218 - Degradación y contaminación de suelos | Ob | 6 | ✓ |
| 2 | 1 | 25214 - Meteorología y climatología | Ob | 6 | ✓ | 2 | 2 | 25219 - Contaminación atmosférica | Ob | 6 | ✓ |
| 2 | 1 | 25209 - Estadística | B | 6 | | 2 | 2 | 25204 - Economía aplicada | B | 6 | |
| | | | | | | | | | | | |
| 3 | 1 | 25220 - Riesgos naturales | Ob | 6 | | 3 | 2 | 25225 - Gestión y conservación de flora y fauna | Ob | 6 | ✓ |
| 3 | 1 | 25223 - Actividad agrosilvopastoral y medio ambiente | Ob | 6 | | 3 | 2 | 25226 - Gestión, tratamiento y recuperación de residuos | Ob | 6 | ✓ |
| 3 | 1 | 25224 - Contaminación de aguas | Ob | 6 | ✓ | 3 | 2 | 25228 - Ordenación del territorio y urbanismo | Ob | 6 | |
| 3 | 1 | 25210 - Bases de la ingeniería ambiental | Ob | 6 | | 3 | 2 | 25222 - Tecnologías limpias. Energías renovables | Ob | 6 | ✓ |
| 3 | 1 | 25256 - Toxicología y salud pública | Ob | 6 | | 3 | 2 | Asignatura optativa 1 | Op | | |
| | | | | | | | | | | | |
| 4 | 1 | 25230 - Evaluación de impacto ambiental | Ob | 6 | | 4 | 2 | 25232 - Trabajo Fin de Grado | TFG | 12 | |
| 4 | 1 | 25257 - Sistemas de gestión y auditorías ambientales | Ob | 6 | ✓ | 4 | 2 | 25259 - Proyectos ambientales | Ob | 12 | |
| 4 | 1 | 25258 - Áreas protegidas | Ob | 6 | ✓ | 4 | 2 | Idioma moderno B1* | Ob | 2 | |
| 4 | 1 | Asignatura optativa 2 | Op | | | 4 | 2 | Asignatura optativa 4 | Op | | |
| 4 | 1 | Asignatura optativa 3 | Op | | | 4 | 2 | Asignatura optativa 5 | Op | | |

B: básica; Ob: obligatoria; Op: optativa; TFG: Trabajo Fin de Grado.

Primer semestre: Septiembre – Enero, Segundo semestre: Febrero – Junio.

*Los estudiantes deben acreditar nivel B-1 en un idioma extranjero (Inglés, Francés, Alemán, Italiano).

| | Curso 3 / Semestre 2** | | Curso 4 / Semestre 1 | | Curso 4 / Semestre 2 | | | | |
|-----------------------|--|----|----------------------|---|----------------------|----|--|----|---|
| | ECTS | EF | ECTS | EF | ECTS | EF | ECTS | EF | |
| Asignaturas optativas | 25236 - Contaminación radiactiva, acústica y por vibraciones | 6 | ✓ | 25248 - Actividades clasificadas | 6 | | 25221 - Educación ambiental | 6 | ✓ |
| | 25238 - Tecnología analítica en la detección de contaminantes | 6 | | 25263 - Química sostenible y medioambiental | 6 | ✓ | 25241 - Biotecnología y conservación de recursos | 6 | |
| | 25245 - Evaluación de suelos | 6 | ✓ | 25264 - Prácticas externas | 5 | | 25267 - Biogeografía y geobotánica | 5 | |
| | 25260 - Aplicación de residuos al suelo y fertilidad | 5 | | 25265 - Teledetección ambiental | 6 | | 25268 - Ecosistemas acuáticos | 6 | ✓ |
| | 25261 - Acreditación y normas de calidad en laboratorios ambientales | 5 | | 25266 - Restauración de ecosistemas | 6 | | 25269 - Inglés para las ciencias ambientales (impartida en inglés) | 6 | ✓ |
| | 25262 - Hidrología ambiental | 6 | | | | | | | |

**Cada curso académico estarán activas 3 de estas 6 asignaturas: 25238, 25245, 25262 (cursos impares: 2019-20, 2021-22, etc.) y 25236, 25260, 25261 (cursos pares: 2020-21, 2022-23, etc.).

SUBJECTS – DEGREE IN ENVIRONMENTAL SCIENCES

For courses descriptions and further information, see: <https://estudios.unizar.es/estudio/ver?id=100>

For lectures schedules and exam calendar, see: <http://eps.unizar.es/academico/horarios-cca>

For a list of courses included in the English Friendly Program (EF), see: <https://eps.unizar.es/subjects-asignaturasef>

| Year | Sem | Subject | Type | ECTS | EF | Year | Sem | Subject | Type | ECTS | EF |
|------|-----|--|------|------|----|------|-----|--|------|------|----|
| 1 | 1 | 25200 - Chemical foundations of the environment | Cr | 6 | ✓ | 1 | 2 | 25205 - Environmental administration and law | Cr | 6 | |
| 1 | 1 | 25201 - Biology | Cr | 6 | ✓ | 1 | 2 | 25206 - Physical foundations of the environment | Cr | 6 | ✓ |
| 1 | 1 | 25202 - Introductory geology for environmental science | Cr | 6 | ✓ | 1 | 2 | 25208 - Soil science | Cr | 6 | ✓ |
| 1 | 1 | 25203 - Basic mathematics for environmental studies | Cr | 6 | | 1 | 2 | 25251 - Botany | Cr | 6 | |
| 1 | 1 | 25250 - Environmental science and sustainability | Cm | 6 | ✓ | 1 | 2 | 25252 - Zoology | Cr | 6 | ✓ |
| 2 | 1 | 25211 - Ecology I | Cm | 6 | ✓ | 2 | 2 | 25215 - Ecology II | Cm | 6 | ✓ |
| 2 | 1 | 25253 - Society and land | Cm | 3 | | 2 | 2 | 25255 - Key analysis in the environment | Cm | 6 | |
| 2 | 1 | 25254 - Cartography and geographical information systems | Cm | 9 | | 2 | 2 | 25218 - Soil degradation and pollution | Cm | 6 | ✓ |
| 2 | 1 | 25214 - Meteorology and climatology | Cm | 6 | ✓ | 2 | 2 | 25219 - Atmospheric pollution | Cm | 6 | ✓ |
| 2 | 1 | 25209 - Statistics | Cr | 6 | | 2 | 2 | 25204 - Applied economics | Cr | 6 | |
| 3 | 1 | 25220 - Natural risks | Cm | 6 | | 3 | 2 | 25225 - Management and conservation of flora and fauna | Cm | 6 | ✓ |
| 3 | 1 | 25223 - Agrosilvopastoral systems | Cm | 6 | | 3 | 2 | 25226 - Management, treatment and recovery of waste | Cm | 6 | ✓ |
| 3 | 1 | 25224 - Water pollution | Cm | 6 | ✓ | 3 | 2 | 25228 - Regional planning and urbanism | Cm | 6 | |
| 3 | 1 | 25210 - Foundations of environmental engineering | Cm | 6 | | 3 | 2 | 25222 - Clean technologies. Renewable energies | Cm | 6 | ✓ |
| 3 | 1 | 25256 - Toxicology and public health | Cm | 6 | | 3 | 2 | Optional subject 1 | Op | | |
| 4 | 1 | 25230 - Environmental impact assessment | Cm | 6 | | 4 | 2 | 25232 - Undergraduate dissertation | Ds | 12 | |
| 4 | 1 | 25257 - Environmental management and audit | Cm | 6 | ✓ | 4 | 2 | 25259 - Environment projects | Cm | 12 | |
| 4 | 1 | 25258 - Protected areas | Cm | 6 | ✓ | 4 | 2 | Modern language B1* | Cm | 2 | |
| 4 | 1 | Optional subject 2 | Op | | | 4 | 2 | Optional subject 4 | Op | | |
| 4 | 1 | Optional subject 3 | Op | | | 4 | 2 | Optional subject 5 | Op | | |

Cr: core; Cm: compulsory; Op: optional; Ds: dissertation.

First semester: September – January, Second semester: February – June.

*Students must verify that level B-1 of a foreign language (English, French, German, and Italian) is met.

| Asignaturas optativas | Curso 3 / Semestre 2** | ECTS | EF | Curso 4 / Semestre 1 | ECTS | EF | Curso 4 / Semestre 2 | ECTS | EF |
|-----------------------|---|------|----|---|------|----|--|------|----|
| | 25236 - Radioactive contamination, acoustic and vibration pollution | 6 | ✓ | 25248 - Classified activities | 6 | | 25221 - Environmental education | 6 | ✓ |
| | 25238 - Analytical technology for the detection of contaminants | 6 | | 25263 - Environmental and sustainable chemistry | 6 | ✓ | 25241 - Biotechnology and resource conservation | 6 | |
| | 25245 - Soil and land evaluation | 6 | ✓ | 25264 - Internships | 5 | | 25267 - Bio-geography and geobotany | 5 | |
| | 25260 - Waste application on soil and fertility | 5 | | 25265 - Environmental remote sensing | 6 | | 25268 - Aquatic ecosystems | 6 | ✓ |
| | 25261 - Accreditation and quality standards in environmental laboratories | 5 | | 25266 - Ecosystem restoration | 6 | | 25269 - English for environmental sciences (taught in English) | 6 | ✓ |
| | 25262 - Environmental hydrology | 6 | | | | | | | |

**Each academic course, 3 of these 6 subjects will be active: 25238, 25245, 25262 (odd courses: 2019-20, 2021-22, etc.) and 25236, 25260, 25261 (even courses: 2020-21, 2022-23, etc.).

PROGRAMA DEL GRADO EN INGENIERÍA AGROALIMENTARIA Y DEL MEDIO RURAL

Más información de las asignaturas en: <https://estudios.unizar.es/estudio/ver?id=140>

Horarios y calendario de exámenes en: <http://eps.unizar.es/academico/horarios-iamr>

Listado de asignaturas dentro del English Friendly Program en: <https://eps.unizar.es/subjects-asignaturasef>

| Curso | Sem. | Asignatura | Tipo | ECTS | EF | Curso | Sem. | Asignatura | Tipo | ECTS | EF | |
|-------|------|--|---------|------|----|-------|------|--|---------|------|----|--|
| 1 | 1 | 28900 Matemáticas I | B | 6 | | 1 | 2 | 28905 Matemáticas II | B | 6 | | |
| 1 | 1 | 28901 Física I | B | 6 | | 1 | 2 | 28906 Física II | B | 6 | | |
| 1 | 1 | 28902 Química I | B | 6 | ✓ | 1 | 2 | 28907 Química II | B | 6 | ✓ | |
| 1 | 1 | 28903 Informática | B | 6 | | 1 | 2 | 28908 Expresión gráfica | B | 6 | | |
| 1 | 1 | 28904 Geología, edafología y climatología | B | 6 | | 1 | 2 | 28909 Biología | B | 6 | ✓ | |
| 2 | 1 | 28910 Estadística | B | 6 | | 2 | 2 | 28911 Botánica | Obg | 6 | | |
| 2 | 1 | 28912 Ciencia animal I | Obg | 6 | | 2 | 2 | 28915 Fundamentos de administración de empresas | B | 6 | | |
| 2 | 1 | 28913 Motores y máquinas | Obg | 6 | ✓ | 2 | 2 | 28916 Fitotecnia | Obg | 6 | | |
| 2 | 1 | 28914 Topografía, cartografía y fotogrametría | Obg | 6 | ✓ | 2 | 2 | 28917 Ecología y gestión de subproductos agroindustriales | Obg | 6 | ✓ | |
| 2 | 1 | 28919 Electrotecnia y electrificación rural | Obg | 6 | ✓ | 2 | 2 | 28918 Resistencia de materiales y cálculo de estructuras | Obg | 6 | ✓ | |
| 3 | 1 | 28920 Biotecnología | Obg | 6 | ✓ | 3 | 2 | 28925 Producción de monogástricos | Obe EA | 6 | ✓ | |
| 3 | 1 | 28921 Hidráulica | Obg | 6 | ✓ | 3 | 2 | 28926 Cultivos herbáceos | Obe EA | 6 | | |
| 3 | 1 | 28922 Economía agraria | Obg | 6 | | 3 | 2 | 28927 Arboricultura | Obe EA | 6 | | |
| 3 | 1 | 28923 Proyectos | Obg | 6 | | 3 | 2 | 28928 Instalaciones en explotaciones agropecuarias | Obe EA | 6 | ✓ | |
| 3 | 1 | 28924 Ciencia animal II | Obe EA | 6 | | 3 | 2 | 28929 Construcciones agropecuarias | Obe EA | 6 | | |
| 3 | 1 | 28936 Operaciones básicas I | Obe IAA | 6 | ✓ | 3 | 2 | 28937 Operaciones básicas II | Obe IAA | 6 | ✓ | |
| 3 | 1 | 28930 Producción hortícola | Obe HJ | 6 | | 3 | 2 | 28938 Fundamentos de la tecnología de los alimentos | Obe IAA | 6 | ✓ | |
| | | | | | | 3 | 2 | 28939 Gestión de la calidad de las industrias agroalimentarias | Obe IAA | 6 | | |
| | | | | | | 3 | 2 | 28940 Ingeniería de las industrias agroalimentarias | Obe IAA | 6 | | |
| | | | | | | 3 | 2 | 28941 Construcciones agroindustriales | Obe IAA | 6 | | |
| | | | | | | 3 | 2 | 28931 Producción frutícola I | Obe HJ | 6 | | |
| | | | | | | 3 | 2 | 28932 Genética y mejora vegetal en hortofruticultura | Obe HJ | 6 | | |
| | | | | | | 3 | 2 | 28934 Cultivos ornamentales | Obe HJ | 6 | | |
| | | | | | | 3 | 2 | 28947 Desarrollo sostenible y medio ambiente | Obe HJ | 6 | | |
| | | | | | | 3 | 2 | 28948 Ingeniería de las áreas verdes y explotaciones hortofrutícolas | Obe HJ | 6 | | |
| 4 | 1 | 28942 Producción de rumiantes | Obe EA | 6 | | 4 | 2 | Idioma moderno B1* | Obg | 2 | | |
| 4 | 1 | 28943 Genética y mejora vegetal | Obe EA | 6 | ✓ | 4 | 2 | Asignatura optativa 1 | Op | | | |
| 4 | 1 | 28944 Protección de cultivos | Obe EA | 6 | ✓ | 4 | 2 | Asignatura optativa 2 | Op | | | |
| 4 | 1 | 28945 Sistemas de riego y drenaje | Obe EA | 6 | | 4 | 2 | Asignatura optativa 3 | Op | | | |
| 4 | 1 | 28950 Diseño y optimización de industrias agroalimentarias | Obe IAA | 6 | ✓ | 4 | 2 | Asignatura optativa 4 | Op | | | |
| 4 | 1 | 28951 Tecnología de las industrias agroalimentarias | Obe IAA | 6 | | | | | | | | |
| 4 | 1 | 28952 Equipos auxiliares y control de procesos | Obe IAA | 6 | | | | | | | | |
| 4 | 1 | 28953 Instalaciones agroindustriales | Obe IAA | 6 | | | | | | | | |
| 4 | 1 | 28933 Protección de cultivos hortofrutícolas | Obe HJ | 6 | | | | | | | | |
| 4 | 1 | 28935 Sistemas de riego y drenaje en explotaciones hortofrutícolas | Obe HJ | 6 | | | | | | | | |
| 4 | 1 | 28946 Producción frutícola II | Obe HJ | 6 | | | | | | | | |
| 4 | 1 | 28949 Jardinería y paisajismo | Obe HJ | 6 | | | | | | | | |
| 4 | 1-2 | Trabajo Fin de Grado | | | | | | | | TFG | 12 | |

B: básica; Obg: obligatoria-general, Obe: obligatoria-específica de cada especialidad (EA: Explotaciones Agropecuarias, IAA: Industrias Agrarias y Alimentarias, HJ: Hortofruticultura y Jardinería); Op: optativa. TFG: Trabajo Fin de Grado. Primer semestre: Septiembre – Enero, Segundo semestre: Febrero – Junio.

*Los estudiantes deben acreditar nivel B-1 en un idioma extranjero (Inglés, Francés, Alemán, Italiano).

| Asignaturas optativas | ECTS | EF | ECTS | EF | ECTS | EF | | |
|---|------|----|---|----|------|--|---|---|
| 28955 Inglés para la ingeniería agroalimentaria y del medio rural (impartida en inglés) | 6 | ✓ | 28958 Redes de riego | 6 | ✓ | 28961 Aprovechamiento energético de productos y residuos | 5 | ✓ |
| 28956 Análisis químico agrícola | 6 | | 28959 Producción integrada y agroecología | 5 | | 28965 Edafología aplicada | 5 | |
| 28957 Tecnología postcosecha | 6 | ✓ | 28960 Instalaciones de la edificación | 5 | ✓ | 28966 Prácticas externas | 5 | |

SUBJECTS DEGREE IN RURAL AND AGRI-FOOD ENGINEERING

For courses descriptions and further information, see: <https://estudios.unizar.es/estudio/ver?id=140>

For lectures schedules and exam calendar, see: <http://eps.unizar.es/academico/horarios-iamr>

For a list of courses included in the English Friendly Program, see: <https://eps.unizar.es/subjects-asignaturasef>

| Year | Sem | Subject | Type | ECTS | EF | Year | Sem | Subject | Type | ECTS | EF |
|------|-----|---|---------|------|----|------|-----|--|---------|------|----|
| 1 | 1 | 28900 Mathematics I | Cr | 6 | | 1 | 2 | 28905 Mathematics II | Cr | 6 | |
| 1 | 1 | 28901 Physics I | Cr | 6 | | 1 | 2 | 28906 Physics II | Cr | 6 | |
| 1 | 1 | 28902 Chemistry I | Cr | 6 | ✓ | 1 | 2 | 28907 Chemistry II | Cr | 6 | ✓ |
| 1 | 1 | 28903 Computer science | Cr | 6 | | 1 | 2 | 28908 Graphic expression | Cr | 6 | |
| 1 | 1 | 28904 Geology, soil science and climatology | Cr | 6 | | 1 | 2 | 28909 Biology | Cr | 6 | ✓ |
| 2 | 1 | 28910 Statistics | Cr | 6 | | 2 | 2 | 28911 Botany | Cmg | 6 | |
| 2 | 1 | 28912 Animal science I | Cmg | 6 | | 2 | 2 | 28915 Fundamentals of business administration | Cr | 6 | |
| 2 | 1 | 28913 Engines and machines | Cmg | 6 | ✓ | 2 | 2 | 28916 Plant science / Plant production | Cmg | 6 | |
| 2 | 1 | 28914 Topography, cartography and photogrammetry | Cmg | 6 | ✓ | 2 | 2 | 28917 Ecology and management of agro-industrial byproducts | Cmg | 6 | ✓ |
| 2 | 1 | 28919 Electrical engineering and rural electrification | Cmg | 6 | ✓ | 2 | 2 | 28918 Strength of materials and structural analysis | Cmg | 6 | ✓ |
| 3 | 1 | 28920 Biotechnology | Cmg | 6 | ✓ | 3 | 2 | 28925 Production of monogastric animals | Cms ALF | 6 | ✓ |
| 3 | 1 | 28921 Hydraulics | Cmg | 6 | ✓ | 3 | 2 | 28926 Herbaceous crops | Cms ALF | 6 | |
| 3 | 1 | 28922 Agricultural economics | Cmg | 6 | | 3 | 2 | 28927 Fruit growing | Cms ALF | 6 | |
| 3 | 1 | 28923 Projects | Cmg | 6 | | 3 | 2 | 28928 Livestock farming facilities and equipment | Cms ALF | 6 | ✓ |
| 3 | 1 | 28924 Animal Science II | Cms ALF | 6 | | 3 | 2 | 28929 Farming: Construction | Cms ALF | 6 | |
| 3 | 1 | 28936 Unit Operations I | Cms AFI | 6 | ✓ | 3 | 2 | 28937 Unit Operations II | Cms AFI | 6 | ✓ |
| 3 | 1 | 28930 Horticultural production | Cms HFG | 6 | | 3 | 2 | 28938 Fundamentals of food technology | Cms AFI | 6 | ✓ |
| | | | | | | 3 | 2 | 28939 Quality management for the agri-food industry | Cms AFI | 6 | |
| | | | | | | 3 | 2 | 28940 Biochemical engineering for the agri-food industry | Cms AFI | 6 | |
| | | | | | | 3 | 2 | 28941 Agri-Industrial construction | Cms AFI | 6 | |
| | | | | | | 3 | 2 | 28931 Fruit production I | Cms HFG | 6 | |
| | | | | | | 3 | 2 | 28932 Plant breeding in horticulture | Cms HFG | 6 | |
| | | | | | | 3 | 2 | 28934 Ornamental crops | Cms HFG | 6 | |
| | | | | | | 3 | 2 | 28947 Sustainable development and the environment | Cms HFG | 6 | |
| | | | | | | 3 | 2 | 28948 Engineering of green areas | Cms HFG | 6 | |
| 4 | 1 | 28942 Ruminant production | Cms ALF | 6 | | 4 | 2 | Modern language B1* | Cmg | 2 | |
| 4 | 1 | 28943 Plant breeding | Cms ALF | 6 | ✓ | 4 | 2 | Optional subject 1 | Op | | |
| 4 | 1 | 28944 Crop protection | Cms ALF | 6 | ✓ | 4 | 2 | Optional subject 2 | Op | | |
| 4 | 1 | 28945 Irrigation and drainage systems | Cms ALF | 6 | | 4 | 2 | Optional subject 3 | Op | | |
| 4 | 1 | 28950 Agri-food Industry: Design and optimisation | Cms AFI | 6 | ✓ | 4 | 2 | Optional subject 4 | Op | | |
| 4 | 1 | 28951 Processing technologies in the food industries | Cms AFI | 6 | | | | | | | |
| 4 | 1 | 28952 Utilities and process control | Cms AFI | 6 | | | | | | | |
| 4 | 1 | 28953 Agri-food industry installations | Cms AFI | 6 | | | | | | | |
| 4 | 1 | 28933 Protection of fruit and vegetable crops | Cms HFG | 6 | | | | | | | |
| 4 | 1 | 28935 Irrigation and drainage systems in horticulture and fruit farming | Cms HFG | 6 | | | | | | | |
| 4 | 1 | 28946 Fruit production II | Cms HFG | 6 | | | | | | | |
| 4 | 1 | 28949 Gardening and landscaping | Cms HFG | 6 | | | | | | | |
| 4 | 1-2 | Undergraduate dissertation | | | | | | | | Ds | 12 |

Cr: core; Cmg: compulsory-general, Cms; Compulsory-specific to each specialty (ALF: Specialisation Agricultural and Livestock Farming, AFI: Specialisation Agricultural and Food Industries, HFG: Specialisation Horticulture, Fruit-farming and Gardening); Op: optional. Ds: dissertation. First semester: September – January, Second semester: February – June.

*Students must verify that level B-1 of a foreign language (English, French, German, Italian) is met.

| Optional subjects | | ECTS | EF | | ECTS | EF | | ECTS | EF |
|-------------------|---|------|----|---|------|----|--|------|----|
| | 28955 English for rural and agri-food engineering (taught in English) | 6 | ✓ | 28958 Irrigation networks | 6 | ✓ | 28961 Energy uses of products and wastes | 5 | ✓ |
| | 28956 Agricultural chemical analysis | 6 | | 28959 Integrated production and agroecology | 5 | | 28965 Applied soil science | 5 | |
| | 28957 Post-harvest technology | 6 | ✓ | 28960 Building installations | 5 | ✓ | 28966 Internships | 5 | |

PROGRAMA DEL MÁSTER UNIVERSITARIO EN INGENIERÍA AGRONÓMICA

Más información de las asignaturas en: <https://estudios.unizar.es/estudio/ver?id=691>

Horarios y calendario de exámenes en: <http://eps.unizar.es/academico/horarios-masteria>

Listado de asignaturas dentro del English Friendly Program en: <https://eps.unizar.es/subjects-asignaturasef>

| Curso | Semestre | Asignatura | Tipo | ECTS | EF | Módulo | Curso | Semestre | Asignatura | Tipo | ECTS | EF | Módulo |
|-------|----------|---|------|------|----|--------|-------|----------|---|------|------|----|--------|
| 1 | 1 | 60560 Calidad y seguridad alimentaria | Ob | 4.5 | | M3 | 1 | 2 | 60566 Instalaciones y vías rurales | Ob | 6 | | M1 |
| 1 | 1 | 60561 Infraestructuras rurales | Ob | 6 | ✓ | M1 | 1 | 2 | 60567 Sistemas de producción animal | Ob | 9 | | M2 |
| 1 | 1 | 60562 Marketing agroalimentario | Ob | 4.5 | ✓ | M4 | 1 | 2 | 60568 Sistemas de producción vegetal | Ob | 9 | | M2 |
| 1 | 1 | 60563 Ordenación y gestión del territorio agrario | Ob | 4.5 | | M1 | 1 | 2 | 60569 Sistemas y procesos agroalimentarios | Ob | 6 | ✓ | M3 |
| 1 | 1 | 60564 Políticas agrarias y de desarrollo rural | Ob | 4.5 | | M1 | | | | | | | |
| 1 | 1 | 60565 Recursos hídricos e instalaciones hidráulicas | Ob | 6 | ✓ | M1 | | | | | | | |
| | | | | | | | | | | | | | |
| 2 | 1 | 60570 Biotecnología y mejora vegetal y animal | Ob | 6 | | M2 | | | | | | | |
| 2 | 1 | 60571 Organización y administración de empresas agroalimentarias | Ob | 6 | | M4 | | | | | | | |
| 2 | 1 | 60572 Prácticas externas | Ob | 6 | | M5 | | | | | | | |
| 2 | 1 | 60573 Trabajo Fin de Máster | TFM | 12 | | M6 | | | | | | | |

Ob: obligatoria; TFM: Trabajo Fin de Máster.

Primer semestre: Septiembre – Enero, Segundo semestre: Febrero – Junio.

SUBJECTS MASTER IN AGRICULTURAL ENGINEERING

For courses descriptions and further information, see: <https://estudios.unizar.es/estudio/ver?id=691>

For lectures schedules and exam calendar, see: <http://eps.unizar.es/academico/horarios-materia>

For a list of courses included in the English Friendly Program, see: <https://eps.unizar.es/subjects-assignaturasef>

| Year | Semester | Subject | Type | ECTS | EF | Module | Year | Semester | Subject | Type | ECTS | EF | Module |
|------|----------|--|------|------|----|--------|------|----------|---|------|------|----|--------|
| 1 | 1 | 60560 Food quality and safety | Cm | 4.5 | | M3 | 1 | 2 | 60566 Rural facilities and roads | Cm | 6 | | M1 |
| 1 | 1 | 60561 Rural infrastructure | Cm | 6 | ✓ | M1 | 1 | 2 | 60567 Animal production systems | Cm | 9 | | M2 |
| 1 | 1 | 60562 Agri-food marketing | Cm | 4.5 | ✓ | M4 | 1 | 2 | 60568 Plant production systems | Cm | 9 | | M2 |
| 1 | 1 | 60563 Agricultural land-use planning and management | Cm | 4.5 | | M1 | 1 | 2 | 60569 Systems and processes of food industries | Cm | 6 | ✓ | M3 |
| 1 | 1 | 60564 Agricultural and rural development policies | Cm | 4.5 | | M1 | | | | | | | |
| 1 | 1 | 60565 Water resources and hydraulic facilities | Cm | 6 | ✓ | M1 | | | | | | | |
| | | | | | | | | | | | | | |
| 2 | 1 | 60570 Biotechnology in plant and animal breeding | Cm | 6 | | M2 | | | | | | | |
| 2 | 1 | 60571 Agri-food business management | Cm | 6 | | M4 | | | | | | | |
| 2 | 1 | 60572 Internships | Cm | 6 | | M5 | | | | | | | |
| 2 | 1 | 60573 Master dissertation | Ds | 12 | | M6 | | | | | | | |

Cm: compulsory; Ds: dissertation.

First semester: September – January, Second semester: February – June.