



Courses in English for 2026/27

NOTE: please check at

https://etsi.us.es/en/utills/docencia/consultas_academicas/programas_asignaturas.php for the description of the contents of the courses.

Bachelor's degree in Aerospace Engineering

Code	Name in Spanish	Name in English
1970020	<i>Métodos Matemáticos</i>	Mathematical Methods
1970023	<i>Diseño y Fabricación Asistidos por Ordenador</i>	Computer-Aided Design and Manufacturing
1970039	<i>Mecánica de Sólidos</i>	Solid Mechanics

Bachelor's degree in Telecommunication Engineering

Code	Name in Spanish	Name in English
1990006	<i>Estadística</i>	Statistics
1990001	<i>Física</i>	Physics
1990004	<i>Matemáticas I</i>	Mathematics I
1990005	<i>Matemáticas II</i>	Mathematics II
1990008	<i>Matemáticas III</i>	Mathematics III
1990002	<i>Fundamentos de Computadores</i>	Computer Fundamentals
1990009	<i>Tecnología de Dispositivos y Componentes</i>	Device and Component Technology

Master's degree in Aeronautical Engineering (Group 2)

Code	Name in Spanish	Name in English
51430012	<i>Aeroelasticidad</i>	Aeroelasticity



51430013	<i>Dinámica de Vehículos Espaciales</i>	Spacecraft Dynamics
51430014	<i>Diseño de Motores a Reacción</i>	Jet Engine Design
51430015	<i>Mecánica de Fluidos y Aerodinámica Avanzadas</i>	Advanced Fluid Mechanics and Aerodynamics
51430016	<i>Mecánica de Materiales Compuestos</i>	Mechanics of Composite Materials
51430007	<i>Mecánica del Vuelo Avanzada</i>	Advanced Flight Mechanics
51430010	<i>Organización Aeronáutica y Transporte Aéreo</i>	Aviation Organisation and Air Transport
51430017	<i>Procesos de Fabricación Aeronáutica</i>	Aeronautical Manufacturing Processes
51430057	<i>Sistemas de Vehículos Espaciales</i>	Spacecraft Systems
51430019	<i>Aviónica Avanzada</i>	Advanced Avionics
51430020	<i>Diseño de Turbomáquinas y Transferencia de Calor</i>	Turbomachinery Design and Heat Transfer
51430021	<i>Diseño Estructural de Aeronaves</i>	Aircraft Structural Design
51430022	<i>Diseño Mecánico de Componentes y Sistemas Aeroespaciales</i>	Mechanical Design of Aerospace Components and Systems
51430024	<i>Tráfico Aéreo Avanzado</i>	Advanced Air Traffic
51430058	<i>Mecánica Orbital Aplicada</i>	Applied Orbital Mechanics
51430031	<i>Optimización de trayectorias de aeronaves</i>	Aircraft Trajectory Optimization
51430028	<i>Helicópteros</i>	Helicopters

Master's degree in Operation of Space Systems

Code	Name in English	Semester
52280007	<i>Orbital Dynamics</i>	1
52280003	<i>Communication Electronics for Aerospace Engineers</i>	1



52280010	<i>Space Environment</i>	1
52280012	<i>Spacecraft Dynamics</i>	1
52280014	<i>Spacecraft Systems</i>	1
52280008	<i>Satellite Electronic Systems</i>	1
52280005	<i>Ground Segment and On Board Computer</i>	1
52280011	<i>Space Mission Design and Operations</i>	2
52280001	<i>Applied Orbital Mechanics</i>	2
52280009	<i>Space Communications</i>	2
52280013	<i>Spacecraft Guidance, and Navigation</i>	2
52280004	<i>Electronic Components and Systems for Space</i>	2
52280002	<i>Artificial Intelligence and Optimizacion for Space Applications</i>	2

It is fully delivered in English.

All courses are 5 ECTS

It will start in 25/26, no code number are available yet.

Master's degree in Plant Engineering [Ingeniería Industrial] (Group 1)

Code	Name in Spanish	Name in English
52210023	<i>Ingeniería de Datos en Organización</i>	Data Engineering in Organization
52210024	<i>Ingeniería Estructural</i>	Structural Engineering
52210044	<i>Tecnología Automática</i>	Automatic Technology
52210047	<i>Tecnología Eléctrica</i>	Electrical Technology
52210048	<i>Tecnología Electrónica</i>	Electronic Technology
52210049	<i>Tecnología Energética</i>	Energy Technology
52210046	<i>Tecnología de Máquinas</i>	Machine Technology



52210051	<i>Tecnología Química</i>	Chemical Technology
52210042	<i>Sistemas Integrados de Fabricación</i>	Integrated Manufacturing Systems
52210026	<i>Máquinas y Motores Térmicos</i>	Thermal Engines and Machinery
52210035	<i>Planificación y Gestión Empresarial</i>	Business Planning and Management
52210020	<i>Gestión de Proyectos Industriales</i>	Industrial Project Management
52210011	<i>Diseño y Planificación de Centros Industriales y de Servicios</i>	Design and Planning of Industrial and Service Centers
52210009	<i>Diseño de Productos en la Industria</i>	Product Design in Industry
52210042	<i>Sistemas Integrados de Fabricación</i>	Integrated Manufacturing Systems
52210086	<i>Organización de Recursos Humanos y Prevención de Riesgos Laborales</i>	Human Resources Organization and Occupational Risk Prevention
52210091	<i>Proyecto Integrado de Plantas Industriales</i>	Integrated Project of Industrial Plants
52210064	<i>Diseño de Procesos Industriales I</i>	Industrial Process Design I
52210065	<i>Diseño de Procesos Industriales II</i>	Industrial Process Design II
52210007	<i>Construcciones Industriales</i>	Industrial Constructions

Master's degree in Electronics, Robotics and Automation Engineering

Code	Name in Spanish	Name in English	Semester
51600002	<i>Comunicaciones Industriales</i>	Communications in Industry	1
51600010	<i>Proyectos de Automatización</i>	Automatization Projects	1
51600011	<i>Proyectos de Robótica</i>	Robotics Projects	1



51600014	Sistemas Digitales Avanzados y Aplicaciones	Applications and Advanced Digital Systems	1
51600005	Emprendimiento	entrepreneurship	2

All subjects have 5 ECTS except Entrepreneurship (3 ECTS)

Master's degree in Telecommunication Engineering [Optional Courses]

Jefatura de Estudios

Code	Name in Spanish	Name in English	Semester
52040017	<i>Biosensores y Bioelectrónica</i>	Biosensors and Bioelectronics	1
52040032	<i>Tecnologías de Comunicación en Biomedicina</i>	Communication Technologies in Biomedicine	1
52040018	<i>Comunicaciones y Análisis de Datos en IoT</i>	Communication and Data Analysis in IoT	1
52040031	<i>Técnicas de Inteligencia Artificial en Sistemas Distribuidos</i>	AI Techniques in Distributed Systems	1
52040024	<i>IA en Imagen Médica</i>	AI in Medical Imaging	1
52040016	<i>Arquitecturas de Servicios Sanitarios</i>	Architectures in Health Services	1

C1: October 9th - February 17th (approx.)

All courses are of 5 ECTS, (60 ECTS = 1 Full Semester)

Master's Degree Ulyseus University CITIESMD

Joint European Master Degree in Efficient and Sustainable Energy, Transport and Mobility to Build the Smart Cities of the Future. (*Limited places*)

Code	Name In English	ECTS	Semester
52200002	<i>Analysis of Active Distribution Networks</i>	4,5	1
52200003	<i>Analysis of Power Conversion Systems</i>	4,5	1
52200007	<i>Energy Conversion Systems in Smart Cities</i>	4,5	1



52200009	<i>Green Module I</i>	3	1
52200012	<i>Modern Electrical Distribution Networks</i>	4,5	1
52200014	<i>Optimal Operation of Smart Grids</i>	4,5	1
52200016	<i>Real-Time Monitoring of Smart Grids</i>	4,5	1
52200004	<i>Artificial Intelligence for Smart Cities</i>	3	2
52200006	<i>Digital Twins</i>	3	2
52200008	<i>Facility Automation Systems</i>	3	2
52200010	<i>Green Module II</i>	3	2
52200011	<i>IT Infrastructure for Smart Cities</i>	6	2

C1: October 9th - February 17th (approx.)

C2: February 15th – June 15th (approx.)

60 ECTS = 1 Full Semester