

Label	EUR-ACE®
Higher Education Institution	UNIVERSIDAD CARLOS III DE MADRID
Country	SPAIN
State/Province	MADRID
Name of the Programme	BACHELOR'S DEGREE IN AEROSPACE ENGINEERING
Degree Awarded	BACHELOR'S DEGREE IN ENGINEERING
Qualification Level	First Cycle
Programme Objectives; Profile	<p>The aim of the degree is to train Aerospace Engineers with the necessary skills (technical, practical and transversal) to develop a successful career in the aerospace industry, and with the capacity to step up to the challenges of today's society</p> <p>The profile of a graduate is that of a highly qualified professional, with a profound knowledge and understanding of the fundamentals of aerospace engineering. Graduates will be able to use the process of analysis and synthesis to solve engineering problems, showing initiative, leadership, decision-making skills, creativity and critical reasoning of the possible solutions. They will be able to apply these skills to the realization of engineering designs in the areas of aerospace vehicles, propulsion systems, navigation and air traffic control, airports, and aerospace materials and equipment, complying with specified requirements and working in multidisciplinary teams with technical and non-technical staff. Graduates will also possess the required abilities for the professional practice of engineering in the society: writing and communication skills to specialized or non-specialized public, working in international environments, continuous learning, etc.</p> <p>The study program complies with the directives included in Ministerial Order CIN/308/2009 of February 9th. Thus, at the end of their studies graduates will receive the professional accreditation to work as Aeronautical Engineer in their field of study (in Spanish, Ingeniero Técnico Aeronáutico), which can be Aerospace Vehicles or Aerospace Propulsion.</p>
	8 Semester

Programme Duration	
Total Number of ECTS Credits Awarded	240 ECTS
Brief Description of the Programme	<p><i>The curriculum of the degree has been structured in six modules (240 ECTS in total), and it is taught entirely in English.</i></p> <p><i>The first module, Basic Training in Engineering (66 ECTS), lays the foundations for the following modules, with subjects that are common to other engineering branches (physics, mathematics, chemistry, business management, etc.). The second module, Common Training in Aeronautics (84 ECTS), includes the core subjects of Aerospace Engineering: fluid mechanics, flight mechanics, structures, material science, thermodynamics, aerodynamics, navigation, air transport and airports, aerospace design, aerospace systems, and electronics. The third module, Specific Technologies (84 ECTS), allows the student to choose between two minors, Aerospace Vehicles and Aerospace Propulsion. These minors share some common subjects like advanced fluid mechanics, aerospace structures, aerospace propulsion, electronics and control, and aircraft design. Students opting for the Minor in Aerospace Vehicles also take subjects related to advanced aerodynamics, aeroelasticity, flight mechanics and avionics. Students opting for the Minor in Aerospace Propulsion take subjects like turbomachinery design, combustion, rocket engines or advanced propulsion. The fourth module, Transversal Skills (18 ECTS), completes the technical training of the student with soft skills (writing and presentation skills, bibliographic research, etc.) necessary for a successful professional career.</i></p> <p><i>The two remaining modules complete the curriculum of the graduates. First, the module of Complementary Technical Training consists of 12 ECTS of internship in an aerospace company, which the students can replace by elective subjects in the aerospace engineering area. Second, the Final Project module (12 ECTS), in which the students have to develop an original engineering project related to the aerospace field, to be presented and defended in front of a tribunal formed by their professors.</i></p> <p><i>Finally, the studies have a strong practical component, with a considerable fraction of the student's work devoted to individual and group projects, and laboratory sessions. This also helps</i></p>

	<i>in the development of transversal skills as team work, communication, leadership, etc.</i>
Examples of Very Good Practice	
Accredited without / with Adjustment Requirements	<i>Accredited</i>
Adjustment Requirements	
Accredited by	ANECA-IIE
Accredited	<i>From the 14th of July 2016 to the 14th of July 2022</i>