Label	EUR-ACE®
Higher Education Institution	School of Telecommunications Systems and Engineering Technical University of Madrid
Country	Spain
State/Province	Madrid
Name of the Programme	Sound and Image Engineering B. Eng.
Degree Awarded	Bachelor of Engineering
Qualification Level	First Cycle
Programme Objectives; Profile	*The B. Eng. program aims to prepare professionals with the ability to:* – *conceive and design acoustic, audio, video and telecommunications systems,* – *collaborate with professionals in related technologies,* – *make technological decisions in accordance with cost, quality, safety, and time criteria, abiding by professional principles.* *This program is compliant with criteria stated by the Spanish National Laws and Decrees related to university education and is awards the professional qualifications stated by law a Technical Telecommunication Engineer (B. Eng.) (Ingeniero Técnico de Telecomunicación).* *Graduates will have acquired the capabilities and skills to:* ***1.*** *Carry out professional practice in the field of Sound and Image / Telecommunications Engineering applying acquired knowledge and competences to the design, management and maintenance of products, processes and systems.* ***2.*** *Implement solutions to engineering problems, using professional arguments based on critical thinking and considering scientific, technical, social, and ethical aspects with professional responsibility.* ***3.*** *Be valuable members and/or leaders of multidisciplinary teams, communicating oral and written information, conveying ideas and solutions effectively in a national and international environment.* ***4.*** *Engage in lifelong learning with a high degree of autonomy to attain additional qualifications, to achieve professional growth and to master emerging technologies, tools and methods.* *Career Opportunities:* ***Telecommunications Systems****: project planning, development and management for the design, conception, deployment and operation of*

	Telecommunications networks, services and applications. ***Audio and Video Systems and Equipment**: analysis, specification, design and maintenance of audio and video systems and equipment. Design, evaluation and use of audio and video processing techniques and tools for signal recording, processing and transmission.* ***Production and Recording Systems**: carry out projects and designs for audio and video production and recording rooms, and PA systems. Carry out projects and designs of electroacoustic transducers.* ***Noise and Vibration control. Acoustic Isolation**: carry out noise and vibration control designs, as well as noise environmental impact characterization. Design of acoustic isolation systems.*
Programme Duration	*8 Semesters*
Total Number of ECTS Credits Awarded	*240 ECTS*
Brief Description of the Programme	*Basic Engineering Subjects: 60 ECTS* *Common Telecommunications Eng. Subjects: 58,5 ECTS* *Specific Sound and Image Eng. Subjects: 54 ECTS* *Common UPM (Transversal) Subjects: 24 ECTS* *Elective Subjects: 31,5 ECTS* *Final Degree Project : 12 ECTS*
Examples of Very Good Practice	• *The **curriculum** includes mandatory courses wich cover learning outcomes relate to Knowledge and Comprehension; Engineering Analysis; Engineering projects; Research and Innovation; Practical Application of Engineering and Transversal Skills as established by ENAEE.* • *The **practical nature of the program** menas that the skills acquired and the activities developed are directly related to learning outcomes defined by ENAEE relatied to Engineering Projects and Practical Application of Engineering.* • ***Internship programs** allow a large number of students to develop part of their competences in companies and organizations with strong ties to professional development in the field of ICT.* • *The **internationalization programs** allow students make to do exchanges in recognized prestigeious high education institutions in Europe, America and Asia.* • ***International accreditation processes***

	followed by the Center, ensure a teaching quality in line with the most prestigious international labels. • *The **educational innovation projects** involving the School faculty allow continuous improvement of the curriculum and have been given several awards in this field.* • ***Program monitoring procedures** provide a degree of control which guarantees the teaching quality and continuous improvement.*
Accredited without / with Adjustment Requirements	*Accredited with Adjustment Requirements*
Adjustment Requirements	*"The implementation and use of the quality system should be promoted so that it becomes common practice with verifiable evidences".*
Accredited by	*ANECA-IIE*
Accredited	*Feb 1st, 2017 to Feb 1st, 2019*