MASTERS DEGREE IN SPACE AND AERONAUTICAL ENGINEERING

The Terrassa School of Industrial, Aerospace and Audiovisual Engineering (ESEIAAT) has substantial experience and an outstanding reputation and is a benchmark in the fields of industrial, aerospace and audiovisual engineering. Its teaching model is based on the learning-by-doing method, in which students engage in real-world projects. The School, which stands out for its focus on innovation, has agreements with universities around the world and solid relationships with business partners. It offers a programme for high achievers and double degree programmes.

The Universitat Politècnica de Catalunya - BarcelonaTech (UPC) is a renowned public institution of research and higher education that is a benchmark in the fields of engineering, architecture, sciences and technology. With its 50 years of history, the UPC welcomes more than 30,000 students every year and hosts the largest concentration of technological research and innovation in southern Europe. It is the best Spanish university in Engineering and Technology, according to the 2020 QS World Universities Rankings by Subject.

Your talent make us proud

Further information:
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UNIVERSITAT POLITÈCNICA DE CATALUNYA
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Terrassa School of Industrial, Aerospace and Audiovisual Engineering

ESEIAAT
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UNIVERSITAT POLITÈCNICA DE CATALUNYA
BÁRCELONATECH
International Campus of Excellence
The master's degree in Space and Aeronautical Engineering taught at the Terrassa School of Industrial, Aerospace and Audiovisual Engineering (ESEIAAT) aims to meet part of the demand by producing competent young professionals who are prepared to start a successful career in different fields of aerospace. The school offers seminars, workshops, visits and individual and group research projects to reinforce theoretical learning.

Curriculum

**1st semester**

- Computational Engineering: 5 credits
- Optional subjects: 25 credits

**2nd semester**

- Research and Aerospace Project Management: 5 credits
- Optional subjects: 6 credits
- Master’s Thesis: 14 credits

Optional subjects (5 ECTS credits each)
- Advanced Aerodynamics
- Advanced Heat and Mass Transfer
- Advanced Jet Engines
- Advanced Propulsion
- Advanced Rocket Engines
- Aerospace Laboratories
- Aircraft: Architecture and Systems
- Aircraft Building Systems
- Air Traffic Management
- Aerodynamics
- Civil and Automotive Aerodynamics
- Fluid Mechanics
- Materials
- Materials Research Group
- Materials Testing

Professional opportunities

This master’s degree allows students to guide their career towards companies in the aerospace industry and areas such as space missions, space and aircraft propulsion, aircraft design and maintenance, fluid mechanics, materials research, airport infrastructure, air traffic management, wind energy, aeronautics, civil and automotive aerodynamics, and the design of civil applications of UAVs.

Work placements

The school has forums for establishing strong bonds between students and professional opportunities companies, which usually lead to work placements and subsequent careers. Master’s degree students often manage to combine their studies with work placement agreements supervised by the university.

**Why this master?**

The master’s degree in Space and Aeronautical Engineering is aimed at graduates in aerospace engineering or related physical sciences and engineering who wish to improve their skills and knowledge. It provides advanced training in the field of space systems and aeronautical engineering that is scientific, technical and practical in nature and will allow students to work towards a professional and/or research career in the aerospace industry. The master’s degree is aimed at graduates who will go on to seek employment in the aerospace industry or to pursue a research career in this field.

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