Master's degree in Technology and Engineering Management

The master's degree in Technology and Engineering Management (MEM) is a challenging 1.5-year (90 ECTS credits) professional and academic degree programme offered by the Terrassa School of Industrial, Aerospace and Audiovisual Engineering (ESEIAAT). The objective of the MEM is to develop the knowledge and skills of engineers and scientists in the management of people, projects, resources and organisations in technical environments. The MEM focuses on effective decision making in engineering and technological organisations in today's competitive and rapidly changing business environment.

GENERAL DETAILS

Duration and start date
1.5 academic year, 90 ECTS credits. Starting September and February

Timetable and delivery
Mornings. Face-to-face

Fees and grants
Approximate fees for the master's degree, excluding degree certificate fee, €4,901 (€7,352 for non-EU residents).
More information about fees and payment options
More information about grants and loans

Language of instruction
English

Location
Terrassa School of Industrial, Aerospace and Audiovisual Engineering (ESEIAAT)

Official degree
Recorded in the Ministry of Education's degree register

ADMISSION

General requirements
Academic requirements for admission to master's degrees

Places
20

Pre-enrolment
Pre-enrolment closed (consult the new pre-enrolment periods in the academic calendar).
How to pre-enrol

Enrolment
How to enrol

Legalisation of foreign documents
All documents issued in non-EU countries must be legalised and bear the corresponding apostille.

PROFESSIONAL OPPORTUNITIES

Professional opportunities
All graduates will be able to:
- Manage and lead cross-disciplinary engineering and science-based teams.
- Apply quantitative analytical and critical thinking techniques in project and process management.
- Take a multidisciplinary approach to solving complex problems that involve integrating engineering and management principles in projects and processes.
- Communicate clearly in the language of business with a variety of audiences.

**Competencies**

**Generic competencies**

Generic competencies are the skills that graduates acquire regardless of the specific course or field of study. The generic competencies established by the UPC are capacity for innovation and entrepreneurship, sustainability and social commitment, knowledge of a foreign language (preferably English), teamwork and proper use of information resources.

**Specific competencies**

- Exploratory analysis of quantitative data to identify patterns.
- Confirmatory analysis of quantitative data to identify patterns.
- Optimisation of problems and systems using mathematical models and skills in making decisions involving uncertainty.
- Application of basic and theoretical principles of technology management and engineering in uncertain environments.
- Analysis of physical and economic needs in process and project management in technological environments.
- Optimal allocation of physical and economic resources in process and project management in technological environments.
- Process and project management in uncertain technological environments.
- Evaluation of the results of process and project development in technological environments influenced by process uncertainty.

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**ORGANISATION**

**UPC school**
Terrassa School of Industrial, Aerospace and Audiovisual Engineering (ESEIAAT)

**Academic coordinator**
Vicenç Fernàndez Alarcón

**Academic calendar**
General academic calendar for bachelor’s, master’s and doctoral degrees courses

**Academic regulations**
Academic regulations for master’s degree courses at the UPC

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**CURRICULUM**

February 2019. **UPC.** Universitat Politècnica de Catalunya · BarcelonaTech