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**
Albert Sunyer Torrents

**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**

January 2020. **UPC. Universitat Politècnica de Catalunya · BarcelonaTech**