@font-face{ font-family:'Glyphicons Halflings'; src:url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.eot"); src: url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.eot?#iefix") format("embedded-opentype"), url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.woff2") format("woff2"), url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.woff") format("woff"), url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.ttf") format("truetype"), url("/content/assets/fonts/bootstrap/glyphicons-halflings-regular.svg#glyphicons_halflingsregular") format("svg") }

UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH

Master's degree in Industrial Facility Design and Management

MANRESA SCHOOL OF ENGINEERING (EPSEM)

The master’s degree in Industrial Facility Design and Management aims to provide specialised knowledge in the calculation, integrated management and maintenance of industrial facilities.

It offers a cross-disciplinary scientific and technical perspective for designing and managing industrial facilities according to efficiency, technological innovation, safety and sustainable development criteria. The programme provides advanced, applied knowledge in the design of electrical, fluid transport, HVAC and safety installations, and measurement systems, as well as in the tools and methods used for facility automation.

GENERAL DETAILS

Duration and start date

1 academic year, 60 ECTS credits. Starting September

Timetable and delivery

Face-to-face

Fees and grants

Approximate fees for the master’s degree, **excluding other costs** (does not include non-teaching academic fees and issuing of the degree certificate):
€1,162 (€2,700 for non-EU residents).
More information about fees and payment options
More information about grants and loans

Language of instruction

Check the language of instruction for each subject in the course guide in the curriculum.

Information on language use in the classroom and students’ language rights.

Official degree

Recorded in the Ministry of Science, Innovation and Universities

ADMISSION

General requirements

Academic requirements for admission to master's degrees

Specific requirements

Direct admission:

Applicants who do not have to take bridging courses will ideally be:

- Graduates in industrial engineering fields such as mechanical engineering, industrial electronics and automatic control engineering, electrical engineering, chemical engineering, automotive engineering, industrial scheduling engineering, etc.
- Holders of pre-EHEA industrial engineering degrees.

With bridging courses:
Applicants holding the following degrees will be required to take up to 12 ECTS credits in bridging courses:

- Bachelor's degree in Industrial Design and Product Development Engineering
- Bachelor’s degree in Architectural Technology and Building Construction
- Degree in Architecture Studies

The academic committee of the master’s degree will assess applications from students with other degrees to determine, where needed, the specific bridging courses required (up to a maximum of 12 ECTS credits).

Places

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Pre-enrolment

Pre-enrolment for this master’s degree is currently **closed**. Use the “Request information” form to ask for information on **upcoming pre-enrolment periods**.

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

- Engineer responsible for industrial facility management.
- Engineer responsible for industrial facility design and improvement projects.
- Engineer responsible for industrial facility automation and instrumentation projects.
- Technology consultant for the design, adaptation and improvement of industrial facilities.
- Engineer responsible for industrial facility auditing.
- Project engineer.

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, teamwork, proper use of information resources, knowledge of a foreign language (preferably English) and gender perspective.

- Design electrical, fluid transport, HVAC and safety systems that are efficient, sustainable, safe and smart.
- Manage industrial facilities from a technical perspective.
- Strategically plan industrial facilities regarding quality, safety, maintenance and environmental management.
- Produce professional texts or scientific and technical reports using the conventions of the discipline, written clearly and unambiguously, for both specialised and non-specialised audiences.
- Critically assess environmental, social and economic impacts of products and services, promoting sustainable and socially just actions with relevant stakeholders.
- Make informed and reflective decisions in complex situations, applying ethical principles in academic, professional and social contexts to promote responsibility and social engagement.
- Integrate the gender perspective into discipline-specific solutions, considering identified biases and inequalities.
- Generate creative solutions to social or technological problems while considering sustainability, business models and entrepreneurial requirements.
- Critically and responsibly assess information sources, avoid plagiarism, respect authorship rights and manage information overload.

ACADEMIC ORGANISATION

UPC school

Manresa School of Engineering (EPSEM)

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
