

Master in Industrial Engineering



Universitat de Lleida
Escola Politècnica Superior



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POLITÈCNICA SUPERIOR
UNIVERSITAT DE LLEIDA

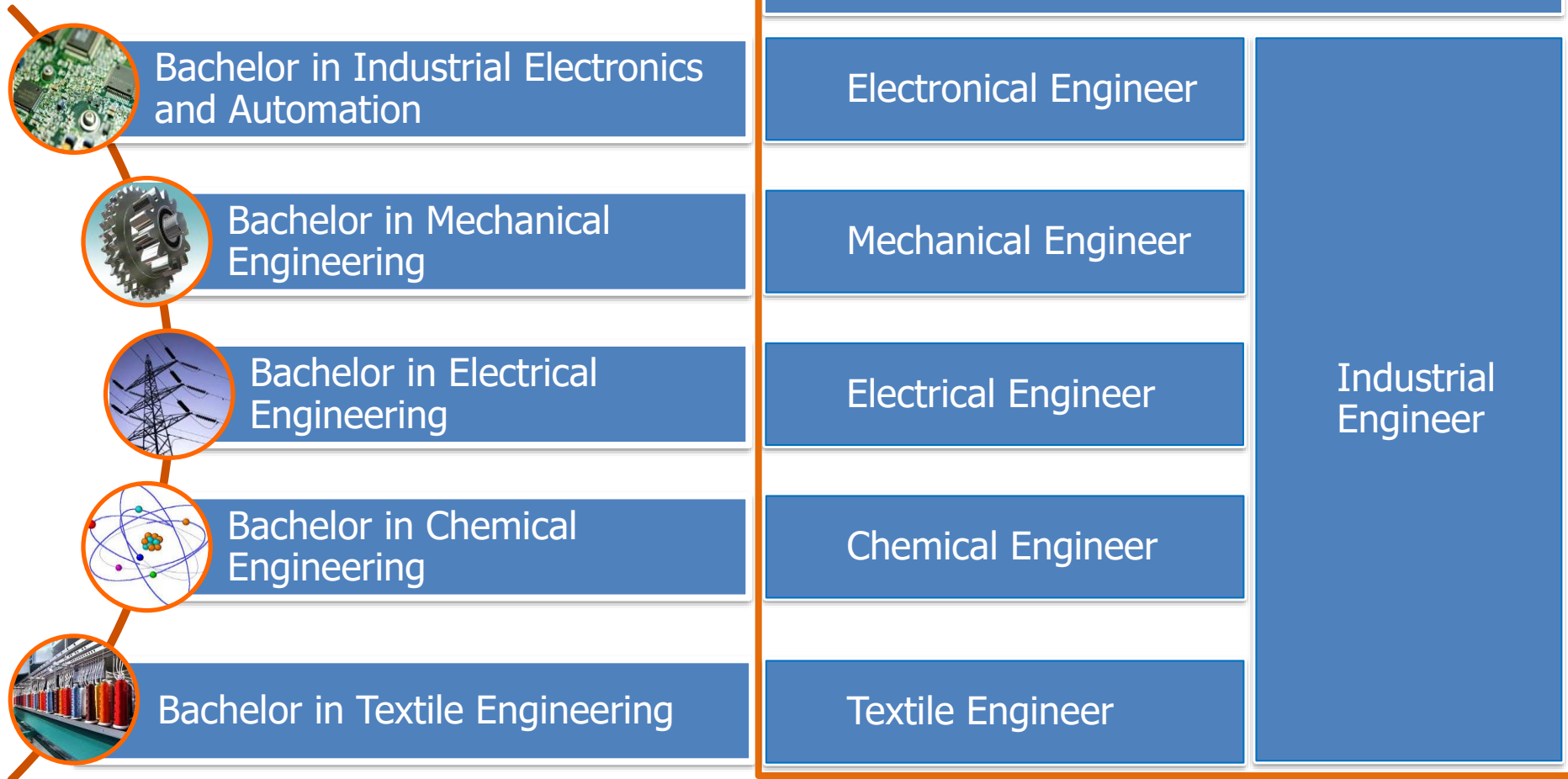


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Professions and Degrees





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Structure of the Master

- Master in Industrial Engineering: 120 ECTS
 - Mandatory subjects: 78 ECTS
 - Elective subjects: 24 ECTS
 - Master's Thesis: 18 ECTS

2 year
program





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Structure of the Master

- **The term “Industrial Engineer” in Spain differs from its use in the rest of the world.**
- The profession of Industrial Engineer in Spain is a **regulated professional title with signing powers** focused to broaden engineering competences in different fields.
- It differs in concept, knowledge, and skills from the “Industrial Engineering” degree of many other countries, more focused in engineering and management.
- These degrees in Spain are referred to as “Industrial Organization” (Organización Industrial).



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Structure of the Master

Modules	ECTS
Management Module	24
Industrial Technology Module	36
Installations, Plants and Complementary Constructions Module	18
Elective Module	24
Master's Thesis	18
TOTAL ECTS	120



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Structure of the Master

1 st Course – 1 st Semester	ECTS
Elective subject	6
Unit Operations of Chemical Processes	6
Generation and Distribution of Energy	6
Electrical Installations and HVAC systems	6
Industrial Organization I	6
TOTAL ECTS	30

2 nd Course – 1 st Semester	ECTS
Control, Certifications and Auditing	6
Business Administration	6
Project and Human Resource Management	6
Electronics and Control Systems Design	6
Thermal and Hydraulic Machines	6
TOTAL ECTS	30

1 st Course – 2 nd Semester	ECTS
Elective subject	6
Machine Design and Testing I	6
Industrial Structures I	6
Advanced Manufacture Systems	6
Industrial Organization II	6
TOTAL ECTS	30

2 nd Course – 2 nd Semester	ECTS
Elective subjects	12
Master's Thesis	18
TOTAL ECTS	30



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Structure of the Master

Elective
Module
(12 ECTS)



Energetic Systems (6+6 ECTS)



Mechanical Systems (6+6 ECTS)



Control Systems (6+6 ECTS)



Enterprise Projects (6+6 ECTS)



Mobility (12 ECTS)



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Conventional Training

- Conventional Training
 - Learning process
 - Classes
 - Laboratories
 - Visits to companies
 - ...
 - Evaluation process
 - Exams
 - Assignments
 - Presentations
 - ...



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Dual Training

The Dual Training Education System is based on the complementarity principle of learning in an academic degree and training in a professional environment in a company. It is a form of training that takes place alternately between the university and the company.





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Dual Higher Education in Moldova and Ukraine – COOPERA
Lleida, November 10th, 2021 – Dr. Albert Castell

Dual Training



ROMERO POLO
EMPRESA CONSTRUCTORA



Vall Companys
GRUP



PAYPER
BAGGING TECHNOLOGY



Sintered Metallic Components





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Dual Training

- Selection process
 - **May:** Publish the positions for dual training for the next year.
 - **Until Mid June:**
 - Enroll to MEIND
 - Contact the coordinator of Dual Training to enroll Dual Training.
 - Dual Training process:
 - **Prioritize companies**
 - Upload your Curriculum Vitae
 - Upload you academic record
 - **End of June** the Curriculum Vitae and the academic record will be send to the companies selected by the students.
 - **July:**
 - **The companies will start the selection process.**
 - The companies will notify the students and EPS about their selection.
 - **September:** Second round of selection.
 - **October:** Dual Training starts.



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Dual Training

Full time contract with the company (8 h/day)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
9:00 – 13:00	Professional World	Professional World	Professional World	Professional World	Professional World		
15:00 – 19:00	University	University	University	University	University		



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Dual Training

■ Follow-up

■ Enterprise advisor

- **Practical training** of the student.
- **Correct integration** of the student in the company.
- **Acquisition** of the **professional competences.**
- **Follow-up and evaluation** of the competences and skills.

■ University advisor

- Follow-up of the **relation between company and student.**
- **Coordination** between company-university.
- **Acquisition** of the **professional competences.**
- **Follow-up and evaluation** of the competences and skills.



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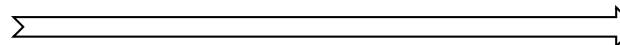
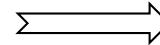
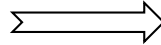
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Dual Training

■ Planning (Each semester)



- Student
- Enterprise advisor
- University advisor





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Dual Training

■ Evaluation Notebook

- Competences
- Skills

Level achieved

0-10

- Report - Evidences
- Follow-up
 - Enterprise advisor
 - University advisor

80% Technical competences
20% General competences & Skills



The image shows a modern university campus at dusk. In the foreground, a large, dark reflecting pool captures the lights from the buildings and the sky. The sky is a deep blue, transitioning from a lighter blue near the horizon to a darker blue at the top. Several multi-story buildings are visible, some with windows illuminated from within. A prominent building in the middle ground has a large, dark, angular facade. The overall atmosphere is quiet and modern.

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<http://www.masterindustrial.udl.cat/>

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