

# Master's degree in Supply Chain, Transport and Mobility Management

The **master's degree in Supply Chain, Transport and Mobility Management** ([master's degree website](#)) produces technical professionals with a high level of excellence in the analysis, management and optimisation of logistics and transport systems in the fields of civil and industrial engineering. These are basic activities in the organisation of society, the productivity of the economy in a region and the quality of life of the population.

## Specialisations

- Supply Chain Management
- Transport and Mobility Management

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## GENERAL DETAILS

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### Duration and start date

Two academic years, 120 ECTS credits. Starting September

### Timetable and delivery

Afternoons. Face-to-face

### Fees and grants

Approximate fees for the master's degree, excluding other costs, €3,320 (€4,980 for non-EU residents).

[More information about fees and payment options](#)

[More information about grants and loans](#)

### Language of instruction

Subjects will be taught 50% in Spanish, 50% in English.

### Official degree

[Recorded in the Ministry of Education's degree register](#)

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## ADMISSION

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### General requirements

[Academic requirements for admission to master's degrees](#)

### Specific requirements

- The master's degree is conceived as the natural continuation of a degree in Civil Engineering, Industrial Engineering or Architecture.
- Given its scientific and professional nature, it is advisable for students to have sufficient knowledge of analysis methods and transport, logistics and mobility systems.

### Admission criteria

- English level B2.2 and Spanish level B1 (foreign students) are required
- Academic record
- First degree and university of origin
- Professional experience

Five places will be awarded in advance on **31 March** for candidates who need admission before June for the purpose of applying for grants or visa.

### Places

30

### 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](#).

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## **PROFESSIONAL OPPORTUNITIES**

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### **Professional opportunities**

Career opportunities for graduates of this programme are found in both the public and private sectors in the fields of logistics, transport and mobility. This master's degree allows students to design and manage supply chains and logistics companies (in charge of logistics, consulting, etc.), to conduct research towards a doctoral degree, or to design and manage infrastructure and transportation networks (consulting, planning transport companies or government, for example), especially public transport networks.

### **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 competences**

On completion of the course, students will be able to:

- Analyse and optimise logistic systems.
- Manage logistic and mobility systems.
- Manage supply chains.
- Design, build and maintain transport infrastructures.
- Collect and analyse mobility data.
- Model transport demand.
- Plan and finance transport infrastructures.
- Make decisions and evaluate them.
- Conduct simulations and prospective analysis.
- Draw up mobility plans.
- Manage transport systems.
- Carry out urban planning based on infrastructures and service networks.

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## **ORGANISATION: ACADEMIC CALENDAR AND REGULATIONS**

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### **UPC school**

[Barcelona School of Civil Engineering \(ETSECCPB\)](#)

[Barcelona School of Industrial Engineering \(ETSEIB\)](#)

### **Academic coordinator**

[Imma Ribas Vila](#)

[Francesc Soriguera Martí](#)

## 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](#)

### CURRICULUM

Subjects		ECTS credits	Type
<b>FIRST SEMESTER</b>			
Data Analysis of Transport and Logistics		5	Compulsory
Introduction to Supply Chain		5	Compulsory
Modelling of Transport Systems and Logistics		5	Compulsory
Quantitative Methods for Business		5	Compulsory
Quantitative Methods in Supply Chain		5	Compulsory
Transport Economics		5	Compulsory
Transport Systems Operations and Logistics		5	Compulsory
<b>Specialisation in Specialisation in Supply Chains</b>	Data Analysis of Transport and Logistics	5	Compulsory
	Introduction to Supply Chain	5	Compulsory
	Modelling of Transport Systems and Logistics	5	Compulsory
	Quantitative Methods for Business	5	Compulsory
	Quantitative Methods in Supply Chain	5	Compulsory
	Transport Economics	5	Compulsory
	Transport Systems Operations and Logistics	5	Compulsory
<b>Specialisation in Specialisation in Transport and Mobility</b>	Data Analysis of Transport and Logistics	5	Compulsory
	Introduction to Supply Chain	5	Compulsory
	Modelling of Transport Systems and Logistics	5	Compulsory
	Quantitative Methods for Business	5	Compulsory
	Quantitative Methods in Supply Chain	5	Compulsory
	Transport Economics	5	Compulsory
	Transport Systems Operations and Logistics	5	Compulsory
<b>SECOND SEMESTER</b>			
Demand of Transportation Systems		5	Compulsory
Economy and Legislation in Transport and Logistics		5	Compulsory
High-Speed Rail Line Management		5	Optional
Occupational Risk Prevention and Ergonomics		3	Optional
Operations Management		5	Optional
Planning and Management of Transportation		6	Optional
Process Description and Improvement		5	Optional

<b>Subjects</b>		<b>ECTS credits</b>	<b>Type</b>
<b>Specialisation in Specialisation in Supply Chains</b>	Human Resources	5	Optional
	Operations Management	6	Optional
	Process Description and Improvement	4	Optional
	Quality of Services in the Supply Chain	5	Optional
	Storage and Provision	5	Optional
	Demand of Transportation Systems	5	Compulsory
	Economy and Legislation in Transport and Logistics	5	Compulsory
	High-Speed Rail Line Management	5	Optional
	Occupational Risk Prevention and Ergonomics	3	Optional
	Operations Management	5	Optional
	Planning and Management of Transportation	6	Optional
	Process Description and Improvement	5	Optional
<b>Specialisation in Specialisation in Transport and Mobility</b>	Appraisal and Decision Making Transportation	5	Optional
	Optimization Models of Transport Networks	5	Compulsory
	Public Transport	5	Compulsory
	Railway Transport	5	Optional
	Traffic Simulation Models	5	Optional
	Demand of Transportation Systems	5	Compulsory
	Economy and Legislation in Transport and Logistics	5	Compulsory
	High-Speed Rail Line Management	5	Optional
	Occupational Risk Prevention and Ergonomics	3	Optional
	Operations Management	5	Optional
	Planning and Management of Transportation	6	Optional
	Process Description and Improvement	5	Optional
<b>THIRD SEMESTER</b>			
Case Studies in Urban Mobility		5	Optional
Information Systems		5	Optional
Management and Cost Control		5	Optional
Operations Management II		5	Optional
Supply Chain Design		5	Optional

Subjects		ECTS credits	Type
<b>Specialisation in Specialisation in Supply Chains</b>	Business Administration and Management	5	Optional
	Information Systems	6	Optional
	Information Systems and Tics in Supply Chain	5	Optional
	Management and Cost Control	4.5	Optional
	Operations Management II	4	Optional
	Packaging	5	Optional
	Sector Strategies in Supply Chain	5	Optional
	Supply Chain Design	6	Optional
	Case Studies in Urban Mobility	5	Optional
	Information Systems	5	Optional
	Management and Cost Control	5	Optional
	Operations Management II	5	Optional
	Supply Chain Design	5	Optional
	<b>Specialisation in Specialisation in Transport and Mobility</b>	Advanced Models of Demand	5
Airports Management		5	Optional
Developing Mobility (C+D)		5	Optional
Funding Investment in Transport		5	Optional
Port Management and Maritime Transport		5	Optional
Routes of Vehicles		5	Optional
Smart Mobility		5	Optional
Sustainable and Green Mobility		5	Optional
Traffic		5	Compulsory
Transport of Goods		5	Compulsory
Case Studies in Urban Mobility		5	Optional
Information Systems		5	Optional
Management and Cost Control		5	Optional
Operations Management II		5	Optional
Supply Chain Design		5	Optional
<b>FOURTH SEMESTER</b>			
Master's Thesis		15	Project
<b>Specialisation in Specialisation in Supply Chains</b>	Master's Thesis	15	Project
<b>Specialisation in Specialisation in Transport and Mobility</b>	Master's Thesis	15	Project