



CIVITAS Catalogue on Education in Urban Mobility

 www.civitas.eu/mobility-powered-by-youth

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IMPRINT

About

This publication has been developed within the framework of the CIVITAS Initiative, one of the flagship programmes helping the European Commission achieve its ambitious mobility and transport goals, and in turn those in the European Green Deal. A major driving force for the development of this catalogue has been the CIVITAS Educational Network launched in 2022 as a network which enables the cooperation between educational institutes active in the field of urban mobility.

The CIVITAS Catalogue on Education in Urban Mobility provides an overview of educational offers in (or related to) urban mobility offered by educational institutes from all across Europe. It serves current or future students to identify a programme, course, module (etc.) they might be interested to apply for, university representatives in identifying cooperation opportunities with other institutes, and industry in finding new educational partners.

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FOREWORD

The EU has pledged to achieve climate neutrality by 2050. The 'European Green Deal' is the EU's strategy for reaching its climate goals. This requires current levels of greenhouse gas emissions to drop substantially in the next decades. An ambitious transition towards sustainable and competitive urban mobility and transport services is vital to achieve this reduction. But this is not enough: we also need to ensure that we have a professional workforce with the right skills and capacities to make it happen.

CINEA, the European Climate, Environment and Infrastructure Executive Agency, plays a key role in supporting the EU Green Deal through the efficient and effective implementation of related delegated funding programmes. This includes important parts of the EU's programmes focused on transport and mobility, such as Horizon Europe, the Connecting Europe Facility (CEF) and LIFE programmes. The Agency manages the projects funded under these programmes throughout their lifecycle, from idea to implementation.

The CIVITAS initiative has played a crucial role for the past 20 years in implementing a dedicated cluster of Horizon 2020 projects managed by CINEA. The aim of the CIVITAS projects is to develop, test and implement innovative solutions for urban transport and mobility. The exchange of information, drawing from joint lessons and networking are an integral part of the initiative.

Sharing experience, joint learning and nurturing new and innovative ideas are also front and centre of this 2022 European Year of Youth. Today's young people will be the planners, the policy makers, the innovators and the project implementers of the future. You may be one of them! The recent Commission Communication on a European strategy for universities, emphasises that we owe young people the chance to acquire excellent competences and relevant skills to support a green and sustainable development of our continent, its regions and cities. This includes new ways of understanding and thinking about urban transport and mobility. It is in this context that this guide was prepared.

This first ever CIVITAS Catalogue on Education in Urban Mobility aims to be a Europe-wide tool to connect current or prospective students to educational institutions, universities to universities, and universities to industry and businesses. This is a living document and your comments, suggestions and additions are more than welcome. Please contact the CIVITAS Educational Network at www.civitas.eu/mobility-powered-by-youth for further details and contributions. I hope that you will find this catalogue informative and interesting.



Dr. Octavia Stepan

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1 **INTRODUCTION**

The current transition towards sustainable and competitive urban mobility and transport services, accelerated through the ‘European Green Deal’, is resulting in a swift shift of the requirements towards the future mobility professional. Mobility is no longer a discipline where a linear and single-minded approach is possible. On the contrary, professionals in the field are now expected to approach the transition from multiple perspectives to ensure its current acceleration and success in the long run. In order to successfully enter the mobility workforce and remain in it, young professionals need to be equipped with the right skills and competencies. The driving force preparing these young professionals for their future careers are the educational institutes which also need to adapt their offerings by making them fit for the future. This is accompanied by an increasing demand for establishing cooperations between private actors, universities and public bodies.

In line with that, CIVITAS Initiative established the CIVITAS Educational Network in 2022 as a network which enables the cooperation between educational institutes active in the field of urban mobility. The creation of the Network was inspired by the results of a survey conducted by CIVITAS in 2021, which indicated the value of such a network for allowing greater structural cooperation among universities. The CIVITAS Educational Network enables this cooperation through a dedicated and dynamic network of institutes actively exchanging knowledge and experience, and rolling out activities in three main domains:

- Student exchange
- Knowledge exchange
- Joint master’s programmes

By joining forces in this network, universities aspire to educate future professionals on tackling today’s and tomorrow urban mobility challenges and to bring synergy in understanding urban mobility. The desired long-term outcome of this initiative is to have a self-sufficient network of cooperating universities which pursues a holistic, interdisciplinary and international approach to urban mobility education.

As one of the steps in facilitating this cooperation, the CIVITAS Educational Network has initiated the creation of the Catalogue on Education in Urban Mobility. Its objective is to provide an overview of educational offers by European institutes operating in the field of urban mobility. The catalogue helps:

- Universities representatives in identifying cooperation opportunities with other institutes.
- Mobility professionals in finding their path in the mobility world by identifying a programme, course, module (etc.) they might be interested to apply for.
- Industry in finding university partners and students for future cooperations.

This is a living document, that has an intention to be updated with new offers throughout the years and will be kept up-to-date in collaboration with the members of the CIVITAS Educational Network. Information about the offers presented in the catalogue has been collected in two ways – via university representatives of the CIVITAS Educational Network and via open-source data from the official websites of the institutes. This is been indicated in the university fact sheets presented in chapter 4. The offers of some universities might be incomplete meaning that not all existing mobility-related offers are featured in this catalogue. Next to it, some of the study offers are not mobility-focused, but contain elements related to it and are, thus, part of this catalogue.

32 institutes | 72 offers
19 counties | 27 cities

The map on the right pinpoints all of the cities where the universities presented in this catalogue are located.

Chapter 2 presents a summary of all study offers per country. Chapter 3 presents a summary of all study offers per type.

The summary tables in chapters 2 and 3 feature the names of the study programmes (underlined) which when clicked, guide you directly to the fact sheet of the selected offer.

Chapter 4 presents the university fact sheets with more detailed information about each study offer.



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CATALOGUE: STUDY OFFERS PER COUNTRY

AUSTRIA

| University name | City | Type of offer | Language(s) | Duration ECTS |
|--|------------|--|-------------|---------------------|
| FH Joanneum GmbH University of Applied Sciences | Kapfenberg | Master`s degree in <u>Energy and Transport Management: Mobility Technologies</u> | English | 2 years 120 ECTS |

BELGIUM

| University name | City | Type of offer | Language(s) | Duration ECTS |
|--------------------|---------|--|-------------|-----------------------|
| Hasselt University | Hasselt | Master`s degree in <u>Transportation Sciences</u> | English | 2-3 years 120 ECTS |
| Ghent University | Ghent | Master`s degree in <u>Industrial Engineering and Operations Research: Transport and Mobility Engineering</u> | English | 2 years 120 ECTS |
| | | Master`s degree in <u>Geography and Geomatics: Urban Geography</u> | Dutch | 2 years 120 ECTS |

CROATIA

| University name | City | Type of offer | Language(s) | Duration ECTS |
|----------------------|------------|---|-------------|----------------------|
| University of Zagreb | Zagreb | Master`s course in <u>Urban Mobility</u> | English | 1 semester 7 ECTS |
| | | Master`s course in <u>Urban Transport Demand Management</u> | English | 1 semester 6 ECTS |
| University North | Koprivnica | Bachelor`s degree in <u>Logistics and Mobility</u> | Croatian | 3 years 180 ECTS |
| | | Master`s degree in <u>Sustainable Mobility and Logistics Management</u> | Croatian | 2 years 120 ECTS |

CZECH REPUBLIC

| University name | City | Type of offer | Language(s) | Duration ECTS |
|---------------------------------------|----------------|--|------------------|----------------------|
| University of Jan Evangelista Purkyně | Ústí nad Labem | Bachelor`s course in <u>Mobility within Territories: management and innovation</u> | English | 1 semester 2 ECTS |
| | | Master`s online course in <u>Applied Economics in Public Services</u> | English | 1 semester 4 ECTS |
| | | PhD degree in <u>Regulation and Behavioural Studies</u> | English Czech | 4 years |
| University of Pardubice | Pardubice | Master`s degree in <u>Transport Operations Management</u> | English | 2 years 120 ECTS |
| | | Master`s degree in <u>Rail Vehicles</u> | English | 2 years 120 ECTS |
| Czech Technical University in Prague | Prague | Master`s degree in <u>Technology in Transportation and Telecommunications: Intelligent Transport Systems</u> | English | 2 years 120 ECTS |
| | | Master`s degree in <u>Smart Cities</u> | English | 2 years 120 ECTS |
| | | PhD degree in <u>Transportation Systems and Technology</u> | English | N/A |
| | | PhD degree in <u>Logistics and Management of Transport Processes</u> | English | N/A |
| | | PhD degree in <u>Smart Cities</u> | English | N/A |

FINLAND

| University name | City | Type of offer | Language(s) | Duration ECTS |
|--------------------|---------|---|-----------------------------|---------------------|
| Tampere University | Tampere | Bachelor`s degree in <u>Sustainable Urban Development</u> | English | 3 years 180 ECTS |
| | | Master`s degree in <u>Civil Engineering</u> | English (from 2023 onwards) | 2 years 120 ECTS |

FRANCE

| University name | City | Type of offer | Language(s) | Duration ECTS |
|---------------------|-------|--|-------------|---------------------|
| University of Lille | Lille | Master`s degree in <u>Electrical Engineering for Sustainable Development</u> | English | 2 years 120 ECTS |

GERMANY

| University name | City | Type of offer | Language(s) | Duration ECTS |
|----------------------------------|---------|--|-------------|---------------------|
| Dresden University of Technology | Dresden | Master`s degree in <u>Transportation Economics</u> | English | 2 years 120 ECTS |

GREECE

| University name | City | Type of offer | Language(s) | Duration ECTS |
|-------------------------------|--------|--|-------------|--------------------------|
| Technical University of Crete | Chania | Master`s degree in <u>Sustainable Engineering and Climate Change</u> | English | 3-6 semesters 90 ECTS |

HUNGARY

| University name | City | Type of offer | Language(s) | Duration ECTS |
|---|----------|--|-------------|---------------------|
| Budapest University of Technology and Economics | Budapest | Master`s degree in <u>Transportation Engineering</u> | English | 2 years 120 ECTS |
| | | Master`s degree in <u>Vehicle Engineering</u> | English | 2 years 120 ECTS |
| | | Master`s degree in <u>Logistics Engineering</u> | English | 2 years 120 ECTS |
| | | Master`s degree in <u>Autonomous Vehicle Control Engineering</u> | English | 2 years 120 ECTS |

IRELAND

| University name | City | Type of offer | Language(s) | Duration ECTS |
|---------------------------------|--------|--|-------------|---------------------|
| Technological University Dublin | Dublin | Master`s degree in <u>Sustainable Transport and Mobility</u> | English | 2 years 120 ECTS |

LUXEMBOURG

| University name | City | Type of offer | Language(s) | Duration ECTS |
|--------------------------|------------------|--|-------------|---------------------|
| University of Luxembourg | Esch-sur-Alzette | Master`s degree in <u>Geography and Spatial Planning</u> | English | 2 years 120 ECTS |

MOLDOVA

| University name | City | Type of offer | Language(s) | Duration ECTS |
|---------------------------------|----------|---|-------------|---------------------|
| Technical University of Moldova | Chişinău | Bachelor`s degree in <u>Railways, Roads and Bridges</u> | Romanian | 4 years 240 ECTS |

THE NETHERLANDS

| University name | City | Type of offer | Language(s) | Duration ECTS |
|-------------------------|-----------|---|-------------|-------------------------|
| University of Amsterdam | Amsterdam | Bachelor`s module in <u>Minor Urban and Regional Planning</u> | English | 6 months 30 ECTS |
| | | Bachelor`s module in <u>Minor Urban Studies</u> | English | 12 months 24-30 ECTS |
| | | Bachelor`s online course in <u>MOOC - Alternative Mobility Narratives</u> | English | 5-12 weeks |
| | | Bachelor`s online course in <u>MOOC – Reclaiming the Street for Liveable Urban Spaces</u> | English | 5-12 weeks |
| | | Bachelor`s online course in <u>MOOC – Unravelling the Cycling City</u> | English | 5-12 weeks |

| | | | | |
|--|-----------|--|---------|-----------------------|
| University of Amsterdam | Amsterdam | Bachelor`s online course in <u>MOOC - Being Smart About Cycling Futures</u> | English | 5-12 weeks |
| | | Master`s degree in <u>Urban and Regional Planning</u> | English | 1 year 60 ECTS |
| | | Summer school on <u>Planning the Cycling City</u> | English | 3 weeks 6 ECTS |
| Amsterdam University of Applied Sciences | Amsterdam | Bachelor`s degree in <u>Built Environment: Mobility</u> | Dutch | 3-4 years 240 ECTS |
| Vrije Universiteit Amsterdam | Amsterdam | Master`s degree in <u>Spatial, Transport and Environmental Economics</u> | English | 1 year 60 ECTS |
| Radboud University | Nijmegen | Master`s degree in <u>Spatial Planning: Urban and Regional Mobility</u> | English | 1 year 60 ECTS |
| Breda University of Applied Sciences | Breda | Bachelor`s degree in <u>Built Environment</u> | English | 4 years 240 ECTS |
| | | Bachelor`s module in <u>Minor International Urban Redevelopment: towards sustainable cities and mobility</u> | English | 18 weeks 30 ECTS |

PORTUGAL

| University name | City | Type of offer | Language(s) | Duration ECTS |
|----------------------|--------|---|-----------------------|---------------------|
| University of Aveiro | Aveiro | Master`s course in <u>Mobility Planning</u> | English Portuguese | 6 ECTS |
| | | Master`s degree in <u>Smart Mobility</u> | English Portuguese | 2 years 120 ECTS |

ROMANIA

| University name | City | Type of offer | Language(s) | Duration ECTS |
|---|-----------|--|--|-----------------------|
| Ion Mincu University of Architecture and Urban Planning | Bucharest | Bachelor`s course in <u>Urban Mobility 1</u> | Romanian (could be in English or French) | 1 semester 2 ECTS |
| | | Master`s degree in <u>Urban Mobility</u> | Romanian | 2 years 120 ECTS |
| | | Master`s course in <u>Urban Mobility 2</u> | Romanian (could be in English or French) | 1 semester 4 ECTS |
| | | Master`s course in <u>Urban Mobility Plans and Policies</u> | Romanian (could be in English or French) | 1 semester 10 ECTS |
| | | Master`s course in <u>Design studio</u> | Romanian (discussions could be held in English/French) | 1 semester 10 ECTS |
| | | PhD degree in <u>Urban Mobility & Urban Development</u> | Romanian English French | 3 years |
| Polytechnic University of Timisoara | Timișoara | Bachelor`s degree in <u>Transportation and Traffic Engineering</u> | Romanian | 4 years 180 ECTS |
| | | Master`s degree in <u>Advanced Techniques in Road Transportation</u> | Romanian | 2 years 130 ECTS |
| Technical University of Civil Engineering Bucharest | Bucharest | Bachelor`s degree in <u>Urban Engineering and Regional Development</u> | Romanian | 4 years 240 ECTS |
| | | Master`s degree in <u>Urban and Regional Development</u> | Romanian | 2 years 120 ECTS |
| Politehnica University of Bucharest | Bucharest | Master`s degree in <u>Urban Transport and Traffic</u> | N/A | 2 years 120 ECTS |
| | | Master`s degree in <u>Transport Management</u> | N/A | 2 years 120 ECTS |

SERBIA

| University name | City | Type of offer | Language(s) | Duration ECTS |
|------------------------|----------|---|-------------|-------------------|
| University of Novi Sad | Novi Sad | Master`s degree in <u>Traffic Engineering</u> | English | 1 year 60 ECTS |

SLOVAKIA

| University name | City | Type of offer | Language(s) | Duration ECTS |
|---|------------|--|-------------------|---------------------|
| Slovak University of Technology in Bratislava | Bratislava | Bachelor`s degree in <u>Spatial Planning</u> | Slovak English | 3 years 180 ECTS |
| | | Master`s degree in <u>Spatial Planning</u> | Slovak English | 2 years 120 ECTS |
| | | PhD degree in <u>Spatial Planning</u> | Slovak English | 3 years |

SPAIN

| University name | City | Type of offer | Language(s) | Duration ECTS |
|--|-----------|--|--------------------|--|
| Fundacion Zaragoza Logistics Center | Zaragoza | Executive education in <u>Logistics and Supply Chain Management</u> | English Spanish | Custom |
| | | Master`s degree in <u>Supply Chain Management</u> | Spanish | 9 months 62 ECTS |
| | | Master`s degree in <u>Engineering in Logistics and Supply Chain Management</u> | English | 10 months 87 ECTS |
| | | Blended master`s degree in <u>Engineering in Logistics and Supply Chain Management</u> | English | 18 months 87 ECTS |
| Institute for Advanced Architecture of Catalonia | Barcelona | Master`s degree in <u>City & Technology</u> | English | 9 months 75 ECTS or 18 months 120 ECTS |
| Polytechnic University of Catalonia | Barcelona | Master`s degree in <u>Urban Mobility: Sustainable Urban Mobility Transitions</u> | English | 2 years 120 ECTS |
| | | Master`s degree in <u>Civil Engineering</u> | English | 2 years 120 ECTS |

SWEDEN

| University name | City | Type of offer | Language(s) | Duration ECTS |
|-----------------|------|---|-------------|---------------------|
| Umeå University | Umeå | Master`s degree in <u>Spatial Planning and Sustainability</u> | English | 2 years 120 ECTS |
| | | Master`s degree in <u>Human Geography with specialisation in Geographical Information Systems</u> | English | 1 year 60 ECTS |
| | | Master`s course in <u>GIS for Transportation</u> | English | 5 weeks 7.5 ECTS |
| | | Master`s course in <u>Population, Migration and Mobility</u> | English | 10 weeks 15 ECTS |

3

CATALOGUE: STUDY OFFERS PER TYPE

BACHELOR'S DEGREE PROGRAMMES

| Name of programme | University name | Country | Language(s) | Duration ECTS |
|---|---|-----------------|-------------------|-----------------------|
| <u>Logistics and Mobility</u> | University North | Croatia | Croatian | 3 years 180 ECTS |
| <u>Sustainable Urban Development</u> | Tampere University | Finland | English | 3 years 180 ECTS |
| <u>Railways, Roads and Bridges</u> | Technical University of Moldova | Moldova | Romanian | 4 years 240 ECTS |
| <u>Built Environment: Mobility</u> | Amsterdam University of Applied Sciences | The Netherlands | Dutch | 3-4 years 240 ECTS |
| <u>Built Environment</u> | Breda University of Applied Sciences | The Netherlands | English | 4 years 240 ECTS |
| <u>Transportation and Traffic Engineering</u> | Polytechnic University of Timisoara | Romania | Romanian | 4 years 180 ECTS |
| <u>Urban Engineering and Regional Development</u> | Technical University of Civil Engineering Bucharest | Romania | Romanian | 4 years 240 ECTS |
| <u>Spatial Planning</u> | Slovak University of Technology in Bratislava | Slovakia | Slovak English | 3 years 180 ECTS |

BACHELOR'S COURSES

| Name of course | University name | Country | Language(s) | Duration ECTS |
|---|---|--------------------|---|----------------------|
| <u>Mobility within Territories: management and innovation</u> | University of Jan Evangelista Purkyně | The Czech Republic | English | 1 semester 2 ECTS |
| <u>MOOC - Alternative Mobility Narratives</u> | University of Amsterdam | The Netherlands | English | 5-12 weeks |
| <u>MOOC – Reclaiming the Street for Liveable Urban Spaces</u> | University of Amsterdam | The Netherlands | English | 5-12 weeks |
| <u>MOOC – Unravelling the Cycling City</u> | University of Amsterdam | The Netherlands | English | 5-12 weeks |
| <u>MOOC - Being Smart About Cycling Futures</u> | University of Amsterdam | The Netherlands | English | 5-12 weeks |
| <u>Urban Mobility 1</u> | Ion Mincu University of Architecture and Urban Planning | Romania | Romanian (could be in English or French) | 1 semester 2 ECTS |

BACHELOR'S MODULES

| Name of module | University name | Country | Language(s) | Duration ECTS |
|---|--------------------------------------|-----------------|-------------|-------------------------|
| <u>Minor Urban and Regional Planning</u> | University of Amsterdam | The Netherlands | English | 6 months 30 ECTS |
| <u>Minor Urban Studies</u> | University of Amsterdam | The Netherlands | English | 12 months 24-30 ECTS |
| <u>Minor International Urban Redevelopment: towards sustainable cities and mobility</u> | Breda University of Applied Sciences | The Netherlands | English | 18 weeks 30 ECTS |

MASTER'S DEGREE PROGRAMMES

| Name of programme | University name | Country | Language(s) | Duration ECTS |
|---|---|--------------------|-----------------------------|-----------------------|
| <u>Energy and Transport Management: Mobility Technologies</u> | FH Joanneum GmbH University of Applied Sciences | Austria | English | 2 years 120 ECTS |
| <u>Transportation Sciences</u> | Hasselt University | Belgium | English | 2-3 years 120 ECTS |
| <u>Industrial Engineering and Operations Research: Transport and Mobility Engineering</u> | Ghent University | Belgium | English | 2 years 120 ECTS |
| <u>Geography and Geomatics: Urban Geography</u> | Ghent University | Belgium | Dutch | 2 years |
| <u>Sustainable Mobility and Logistics Management</u> | University North | Croatia | Croatian | 2 years 120 ECTS |
| <u>Transport Operations Management</u> | University of Pardubice | The Czech Republic | English | 2 years 120 ECTS |
| <u>Rail Vehicles</u> | University of Pardubice | The Czech Republic | English | 2 years 120 ECTS |
| <u>Technology in Transportation and Telecommunications: Intelligent Transport Systems</u> | Czech Technical University in Prague | The Czech Republic | English | 2 years 120 ECTS |
| <u>Smart Cities</u> | Czech Technical University in Prague | The Czech Republic | English | 2 years 120 ECTS |
| <u>Civil Engineering</u> | Tampere University | Finland | English (from 2023 onwards) | 2 years 120 ECTS |

| | | | | |
|---|---|-----------------|-----------------------|--------------------------|
| <u>Electrical Engineering for Sustainable Development</u> | University of Lille | France | English | 2 years 120 ECTS |
| <u>Transportation Economics</u> | Dresden University of Technology | Germany | English | 2 years 120 ECTS |
| <u>Sustainable Engineering and Climate Change</u> | Technical University of Crete | Greece | English | 3-6 semesters 90 ECTS |
| <u>Transportation Engineering</u> | Budapest University of Technology and Economics | Hungary | English | 2 years 120 ECTS |
| <u>Vehicle Engineering</u> | Budapest University of Technology and Economics | Hungary | English | 2 years 120 ECTS |
| <u>Logistics Engineering</u> | Budapest University of Technology and Economics | Hungary | English | 2 years 120 ECTS |
| <u>Autonomous Vehicle Control Engineering</u> | Budapest University of Technology and Economics | Hungary | English | 2 years 120 ECTS |
| <u>Sustainable Transport and Mobility</u> | Technological University Dublin | Ireland | English | 2 years 120 ECTS |
| <u>Geography and Spatial Planning</u> | University of Luxembourg | Luxembourg | English | 2 years 120 ECTS |
| <u>Urban and Regional Planning</u> | University of Amsterdam | The Netherlands | English | 1 year 60 ECTS |
| <u>Spatial, Transport and Environmental Economics</u> | Vrije Universiteit Amsterdam | The Netherlands | English | 1 year 60 ECTS |
| <u>Spatial Planning: Urban and Regional Mobility</u> | Radboud University | The Netherlands | English | 1 year 60 ECTS |
| <u>Smart Mobility</u> | University of Aveiro | Portugal | English Portuguese | 2 years 120 ECTS |
| <u>Urban Mobility</u> | Ion Mincu University of Architecture and Urban Planning | Romania | Romanian | 2 years 120 ECTS |
| <u>Advanced Techniques in Road Transportation</u> | Polytechnic University of Timisoara | Romania | Romanian | 2 years 130 ECTS |
| <u>Urban and Regional Development</u> | Technical University of Civil Engineering Bucharest | Romania | Romanian | 2 years 120 ECTS |
| <u>Urban Transport and Traffic</u> | Politehnica University of Bucharest | Romania | N/A | 2 years 120 ECTS |
| <u>Transport Management</u> | Politehnica University of Bucharest | Romania | N/A | 2 years 120 ECTS |

| | | | | |
|--|--|----------|----------------|--|
| <u>Traffic Engineering</u> | University of Novi Sad | Serbia | English | 1 year 60 ECTS |
| <u>Spatial Planning</u> | Slovak University of Technology in Bratislava | Slovakia | Slovak English | 2 years 120 ECTS |
| <u>Supply Chain Management</u> | Fundacion Zaragoza Logistics Center | Spain | Spanish | 9 months 62 ECTS |
| <u>Engineering in Logistics and Supply Chain Management</u> | Fundacion Zaragoza Logistics Center | Spain | English | 10 months 87 ECTS |
| <u>Engineering in Logistics and Supply Chain Management</u> | Fundacion Zaragoza Logistics Center | Spain | English | 18 months 87 ECTS |
| <u>City & Technology</u> | Institute for Advanced Architecture of Catalonia | Spain | English | 9 months 75 ECTS or 18 months 120 ECTS |
| <u>Urban Mobility: Sustainable Urban Mobility Transitions</u> | Polytechnic University of Catalonia | Spain | English | 2 years 120 ECTS |
| <u>Civil Engineering</u> | Polytechnic University of Catalonia | Spain | English | 2 years 120 ECTS |
| <u>Spatial Planning and Sustainability</u> | Umeå University | Sweden | English | 2 years 120 ECTS |
| <u>Human Geography with specialisation in Geographical Information Systems</u> | Umeå University | Sweden | English | 1 year 60 ECTS |

MASTER'S COURSES

| Name of course | University name | Country | Language(s) | Duration ECTS |
|---|---|--------------------|---|-----------------------|
| <u>Urban Mobility</u> | University of Zagreb | Croatia | English | 1 semester 7 ECTS |
| <u>Urban Transport Demand Management</u> | University of Zagreb | Croatia | English | 1 semester 6 ECTS |
| <u>Applied Economics in Public Services</u> | University of Jan Evangelista Purkyně | The Czech Republic | English | 1 semester 4 ECTS |
| <u>Mobility Planning</u> | University of Aveiro | Portugal | English Portuguese | 6 ECTS |
| <u>Urban Mobility 2</u> | Ion Mincu University of Architecture and Urban Planning | Romania | Romanian (could be in English or French) | 1 semester 4 ECTS |
| <u>Urban Mobility Plans and Policies</u> | Ion Mincu University of Architecture and Urban Planning | Romania | Romanian (could be in English or French) | 1 semester 10 ECTS |
| <u>Design studio</u> | Ion Mincu University of Architecture and Urban Planning | Romania | Romanian (discussions could be held in English / French) | 1 semester 10 ECTS |
| <u>GIS for Transportation</u> | Umeå University | Sweden | English | 5 weeks 7.5 ECTS |
| <u>Population, Migration and Mobility</u> | Umeå University | Sweden | English | 10 weeks 15 ECTS |

PhD DEGREE PROGRAMMES

| Name of programme | University name | Country | Language(s) | Duration ECTS |
|--|---|--------------------|-------------------------------|---------------|
| <u>Regulation and Behavioural Studies</u> | University of Jan Evangelista Purkyně | The Czech Republic | English Czech | 4 years |
| <u>Transportation Systems and Technology</u> | Czech Technical University in Prague | The Czech Republic | English | N/A |
| <u>Logistics and Management of Transport Processes</u> | Czech Technical University in Prague | The Czech Republic | English | N/A |
| <u>Smart Cities</u> | Czech Technical University in Prague | The Czech Republic | English | N/A |
| <u>Urban Mobility & Urban Development</u> | Ion Mincu University of Architecture and Urban Planning | Romania | Romanian English French | 3 years |
| <u>Spatial Planning</u> | Slovak University of Technology in Bratislava | Slovakia | Slovak English | 3 years |

OTHER TYPES OF OFFERS

| Name and type of offer | University name | Country | Language(s) | Duration ECTS |
|--|-------------------------------------|-----------------|--------------------|-------------------|
| <u>Planning the Cycling City</u> | University of Amsterdam | The Netherlands | English | 3 weeks 6 ECTS |
| <u>Logistics and Supply Chain Management</u> | Fundacion Zaragoza Logistics Center | Spain | English Spanish | Custom |

4 UNIVERSITY FACT SHEETS

FH Joanneum GmbH University of Applied Sciences



Kapfenberg, Austria



<https://www.fh-joanneum.at/en/institut/energy-transport-and-environmental-management/>



MASTER'S DEGREE

Energy and Transport Management: Mobility Technologies

The integration of new forms of mobility, high pollution levels and increasing pressure on existing mobility infrastructure are confronting regions and cities with major challenges for the future. Strategies to develop and manage modern mobility systems need to be developed if we are to ensure that cities remain liveable for generations to come. During your studies you focus on modern traffic simulations, international mobility trends and innovative scenarios. If you are striving for a career which focuses on modern mobility management, then this degree programme prepares you for tomorrow's world of work.

- Department of Building, Energy & Society
- 2 years | 120 ECTS
- English-taught
- Highlights:
 - ✓ Part of the Erasmus programme.
 - ✓ The courses can be chosen as separate modules.

Key areas covered

- ✓ **Active mobility**
- ✓ **Behavioural change & mobility management:** Psychological and Social Aspects on Mobility Behaviour, Trends in International and Urban Mobility.
- ✓ **Clean & energy-efficient vehicles:** Autonomous Driving Technologies and Impacts; Advanced Traffic Technologies; Environmental Chemistry and Emission Control.
- ✓ **Collective passenger transport & shared mobility:** Trends in International and Urban Mobility; International Aspects of Traffic Law; Public Transport Operation.
- ✓ **Demand & urban space management**
- ✓ **Integrated & inclusive planning**
- ✓ **Public participation & co-creation:** Strategic Management - Cases in international Business (Success and Pitfall Studies); Advanced Harvard Case Studies in Sustainable Management.
- ✓ **Road safety & security:** Advanced Traffic Technologies; Traffic Safety Aspects.
- ✓ **Smart & connected mobility:** Advanced Traffic Technologies; Automation and Control - Energy and Transport; Big Data Security and Safety Aspects; Autonomous Driving Technologies and Impacts; International Aspects of Traffic Law.
- ✓ **Urban logistics:** International Traffic Management and Transport Logistics.

Hasselt University



Hasselt, Belgium



<https://www.uhasselt.be/en/study/programmes/master-of-transportation-sciences>



MASTER'S DEGREE

Transportation Sciences

Since transportation is so multi-faceted, we have a multi-disciplinary take on transportation including psychological, social, urban, environmental and infrastructural aspects. Students approach the current and future transportation challenges from different angles, integrating knowledge and skills from different domains.

The online track is specifically tailored to the needs of practitioners who want to earn a specialised qualification and broaden their knowledge and work experience in the rapidly changing transportation field. The content and the degree of the online programme are equal to the full-time programme, but the courses are organized in such a way that students are able to combine a job with their studies. The course material is made available on an e-learning platform which enrolled students access from home. The internship and master thesis can be carried out at your place of employment, so you will already benefit from your studies in practice while still earning your degree.

Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Road safety & security
- ✓ Smart & connected mobility

- School of Transportation Sciences
- 2 years | 120 ECTS (on campus)
3 years | 120 ECTS (online)
- English-taught
- Highlights:
 - ✓ Part of the Erasmus programme.
 - ✓ Specialization options in Traffic Safety & Transport Policy and Planning.
 - ✓ International orientation.
 - ✓ Option to follow the offline or online track.

Ghent University



Ghent, Belgium



<https://studiekiezer.ugent.be/master-of-science-in-industrial-engineering-and-operations-research-transport-and-mobility-engineering-en/2022>



**GHENT
UNIVERSITY**

MASTER'S DEGREE

Industrial Engineering and Operations Research: Transport and Mobility Engineering

This Master programme combines the core disciplines of Industrial Engineering and Operational Research. Industrial Engineering is a branch of engineering that deals with analysing, designing and optimising complex operational systems. The set of the mathematical tools these engineers rely on for designing operational systems is known under the term Operations Research.

The IE/OR programme effectively prepares students for taking up leading roles in manufacturing, service industries and organisations worldwide, by thoroughly training them in technical principles of the design, planning and control of systems. The specialization Transport & Mobility Engineering is focused on the design and analysis of transport systems.

Key areas covered

- ✓ Behavioural change & mobility management
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation
- ✓ Smart & connected mobility
- ✓ Urban logistics
- ✓ Citizen science
- ✓ Digital Twins
- ✓ Big Data

● Faculty of Engineering and Architecture

● 2 years | 120 ECTS

● English-taught

● Highlights:

- ✓ Multidisciplinary approach.
- ✓ Students have a certain freedom of choice to compose their study programme according to their interests.
- ✓ Students become acquainted with state-of-the-art software tools for various applications (statistics, simulation, automatization and operations management).

Ghent University

 Ghent, Belgium

 <http://www.geografie.ugent.be/master>



MASTER'S DEGREE

Geography and Geomatics: Urban Geography

In the Master's programme Geography and Geomatics, substantive deepening is central. The study allows students to carry out independent scientific research in the subfields of:

- Geography (social and economic geography, landscape science, physical geography); or
- Geomatics (cartography and GIS, topography and hydrography).

Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management
- ✓ Smart & connected mobility
- ✓ Urban logistics

● Faculty of Sciences

● 2 years | 120 ECTS

● Dutch-taught

● Highlights:

- ✓ Multidisciplinary approach.
- ✓ Students have a certain freedom of choice to compose their study programme according to their interests.
- ✓ A wide range of employment opportunities after graduating.

University of Zagreb

 Zagreb, Croatia

 <https://www.fpz.unizg.hr/zgp>



University of
Zagreb

MASTER'S COURSE

Urban Mobility

In this course, students gain knowledge about the technological differences between different passenger transport modes, the impact of mobility on urban environments, and present modern concepts and paradigms related to sustainable mobility.

After completing the course, students will be able to:

- Compare the characteristics of every passenger transport mode in cities as well as modal split.
- Valorise the socio-economic and safety aspect in urban traffic system with sustainable development as a goal.
- Evaluate every indicator for describing the state of mobility according to the latest methodologies.
- Analyse delivery traffic and means of distributing goods in urban areas.
- Compare theoretical and real capacity among public transport lines in different transport systems.
- Plan non-motorized transport modes.
- Critically evaluate sustainable urban mobility plans and examples of projects encouraging sustainable urban mobility.

Key areas covered

- ✓ **Active mobility:** Cycling; modal shift.
- ✓ **Behavioural change & mobility management:** Criteria for urban transport modes.
- ✓ **Clean & energy-efficient vehicles:** E-mobility; alternative fuels in public transport.
- ✓ **Collective passenger transport & shared mobility:** New mobility services; public transport.
- ✓ **Road safety & security:** Road Safety; SUMP.
- ✓ **Smart & connected mobility:** Smart city; smart mobility; vulnerable traffic users; mobility hubs.
- ✓ **Urban logistics:** Distribution of goods.
- ✓ **Quality of service in public transport**
- ✓ **Application of Intelligent Transport Systems in urban transport**

- Faculty of Transport and Traffic Sciences
- 1 semester | 7 ECTS
- English-taught

University of Zagreb

 Zagreb, Croatia

 <https://www.fpz.unizg.hr/zgp>



University of
Zagreb

MASTER'S COURSE

Urban Transport Demand Management

In this course, students acquire knowledge related to transport demand management in cities and an integrated approach in developing transport demand measures.

After completing the course, students will be able to:

- Differentiate advantages and disadvantages of different transport demand strategies and their influence on transport politics.
- Analyse travel behaviour among the users through the factors determining mode choice.
- Plan the elements of urban traffic infrastructure according to transport demand.
- Give comments on successfully implemented transport demand strategies.
- Estimate acceptability and transferability of every transport demand measures.

- Faculty of Transport and Traffic Sciences
- 1 semester | 6 ECTS
- English-taught

Key areas covered

- ✓ **Behavioural change & mobility management:** Factors influencing travel choices.
- ✓ **Clean & energy-efficient vehicles:** Urban Vehicle Access Regulations.
- ✓ **Demand & urban space management**
- ✓ **Integrated & inclusive planning**
- ✓ **Public participation & co-creation:** Acceptability/transferability of transport demand measures.
- ✓ **Road safety & security:** Traffic calming; redesign of traffic areas.
- ✓ **Transport policy:** Transport policy makers, concepts and implementation.
- ✓ **Transport demand management, modelling and measures**

University North



Koprivnica, Croatia



<https://www.unin.hr/tehnicka-i-gospodarska-logistika-kc/opce-informacije/>



BACHELOR'S DEGREE

Logistics and Mobility

This interdisciplinary study programme includes general economic, professional logistics and transport courses, which makes it unique in Croatia.

Upon completion of the study Logistics and Mobility, students acquire competencies for managing complex logistics and transport processes. Graduates of the programme can be employed as logistics and mobility engineers dealing with, for example, logistics management, warehouse disposition and transport disposition, freight forwarding management, in-house logistics and similar responsibilities in companies.

Key areas covered

- ✓ **Active mobility:** Sustainable mobility; active urban and rural mobility.
- ✓ **Collective passenger transport & shared mobility:** SUMPs; public transport; shared mobility.
- ✓ **Public participation & co-creation:** Citizen participation in mobility planning.
- ✓ **Smart & connected mobility:** Intelligent Transport Systems.
- ✓ **Urban logistics:** Sustainable urban logistics plans (SULPs).
- ✓ **Management**
- ✓ **Quality control**
- ✓ **Project documentation**

Department for logistics and sustainable mobility

3 years | 180 ECTS

Croatian-taught

Highlights:

- ✓ Multidisciplinary approach.
- ✓ Students have a certain freedom of choice to compose their study programme according to their interests.

University North



Koprivnica, Croatia



<https://www.unin.hr/odrziva-mobilnost-i-logistika/diplomski-sveucilisni-studij/opce-informacije/>



MASTER'S DEGREE

Sustainable Mobility and Logistics Management

This study programme offers two specialization options. The specialization Sustainable Mobility explores the development of transport systems from their planning and project initiation to the implementation itself. Through the specialization Logistics Management, students acquire knowledge about the quality management of logistics systems.


The study prepares students to meet the market demands for employees capable of leading sustainable development processes and entire mobility and logistics processes by providing knowledge about all technological, technical, economic, managerial and environmental aspects related to these processes. This programme is open to horizontal and vertical cooperation and ensures student mobility within national and international frameworks.


Key areas covered

- ✓ **Active mobility:** Sustainable mobility; urban and rural mobility.
- ✓ **Behavioural change & mobility management:** Mobility management in urban areas.
- ✓ **Clean & energy-efficient vehicles:** Electromobility; clean vehicles.
- ✓ **Collective passenger transport & shared mobility:** SUMP, public transport; shared mobility.
- ✓ **Integrated & inclusive planning**
- ✓ **Public participation & co-creation:** Citizen participation in decision-making.
- ✓ **Road safety & security**
- ✓ **Smart & connected mobility:** Intelligent Transport Systems.
- ✓ **Urban logistics:** Sustainable urban logistics plans (SULPs) and last mile transport.
- ✓ **Regional and urban development**
- ✓ **Smart and intelligent cities**
- ✓ **Urban economics**
- ✓ **Supply chain management and modelling**
- ✓ **Computer simulations in transport and logistics**

- Department for logistics and sustainable mobility
- 2 years | 120 ECTS
- Croatian-taught
- Highlights:
 - ✓ Multidisciplinary approach.
 - ✓ Specialization options during the second year of the study: Sustainable Mobility or Logistics Management.

University of Jan Evangelista Purkyně

 Ústí nad Labem, the Czech Republic

 http://www.mobilita-ieep.cz/en/vyuka_kurzy/mobilita_v_uzemi/




UNIVERZITA J. E. PURKYNĚ V ÚSTÍ NAD LABEM



BACHELOR'S COURSE

Mobility within Territories: management and innovation


The course introduces the issues of organisation, planning and regulation of transport and its impacts on the health and the environment. A special emphasis is put on the strategic transport planning of cities and regions. The course further explains key aspects related to decision-making of cities and regions and introduces innovative measures of mobility management and other policies supporting sustainable transport and mobility - and their applications.

-  Faculty of Social and Economic Studies
-  1 semester | 2 ECTS
-  English-taught

Key areas covered

- ✓ **Active mobility:** Sustainable mobility; urban and rural mobility.
- ✓ **Behavioural change & mobility management:** Measures to influence mobility demand and offer sustainable travel options.
- ✓ **Clean & energy-efficient vehicles:** Alternative fuels; electromobility.
- ✓ **Collective passenger transport & shared mobility**
- ✓ **Demand & urban space management:** Smart parking policies; tolling; UVAR.
- ✓ **Integrated & inclusive planning:** SUMP; design of evaluation plans for policies.
- ✓ **Public participation & co-creation:** Participative planning - cooperation with target groups in mobility planning.

University of Jan Evangelista Purkyně

 Ústí nad Labem, the Czech Republic

 N/A

UNIVERZITA J. E. PURKYNĚ V ÚSTÍ NAD LABEM



MASTER'S ONLINE COURSE

Applied Economics in Public Services

The aim of this online course is to examine the economic theories that attempt to explain government fiscal activities in public services. The case studies are used to explain 1) public transport services and infrastructure; 2) energy infrastructure, and 3) green and blue infrastructure and water management.

Upon completing this course, students are able to:


- Explain the structure and growth of public expenditures and illustrate it on real-world case studies;
- Describe how the level of government expenditures is determined for public services;
- Describe wider consequences and impacts of the provided public services on the economy, society and the environment;
- Apply methods of social evaluation (MCA, CBA) on projects from three analysed case studies (public transport services and infrastructure; energy infrastructure; and green and blue infrastructure).
- Understanding of different approaches to the provision of public services according to their characteristics.

- Faculty of Social and Economic Studies
- 1 semester | 4 ECTS
- English-taught

Key areas covered

- ✓ **Collective passenger transport & shared mobility:** Public transport; efficiency.
- ✓ **Integrated & inclusive planning:** Public transport; wider impacts on the society, economy and the environment.

University of Jan Evangelista Purkyně

 Ústí nad Labem, the Czech Republic

 <https://www.fse.ujep.cz/en/regulation-and-behavioural-studies/>

UNIVERZITA J. E. PURKYNĚ V ÚSTÍ NAD LABEM



PhD DEGREE

Regulation and Behavioural Studies

This 4-year specialised study educates students to be experts and analysts capable of performing a critical analysis of the functioning of economic policy, economic regulation tools and consumer protection. The focus is on current societal issues that have implications for public policy making.

Behavioural economics and psychology are in foundation of this program. Students have the opportunity to use a modern stationary and mobile behavioural laboratory and the SMART Public Administration Laboratory.

Key areas covered

- ✓ **Behavioural change & mobility management**
- ✓ **Integrated & inclusive planning**

● Faculty of Social and Economic Studies

● 4 years

● English-taught
Czech-taught

● Highlights:

- ✓ Opportunity to interact in a research team.
- ✓ Opportunity to use a modern behavioural laboratory and the SMART Public Administration Laboratory.

University of Pardubice



Pardubice, the Czech Republic



<https://dfjp.upce.cz/en/new-masters-degree-program-transport-operations-management>



UNIVERSITY
OF PARDUBICE

MASTER`S DEGREE

Transport Operations Management

The master's study programme "Transport Operations Management" is designed to provide students with interdisciplinary theoretical and practical knowledge and skills. This two-year programme provides students with knowledge of planning, optimization, pricing, sustainability and IT support in the field of transportation and logistics.

Courses such as transport theory, computer intelligence and optimization methods in transport are followed by specialized courses in sustainable transport, regulation of transport and postal services, logistics management, intermodal transport or public passenger transport. Emphasis is placed on the environmental and social impacts of transport and logistics processes. The close cooperation with various Czech and international companies such as Škoda Auto, Siemens or AŽD Praha ensures that students are working on the real-life problems.

Key areas covered

- ✓ **Behavioural change & mobility management:** Urban mobility planning; modal split and its impact on passenger behaviour.
- ✓ **Collective passenger transport & shared mobility**
- ✓ **Integrated & inclusive planning:** Inclusive usage of public transport and urban areas; universal design; transport for all.
- ✓ **Urban logistics:** Cargo bikes in supply chain management; logistics management; reverse logistics, green logistics, distribution channels.
- ✓ **Sustainability**
- ✓ **Accessibility:** Public transportation; urban areas.
- ✓ **Optimization of transport:** Analysis of transport systems; decision-making tasks, scheduling, capacity issues of transport networks.



Faculty of Transport Engineering


2 years | 120 ECTS

English-taught

Highlights:

- ✓ Multidisciplinary approach.
- ✓ Close cooperation with Czech and international companies.

University of Pardubice

 Pardubice, the Czech Republic

 N/A



UNIVERSITY
OF PARDUBICE

MASTER`S DEGREE

Rail Vehicles

The master's study programme Rail Vehicles provides students with complex knowledge about the design, manufacturing, testing, operation and maintenance of rail vehicles. The programme includes courses such as mechanics, electronics, applied mathematics and strength of materials. These are followed by courses on rail-related topics and specific technical skills in four main streams – mechanical engineering, electrical engineering, rail technology and rail theory. Diploma theses and projects often deal with practical problems and are assigned and solved in cooperation with industrial partners.

Key areas covered

- ✓ **Clean & energy-efficient vehicles:** Design of rail vehicles and electric traction in rail systems; energy-efficient transport.
- ✓ **Collective passenger transport & shared mobility:** Vehicles for railways and other systems of rail transport; public passenger transport.
- ✓ **Smart & connected mobility:** Technical diagnostics and maintenance; sensors and smart systems; predictive diagnostics; tools for predictive diagnostics of rail vehicles and infrastructure.
- ✓ **Vehicle design:** Design of railway vehicle; mechanical and electrical parts.
- ✓ **Vehicle testing:** Development, research, testing and acceptance of railway vehicles.
- ✓ **Vehicle operation and maintenance:** Operation, maintenance and repairs of rail vehicles.
- ✓ **Electric traction:** Electrical engineering in rail transport; electric motors; drive systems and control.
- ✓ **Rail engineering**
- ✓ **Wheel-rail interaction**

Faculty of Transport
Engineering

2 years | 120 ECTS

English-taught

Highlights:

- ✓ Real-life case studies / projects assigned and solved in cooperation with industrial partners.
- ✓ Students can be involved in the research activities of the faculty.
- ✓ Opportunity to proceed with a doctoral study after graduating.

*Information collected from open-source data.

Czech Technical University in Prague*



Prague, the Czech Republic



<https://www.fd.cvut.cz/english/students/study-programmes.html#master-IS>



MASTER'S DEGREE

Technology in Transportation and Telecommunications: Intelligent Transport Systems

The study field Intelligent Transport Systems is a part of a Master's Degree Programme called Technology in Transportation and Telecommunications and enlarges the spectrum of transportation education.

Graduates of the programme acquire a detailed understanding of intelligent transport systems, their components, upcoming development in the field and also practical knowledge of the design, control and evaluation of these systems.

The Intelligent Transport Systems study field is offered either as a single degree program at the Czech Technical University in Prague or as a joint-degrees study field combined with a partner university (Linköpings Universitet, Sweden), offering students the possibility to obtain diploma also from the foreign university.

● Faculty of Transportation Sciences

● 2 years | 120 ECTS

● English-taught

● Highlights:

- ✓ Availability of a variety of research laboratories specializing in ITS.
- ✓ Opportunity to pursue a joint-degree programme in cooperation with Linköping University (Linköping, Sweden).

*Information collected from open-source data.

Czech Technical University in Prague*

 Prague, the Czech Republic

 <https://uchazec.fd.cvut.cz/en/smart-cities/>




MASTER'S DEGREE

Smart Cities

The Dual Master's Degree Programme in Smart Cities is a full-time study programme offered in cooperation between the Czech Technical University in Prague (CTU) and The University of Texas at El Paso (UTEP). Students study for one year at CTU and for one year at UTEP. Graduates receive two Master's degrees, one from CTU and one from UTEP.



The students learn the foundations of the Smart Cities concept as well as how to model and design a suitable and smart city solution. Due to the interdisciplinary nature of Smart Cities, courses on urban development and planning along with ITS, logistics, or project management are offered.

 Faculty of Transportation Sciences

 2 years | 120 ECTS

 English-taught

 Highlights:

-  Multidisciplinary approach.
-  Dual Master's Degree in cooperation with The University of Texas at El Paso (UTEP).

*Information collected from open-source data.

Czech Technical University in Prague*



Prague, the Czech Republic



<https://www.fd.cvut.cz/english/students/study-programmes.html#phd>



PhD DEGREE

Transportation Systems and Technology

This doctoral study program is organised in the following areas: intelligent transport systems, safety and reliability of transport systems, components and systems of vehicles, development of transport telematics, transport systems in the city and in the countryside, environmental impacts, human mobility in non-urban areas, design of transport infrastructure, applied mechanics, modelling in transportation. Students are trained to deal with complex analytical and decision-making processes in the field of transport systems and technology.



Faculty of Transportation Sciences

English-taught

*Information collected from open-source data.

Czech Technical University in Prague*

 Prague, the Czech Republic

 <https://www.fd.cvut.cz/english/students/study-programmes.html#phd>





PhD DEGREE

Logistics and Management of Transport Processes

The programme aims to prepare students to solve complex analytical, decision-making and implementation processes in the field of transport and logistics systems. The study program is focused on scientific research and the independent creative activity of doctoral students.

Students will acquire knowledge in applied mathematics, transportation logistics, transport theory, transport technology, and modern logistic systems. Students will be prepared for providing solutions to research-developing problems in the area of logistics. They will work as researchers in the development of projects for the everlasting improvement of controlling mechanisms in logistics.

-  Faculty of Transportation Sciences
-  English-taught

*Information collected from open-source data.

Czech Technical University in Prague*

 Prague, the Czech Republic

 <https://www.fd.cvut.cz/english/students/study-programmes.html#phd>





PhD DEGREE

Smart Cities

The programme aims to prepare students to solve complex analytical, decision-making and implementation processes in the field of transport and urbanism. Due to the interdisciplinary character of the programme, experts from both the Faculty of Transportation Sciences and from the Faculty of Architecture of the Czech Technical University take part in the teaching activities.

The graduate of the doctoral programme Smart Cities gains knowledge (according to a choice of compulsory elective courses) in mobility, urban planning, systems science or logistics.

-  Faculty of Transportation Sciences
-  English-taught

Tampere University

 Tampere, Finland

 <https://www.tuni.fi/en/study-with-us/technology-sustainable-urban-development>



BACHELOR`S DEGREE

Sustainable Urban Development

Upon completing this study, graduates will:

- Understand the various aspects of built environment, sustainable urban development and their societal significance;
- Know the key concepts and terminology and be able to follow the developments in the field of urban development;
- Recognize the central actors, questions, conflicts and solutions connected to sustainable urban development;
- Be able to carry out development projects individually and in teams related to sustainable urban development;
- Understand the basic principles of academic research and be able to independently design, conduct and report academic research projects.

 Faculty of Built Environment

 3 years | 180 ECTS

 English-taught

 Highlights:

- ✓ Multidisciplinary approach.
- ✓ Opportunity to proceed with the Master of Science in Technology after graduating.

Key areas covered

- ✓ **Active mobility:** Transport modes; passenger transport.
- ✓ **Behavioural change & mobility management:** Mobility needs of society & business.
- ✓ **Clean & energy-efficient vehicles:** Transport impacts on society and environment.
- ✓ **Demand & urban space management:** Processes, actors and aims of transport system planning; land use planning and transport system planning; infrastructure and vehicles; transport policy goals, decision making and user preferences and choices.
- ✓ **Integrated & inclusive planning:** Importance of mobility and transport for the society; societal aims affecting the transport system; transport policy.
- ✓ **Road safety & security:** Effects of transport on accessibility, the environment and safety, and the goal of sustainable mobility and transport system in ecological, economic and social terms.
- ✓ **Urban logistics:** Freight transport needs of business and the society.

Tampere University

 Tampere, Finland

 <https://www.tuni.fi/fi/tule-opiskelemaan/rakennustekniikan-di-ohjelma>



MASTER`S DEGREE

Civil Engineering


In this study, available in English from 2023 onwards, students can specialise in sustainable transport systems. As experts of sustainable transport systems, students analyse, plan and develop transport systems that serve passenger and freight transport in urban and rural areas. Knowledge is offered on the transport needs of people and on the solutions to meet those needs in a sustainable way from ecological, economic and social perspectives. Graduates are able to understand and apply transport and mobility principles as they relate to sustainable urban development, and analyse their complex interrelations within the urban systems, as well as critically evaluate sustainable development projects and case studies in their global context and formulate the best practices in local context.


The Master's programme prepares graduates to compete for local and international positions within public, private or the third sector.

Key areas covered

- ✓ **Active mobility:** Sustainable urban mobility; walking and cycling in cities.
- ✓ **Behavioural change & mobility management:** Transport economics; the elasticity of transport demand due to cost, time and effort.
- ✓ **Clean & energy-efficient vehicles:** Feasibility of alternative motive powers.
- ✓ **Collective passenger transport & shared mobility:** Analysing and planning public transport.
- ✓ **Demand & urban space management:** Connections between land use and transport.
- ✓ **Integrated & inclusive planning:** Analysing transport poverty.
- ✓ **Public participation & co-creation:** Participatory research principles.
- ✓ **Road safety & security:** Traffic safety research principles.
- ✓ **Smart & connected mobility:** Planning automated transport systems.
- ✓ **Urban logistics:** Analysing and planning logistics.

 Faculty of Built Environment

 2 years | 120 ECTS

 English-taught
(from 2023 onwards)

 Highlights:

- ✓ Specialization option in sustainable transport systems.
- ✓ A wide range of employment opportunities after graduating.

*Information collected from open-source data.

University of Lille*



Lille, France



<https://sciences-technologies.univ-lille.fr/formations/fiche/fr-00002024>



MASTER'S DEGREE

Electrical Engineering for Sustainable Development

The aim of the Master Electrical Engineering for Sustainable Development is to train students in advanced methods of design and control of electrical systems. These systems aim to increase the contribution of renewable energies in the generation of electricity and as sources for transport, and to improve the performance and the energy efficiency of electrical systems in order to move towards a more rational use of natural resources.

The study programme allows to acquire a specialized knowledge in electrical engineering applied to environmental problems. It provides the knowledge in such topics like: power conversion, design of electromechanical actuators with high performance, sustainable transport, integration of renewable energy sources in the grid.

- Faculty of Sciences and Technology
- 2 years | 120 ECTS
- English-taught
- Highlights:
 - ✓ Option to follow the double degree track with Harbin Institute of Technology (HIT-China) and Ghent University (Belgium).
 - ✓ International character.

Dresden University of Technology



Dresden, Germany



<https://tu-dresden.de/bu/verkehr/studium/studienangebot/transportation-economics-master>



**TECHNISCHE
UNIVERSITÄT
DRESDEN**

MASTER`S DEGREE Transportation Economics

The Master's programme in Transportation Economics provides scientific methods and tools for understanding, processing and solving imminent transport-related issues.

The design of mobility, transport and logistics systems is one of the main societal challenges. It determines participation in social and economic activities, the environmental impact of transport, and the economy's and society's spatial structure. In addition, means of transport, infrastructures, the organisation and financing of mobility services face fundamental changes due to the platform economy, internet trade, the shift towards renewable energy, the development of autonomous vehicles, and the availability of large and heterogeneous amounts of data. This implies a range of transport economics issues at both the operational and societal levels.

Key areas covered

- ✓ **Behavioural change & mobility management:** Policy instruments to affect mobility behaviour aimed at lowering emissions, noise, congestion; Simulations for transport policy in urban context.
- ✓ **Clean & energy-efficient vehicles**
- ✓ **Collective passenger transport & shared mobility:**
- ✓ **Urban logistics:** Improving and tackling logistics problems.
- ✓ **Logistics:** Computational logistics - methods to analyse issues in public transport supply.
- ✓ **Transport pricing:** Economic instruments to achieve transport policy goals.
- ✓ **Cost-benefit:** Economic evaluation of infrastructure projects.
- ✓ **Urban economics:** Issues in cities - transport, housing, climate change.
- ✓ **Empirical methods:** Statistics; computational statistics; data analytics; econometrics as methods to analyse mobility issues.
- ✓ **Transport modelling**



Friedrich List Faculty of
Transport and Traffic Sciences

2 years | 120 ECTS

English-taught


Highlights:

- ✓ Five specialization options to choose from.
- ✓ Opportunity to study abroad or follow a vocational internship in the 3rd semester.

*Information collected from open-source data.

Technical University of Crete*

 Chania, Greece

 <https://www.chenveng.tuc.gr/en/studies/postgraduate/masters-programme>



MASTER`S DEGREE Sustainable Engineering and Climate Change

This programme awards the degree of Master of Science (M.Sc.) in Sustainable Engineering and Climate Change and is offered by the School of Chemical and Environmental Engineering. The Programme offers science and engineering graduates the opportunity to specialize in one of the following areas:

- Sustainable Water and Wastewater Management
- Sustainable Energy

- School of Chemical and Environmental Engineering
- 3-6 semesters | 90 ECTS
- English-taught

Budapest University of Technology and Economics



Budapest, Hungary



<https://transportation.bme.hu/msc-programmes/applicants/transportation-engineering-master-msc/>



MASTER`S DEGREE Transportation Engineering

The aim of the study is to train graduates who will be able to analyse, plan, organize and control transport-related processes in an integrated way considering economic, safety, environmental and human resource aspects. Graduates will be equipped with the right skills to deal with tasks of transport administration and transport authorities, choice and operation of vehicles and facilities of passenger and good transportation systems and related infrastructural, control and IT system elements. The students will also be prepared to tackle higher management tasks, to creatively participate in research & development tasks.

Key areas covered

- ✓ **Active mobility:** Passenger Transportation.
- ✓ **Behavioural change & mobility management:** Intelligent Transport Systems; Environmental Effects on Transport.
- ✓ **Collective passenger transport & shared mobility:** Passenger Transportation.
- ✓ **Demand & urban space management:** Transport Modelling.
- ✓ **Smart & connected mobility:** Smart City; Intelligent Transport Systems.



Transportation Engineering and Vehicle Engineering



2 years | 120 ECTS



English-taught




Highlights:

- ✓ Five specialization options to choose from.
- ✓ Opportunity to proceed with a doctoral study after graduating.

Budapest University of Technology and Economics

 Budapest, Hungary

 <https://transportation.bme.hu/msc-programmes/applicants/vehicle-engineering-master-msc/>



MASTER`S DEGREE Vehicle Engineering

The goal of this master`s study is to provide the required knowledge for managing the development, design, dimensioning, manufacturing and analysing of internal processes of different vehicles. Students will also be prepared to tackle management tasks and to creatively participate in Research & Development related tasks.

 Transportation Engineering and Vehicle Engineering

 2 years | 120 ECTS

 English-taught

 Highlights:

- ✓ Eight specialization options to choose from.
- ✓ Opportunity to proceed with a doctoral study after graduating.

Budapest University of Technology and Economics



Budapest, Hungary



<https://transportation.bme.hu/msc-programmes/applicants/logistics-engineering-master-msc/>



MASTER`S DEGREE Logistics Engineering

The aim of this master`s degree is to educate graduates for the planning, organization and control of corporate logistics systems, good transport systems and supply and distribution networks. Graduates will also acquire knowledge enabling them to develop machine and tools related to logistics systems. The students will be able to deal with the complex modelling and optimization of logistics systems, understand the operation and planning principles of corporate logistics systems, and the distribution of networks and supply chains.

● Transportation Engineering
and Vehicle Engineering

● 2 years | 120 ECTS

● English-taught

● Highlights:

- ✓ Three specialization options to choose from.
- ✓ Opportunity to proceed with a doctoral study after graduating.

Budapest University of Technology and Economics



Budapest, Hungary



<https://transportation.bme.hu/msc-programmes/applicants/autonomous-vehicle-control-engineering-master-msc/>



MASTER`S DEGREE Autonomous Vehicle Control Engineering

The goal of this master`s programme is to provide students with knowledge in the fields of vehicle technology, control theory, intelligent systems, information technology and communications. The students will be prepared to design, develop and manufacture autonomous vehicles, simulate networks, test and validate processes and work in a complex environment with various sensor data. Students will also be able to facilitate the creation of a safe and energy-saving operation of autonomous transportation systems considering environmental and sustainable parameters.

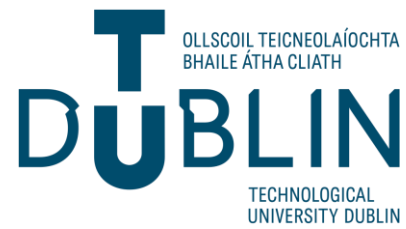
- Transportation Engineering and Vehicle Engineering
- 2 years | 120 ECTS
- English-taught
- Highlights:
 - ✓ Cooperation with industrial partners ensuring participation in the latest research and development projects.
 - ✓ Opportunity to proceed with a doctoral study after graduating.

*Information collected from open-source data.

Technological University Dublin*


 Dublin, Ireland

 <https://www.tudublin.ie/study/postgraduate/courses/transport-and-mobility/>



MASTER`S DEGREE Sustainable Transport and Mobility



The Master of Science in Sustainable Transport and Mobility is a multi-disciplinary programme delivered by a team across the College of Engineering and Built Environment at TU Dublin. The objectives of the programme include examining the context of enhancing mobility for resilient urban and rural environments and fostering equity and well-being for all. This in turn encapsulates the idea of planning and design for healthy communities and living streets. The programme is designed to be highly engaged, both with industry and civic society, encouraging current best practice and reflectiveness, and to facilitate new research and innovation in the field of transport planning.

 College of Engineering & Built Environment

 2 years | 120 ECTS


 English-taught

 Highlights:

-  Intercultural and interdisciplinary context.
-  Professionally accredited programme with the Chartered Institution of Highways & Transportation (CIHT) and the Transport Planning Society.

University of Luxembourg

 Esch-sur-Alzette, Luxembourg

 https://www.en.uni.lu/studies/fhse/master_in_geography_and_spatial_planning




UNIVERSITÉ DU
LUXEMBOURG


MASTER`S DEGREE Geography and Spatial Planning

The Master in Geography and Spatial Planning is designed to respond to the growing need for highly qualified experts that can embrace the multi-dimensionality and complexity of the evolution of cities and regions, reflecting global changes and local dynamics.

Despite the demand for European or transnational coordination in spatial planning, national planning cultures and concepts within Europe continue to be markedly heterogeneous. The students will be prepared for understanding a wide range of European and transnational planning philosophies and processes, as well as transcending current limits.

The programme addresses key social, economic and environmental challenges with a geographical and multi-scalar perspective. Sustainable planning strategies require a holistic approach and push researchers and experts to enlarge the scope of their competences and move beyond singular disciplinary culture.

 Faculty of Humanities,
Education and Social Sciences

 2 years | 120 ECTS

 English-taught

 Highlights:

- ✓ Intercultural and interdisciplinary context.
- ✓ Unique combination of academic courses and practical work.

Technical University of Moldova

 Chişinău, Republic of Moldova

 <https://fua.utm.md/program-de-studiu-la-specialitatea-cai-ferate-drumuri-poduri/>



BACHELOR`S DEGREE

Railways, Roads and Bridges

The Railways, Roads and Bridges bachelor program comprises education on: transport modes (road, rail, airport runways); transport infrastructure types (urban and interurban, national and international, terminals); phases of transportation projects (planning, design, tendering, construction, delivery for operation, operation, management, maintenance); types of materials for road constructions; technologies and methods for road construction, both below the road surface (e.g. subway) and above and mobility and safety.

Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Road safety & security

- Faculty of Architecture and Urban Planning
- 4 years | 240 ECTS
- Romanian-taught
- Highlights:
 - ✓ Opportunity to use a wide range of didactic laboratories.
 - ✓ Opportunity to be part of student mobility programs such as "Erasmus+".

University of Amsterdam



Amsterdam, the Netherlands



<https://www.uva.nl/en/programmes/minors/urban-and-regional-planning/urban-and-regional-planning>



UNIVERSITY
OF AMSTERDAM

BACHELOR'S MODULE

Minor Urban and Regional Planning

The Urban and Regional Planning minor focuses on people, their environment and spatial issues emerging from their interaction. Space is a finite resource and we need to use it carefully, particularly in the Netherlands. An urban or regional planner considers the future use of space and concentrates primarily on the built environment. Societal changes constantly require spatial modifications. Planners work to ensure that spatial changes are implemented as effectively as possible.



College of Social Sciences


6 months | 30 ECTS

English-taught

Key areas covered

- ✓ Integrated & inclusive planning

University of Amsterdam

 Amsterdam, the Netherlands

 <https://www.uva.nl/en/programmes/minors/urban-studies/urban-studies>



UNIVERSITY
OF AMSTERDAM

BACHELOR'S MODULE

Minor Urban Studies

The minor Urban Studies is an interdisciplinary field in the Social Sciences, with connections to the Humanities and the Natural (Earth) Sciences. The growing importance of Urban Studies is reflected in: the rapid acceleration of urbanization world-wide; the transition to an information economy that is primarily embedded in urban areas and the emergence of 'world cities' and the main nodes of a global urban network.

Key areas covered

- ✓ Collective passenger transport & shared mobility
- ✓ Integrated & inclusive planning

- College of Social Sciences
- 12 months | 24-30 ECTS
- English-taught

University of Amsterdam



Amsterdam, the Netherlands



<https://www.mooc-list.com/course/alternative-mobility-narratives-coursera>



UNIVERSITY
OF AMSTERDAM

BACHELOR'S ONLINE COURSE MOOC - Alternative Mobility Narratives

This course is about the stories that we tell ourselves about why and how we move. Critically examining our current narratives, helps to think about mobility in a new way. Using systems dynamics modelling, we explore how a mobility innovation (of student choice) impacts our mobility system as a whole, for better or for worse. This course invites to reflect on the mainstream mobility narrative built on engineering and economics.

Key areas covered

- ✓ Behavioural change & mobility management
- ✓ Integrated & inclusive planning



College of Social Sciences

5-12 weeks

English-taught

University of Amsterdam



Amsterdam, the Netherlands



<https://www.mooc-list.com/course/reclaiming-street-livable-urban-spaces-coursera>



UNIVERSITY
OF AMSTERDAM

BACHELOR'S ONLINE COURSE MOOC – Reclaiming the Street for Liveable Urban Spaces

In the MOOC Reclaiming the Street, the student learns about the mechanisms of change and challenges in creating vibrant streetscapes in own neighbourhoods. This course guides through seminal academic work on the topics of transition management and street experiments while providing practical insights from practitioners from around the world. A final peer-reviewed project integrates key takeaways from each module of this course, helping to write an actionable plan for change.

Key areas covered

- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning



College of Social Sciences



5-12 weeks



English-taught



University of Amsterdam



Amsterdam, the Netherlands



<https://www.mooc-list.com/course/unraveling-cycling-city-coursera>



UNIVERSITY
OF AMSTERDAM

BACHELOR'S ONLINE COURSE MOOC – Unravelling the Cycling City

Obscured by its apparent simplicity, cycling is a complex phenomenon. Being an almost perfect human-machine hybrid, cycling is deeply rooted in a plethora of socio-technological systems. Around the world cycling is embraced as an important ingredient to tackle a wide variety of individual and societal challenges. The Netherlands is often seen as an ideal living lab, because cycling has retained its significant share of mobility throughout the country. At the same time, there are large differences in developments across time and space, that allows for a better understanding of potential causal relations. Unravelling the Cycling City bundles the state-of-the-art knowledge that emerges from research and practice on the Dutch cycling system. As such, it provides an easily accessible platform to learn about important causes and effects, to open minds for the complexity of the entire system and to support group deliberations around the world.

Key areas covered

- ✓ Active mobility





College of Social Sciences

5-12 weeks

English-taught

University of Amsterdam

 Amsterdam, the Netherlands

 <https://www.coursera.org/learn/being-smart-about-cycling-futures>



UNIVERSITY
OF AMSTERDAM

BACHELOR'S ONLINE COURSE MOOC - Being Smart About Cycling Futures

What is the future of cycling in our cities that struggle to transition to more sustainable and inclusive forms of mobility? What is the role of innovation in ensuring that cycling becomes easier, safer and more accessible for different groups of people? What are Great Bikes and what are Great Cycling Cities? This course tackles such questions, helps the student to develop its own approach to cycling futures and innovation. It teaches the students to ask critical questions about various aspects of cycling practice and its place in mobility systems, about cycling innovation and the way in which various stakeholders imagine cycling futures.

- College of Social Sciences
- 5-12 weeks
- English-taught

Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Integrated & inclusive planning

University of Amsterdam



Amsterdam, the Netherlands



<https://www.uva.nl/en/programmes/masters/urban-and-regional-planning/urban-and-regional-planning>



UNIVERSITY
OF AMSTERDAM

MASTER`S DEGREE Urban and Regional Planning

With its diverse study programme of themes and learning approaches, the programme allows to examine and understand the governance processes that shape the social and built environment of cities; to critically reflect and address the limits and opportunities of current policies tackling the socio-ecological questions of present urbanization; to know the historical roots and path dependencies of present planning processes; and to engage with imaginative and experimental methods of urban imagination and policy making.

Key areas covered

- ✓ Integrated & inclusive planning



Faculty of Social and Behavioural Sciences



1 year | 60 ECTS



English-taught



Highlights:

- ✓ Intercultural and interdisciplinary context.
- ✓ An option to perform an 'extra-curricular internship' during your thesis, join a field trip abroad to do international empirical research or join the 'planning in practice' path.

University of Amsterdam



Amsterdam, the Netherlands



<https://summerschool.uva.nl/content/summer-courses/planning-the-cycling-city/planning-the-cycling-city>



UNIVERSITY
OF AMSTERDAM

SUMMER SCHOOL Planning the Cycling City

This three-week summer programme deploys Amsterdam as the living lab to examine the impacts of history, policy, infrastructure, planning, and culture within the context of urban cycling in the Netherlands. Students are invited to bring and share their personal views and experiences on cycling cities from around the world, sharing diverse perspectives, plans, and desires working together to plan cycling cities. As the world's cycling capital, Amsterdam offers a premier environment for engaging with all of this.



Faculty of Social and
Behavioural Sciences



3 weeks | 6 ECTS



English-taught

*Information collected from open-source data.

Amsterdam University of Applied Sciences*



Amsterdam, the Netherlands



<https://www.hva.nl/opleiding/built-environment/studieprogramma/mobiliteit/mobiliteit>



**Amsterdam University
of Applied Sciences**

BACHELOR`S DEGREE Built Environment: Mobility

In this specialization of Built Environment, students work on the following themes and fields of expertise:

- Developing a public transport hub
- Mobility and Technology
- 3D infrastructure design

During the projects and the internship, students work on real challenges in the field of mobility: e.g., how to keep a car-free neighbourhood accessible, how to design a safe street.



Faculty of Technology



3-4 years | 240 ECTS



Dutch-taught



*Information collected from open-source data.

Vrije Universiteit Amsterdam*



Amsterdam, the Netherlands



<https://vu.nl/en/education/master/spatial-transport-and-environmental-economics>



MASTER`S DEGREE

Spatial, Transport and Environmental Economics


The Master's in Spatial, Transport and Environmental Economics deals with urban and regional, transport, environmental, or real estate economics.

The Master's programme allows students to specialize in one of these four fields, but also offers the opportunity to combine courses from all these fields. The programme offers the theoretical knowledge and practical skills to tackle complex problems at a high level of abstraction, keeping in mind the need to translate theoretical solutions into clear-cut policy advice. The contents are firmly rooted in economics, but shed light on the multi-disciplinary nature of many real-world policy questions.

- School of Business and Economics
- 1 year | 60 ECTS
- English-taught
-

*Information collected from open-source data.

Radboud University*

 Nijmegen, the Netherlands

 <https://www.ru.nl/en/education/masters/urban-and-regional-mobility>

Radboud University



MASTER`S DEGREE

Spatial Planning: Urban and Regional Mobility

Mobility deals with increasingly complex flows of people and goods in the networked city and region. With different technologies, lifestyles and spatial structures, the demand side is always changing. On the supply side, services become more flexible and the physical infrastructure is used more efficiently. This Master's specialisation looks into various integrated mobility systems or transport modes at different spatial scales. It also looks at innovations for strategic spatial planning at the level of integrated city regions, and how mobility and transportation fit in these innovations.

- Nijmegen School of Management
- 1 year | 60 ECTS
- English-taught

Breda University of Applied Sciences



Breda, the Netherlands



www.buas.nl/en/programmes/built-environment



BACHELOR`S DEGREE

Built Environment

The human living environment is everchanging and therefore challenged. To ensure liveable and sustainable living environments, young professionals that understand how to organise our cities, places and movements in the best fitting way, are needed. In the Built Environment programme, students learn to design attractive cities, manage urban planning efficiently, influence people towards making clever transport choices, and think and design strategically. This is done through a project-based approach with a focus on personal, professional skill-development that not just teaches students what to think, but especially how to think. Importantly, this involves putting responsibility of choice in the students' hands which is done through the elective courses 'Expertise course' and 'Profiling course'.

Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation



Academy for Built Environment & Logistics



4 years | 240 ECTS



English-taught



Highlights:

- ✓ Unique and integral combination of mobility, urban planning and urban design.
- ✓ Intercultural and interdisciplinary context.
- ✓ Small-scale degree programme in an informal learning community with one-to-one coaching.

Breda University of Applied Sciences



Breda, the Netherlands



<https://www.kiesopmaat.nl/modules/nhtv/ABEL/142424>



BACHELOR`S MODULE

Minor International Urban Redevelopment: towards sustainable cities and mobility

Cities around the world are aiming to reduce their car dependency and unrestricted growth. The purpose of the minor is to pave the way for a shift towards a sustainable mobility and urban culture. This involves tackling issues related to air quality, obesity, the quality of public spaces, social cohesion etc. However, changing urban structures and citizen behaviour is no easy endeavour: it needs careful and specific interventions to change the way urban areas are laid out and used. It not only involves a shift in spatial and transportation policies, but also a new way of thinking about cities, people and mobility. That is Retrofitting in a nutshell. This minor program aims to spur this paradigm shift by using your expertise and perspectives.



Academy for Built Environment & Logistics

18 weeks | 30 ECTS


English-taught

Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation

*Information collected from open-source data.

University of Aveiro*

 Aveiro, Portugal

 <https://www.ua.pt/en/uc/5786>



MASTER`S COURSE

Mobility Planning

The objectives of the course are:

- To present an integrated perspective on problems and opportunities from recent mobility trends;
- To promote a critical discussion about the relevance of mobility planning and different tools to intervene on this field.

The learning outcomes of the course are:

- To understand planning of mobility as a part of territorial policies;
- To know policies towards a sustainable mobility;
- To distinguish mobility patterns according to different territories;
- To integrate transport system with social and economic matters;
- To propose and to evaluate solutions for better mobility on urban and rural contexts;
- To relate mobility's best practices with urban environment and people's quality of life.

- Department of Social, Political and Territorial Sciences
- 6 ECTS
- English-taught
Portuguese-taught

*Information collected from open-source data.

University of Aveiro*

 Aveiro, Portugal


 <https://www.ua.pt/en/course/472>




MASTER`S DEGREE Smart Mobility

This Master degree aims to develop problem-solving skills in the area of mobility and is geared towards the development of new products and technologies for smart, safe and sustainable mobility.

It is intended to forming graduates who will become recognized leaders in the field by solving mobility challenges, including infrastructure, planning, impacts, logistics and the competitiveness and manufacturing of innovative products.

 Department of Mechanical Engineering

 2 years | 120 ECTS

 English-taught
Portuguese-taught

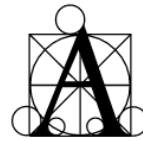
Ion Mincu University of Architecture and Urban Planning



Bucharest, Romania



<https://www.uauim.ro/en/faculties/urbanism/urbanism/curricula/3/>



“Ion Mincu”
University of Architecture
and Urban Planning

BACHELOR`S COURSE

Urban Mobility 1

Urban mobility 1 is an introductory course discussing: Urban mobility definition, typologies; A holistic approach of urban mobility; Urban form & Urban mobility.

Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Clean & energy-efficient vehicles
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation
- ✓ Road safety & security
- ✓ Smart & connected mobility



Faculty of Urban Planning

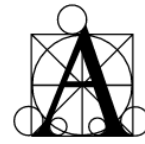
1 semester | 2 ECTS

Romanian-taught
(could be English-taught)
(could be French-taught)

Ion Mincu University of Architecture and Urban Planning

 Bucharest, Romania

 <https://www.uauim.ro/en/faculties/urbanism/mmu/>



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MASTER`S DEGREE

Urban Mobility

Urban Mobility Master is exploring three new approaches in urban mobility:


- Holistic theoretic approach and multidisciplinary planning of urban mobility
- Land Use and Mobility theoretical and integrated planning models
- Urban Mobility management - integrated and sectoral policies

Urban Mobility Master has a theoretical and methodological focus on developing a new model of Land Use & Mobility integrated planning, founded on systematized correlations between the spatial organisation and the mobility patterns of and within a zonal, local or metropolitan territory. Relevant concepts, methods, models and tools are investigated in "research through project" activities, having as background the general concerns related to sustainability, resilience to climate change, smart city and smart mobility challenges.

Key areas covered

- ✓ **Active mobility:** Standards and regulations, design, policy.
- ✓ **Behavioural change & mobility management:** Mobility management, integrated and sectoral urban mobility policies aimed at the (re)shape of sustainable mobility habits and behaviour.
- ✓ **Clean & energy-efficient vehicles**
- ✓ **Collective passenger transport & shared mobility:** Standards and regulations, design, policy.
- ✓ **Demand & urban space management:** Multimodal urban mobility schemes, at zonal and local level; recovery and reallocation of public space, street re-design and urban regeneration.
- ✓ **Integrated & inclusive planning:** Land Use and Mobility integrated planning.
- ✓ **Public participation & co-creation**
- ✓ **Road safety & security**
- ✓ **Smart & connected mobility**
- ✓ **Urban logistics**
- ✓ **Sustainable Urban Mobility Plans**
- ✓ **UVAR schemes**

 Faculty of Urban Planning

 2 years | 120 ECTS

 Romanian-taught

 Highlights:

- ✓ Multidisciplinary approach.
- ✓ Opportunity to proceed with a doctoral study after graduating.

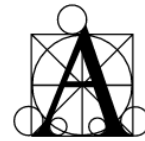
Ion Mincu University of Architecture and Urban Planning



Bucharest, Romania



<https://www.uauim.ro/en/faculties/urbanism/mmu/compulsory-courses/ut-25/>



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University of Architecture
and Urban Planning

MASTER`S COURSE

Urban Mobility 2

Urban mobility 2 is a theoretical master course discussing:

- Urban mobility typology and concepts, Urban mobility sustainable and smart paradigm;
- A holistic approach of urban mobility (social, economic, environmental insights);
- Modes of transportations -integrated and sectoral planning models, in urban contexts (contextualized);
- Urban form - Urban mobility; principles of urban form organization to create spatial premises for sustainable mobility;
- Urban operations with significant components of urban mobility remodel.



Faculty of Urban Planning

1 semester | 4 ECTS

Romanian-taught
(could be English-taught)
(could be French-taught)

Key areas covered

- ✓ **Active mobility:** Characteristics, infrastructure.
- ✓ **Behavioural change & mobility management:** Perceptions of transportation modes, mobility culture, attitudes and mobility behaviour; inclusiveness and equity in mobility.
- ✓ **Clean & energy-efficient vehicles:** Environmental issues, clean energy, charging infrastructure.
- ✓ **Collective passenger transport & shared mobility:** Transport systems characteristics, infrastructure, fleets, services; behavioural issues (sharing versus owning); spatial insight.
- ✓ **Demand & urban space management:** Street (re)design.
- ✓ **Integrated & inclusive planning:** Land Use and Mobility integrated planning
- ✓ **Public participation & co-creation:** Types of public participation & co-creation.
- ✓ **Road safety & security:** Principles and models of street design with higher safety features.
- ✓ **Smart & connected mobility:** Related concerns and challenges (foreseeable benefits and potential negative impacts); discussion on presumptive spatial issues.
- ✓ **Urban logistics:** Typologies, locations and organisations of logistic platforms, freight transport in different urban zones (e.g., central zone).

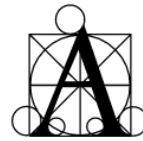
Ion Mincu University of Architecture and Urban Planning



Bucharest, Romania



<https://www.uauim.ro/en/faculties/urbanism/mmu/compulsory-courses/ut-88/>



"Ion Mincu"
University of Architecture
and Urban Planning

MASTER`S COURSE

Urban Mobility Plans and Policies

Urban mobility plans and policies is a master course on:

- Regulatory and programmatic framework for Urban mobility (European, regional, local level), including SUMPS;
- SUMP's methodology, methods, tools, programs and projects;
- Urban mobility management - Integrated and sectoral urban mobility policies.



Faculty of Urban Planning

1 semester | 10 ECTS

Romanian-taught
(could be English-taught)
(could be French-taught)

Key areas covered

- ✓ **Active mobility**
- ✓ **Behavioural change & mobility management:** Integrated approach - multimodal policy; mobility behavioural (re)modelisation through mobility policies (stick and carrot measures); dissuasive policies for automobility & indicative policies for alternative modes.
- ✓ **Clean & energy-efficient vehicles:** Sectoral policy; programmatic framework for climate change related resilience.
- ✓ **Collective passenger transport & shared mobility**
- ✓ **Demand & urban space management:** Horizontal concern in all the sectoral policies.
- ✓ **Integrated & inclusive planning:** Land Use & Mobility methods of integrated planning - contextualized zonal mobility schemes and policies.
- ✓ **Public participation & co-creation**
- ✓ **Road safety & security**
- ✓ **Smart & connected mobility**
- ✓ **Urban logistics**

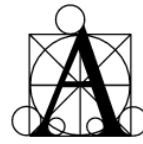
Ion Mincu University of Architecture and Urban Planning



Bucharest, Romania



<https://www.uauim.ro/en/faculties/urbanism/mmu/curricula/1/>



“Ion Mincu”
University of Architecture
and Urban Planning

MASTER`S COURSE

Design studio

This course is part of the second year of the master`s study Urban Mobility and offers specialized knowledge on SUMP planning at regional (metropolitan / Functional Urban Area), local (city) and district level, tackling:

- General context (socio-demographic, economic, environmental, technical issues);
- Mobility issues (public transport: road & rail network, intermodality, non-motorized travel facilities, parking systems, freight transport, safety and accessibility for people with reduced mobility);
- Urban planning issues (urban structure, morphologies, urban functions and their respective densities, centralities, interchange hubs as accessibility cores for main or secondary urban centralities, morphology, aesthetics and use of streets and squares as community, public “life spaces”, spatial premises for changing mobility behaviour in favour of public transportation & non-motorized travels, concerns regarding the integration of transport infrastructure in the urban landscape).



Faculty of Urban Planning



1 semester | 10 ECTS



Romanian-taught
(discussions could be held
in English/French)

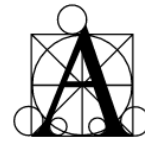
Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Clean & energy-efficient vehicles
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation
- ✓ Road safety & security
- ✓ Smart & connected mobility
- ✓ Urban logistics

Ion Mincu University of Architecture and Urban Planning

 Bucharest, Romania

 <https://www.uauim.ro/en/doctoral-studies/sdu/>



“Ion Mincu”
University of Architecture
and Urban Planning

PhD DEGREE

Urban Mobility & Urban Development

Guidance for PhD studies in the field of urban mobility and correlated with urban planning.


Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Clean & energy-efficient vehicles
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation
- ✓ Road safety & security
- ✓ Smart & connected mobility
- ✓ Urban logistics

- Doctoral School of Urban Planning
- 3 years
- Romanian-taught
English-taught
French-taught

Polytechnic University of Timisoara

 Timișoara, Romania




 <http://www.mec.upt.ro/fisiere/2015-2016/internationalizare/INGINERIA%20TRANSPORTURILOR%20SI%20A%20TRAFICULUI.pdf>



BACHELOR'S DEGREE

Transportation and Traffic Engineering

The aim of the Bachelor's degree program "Transportation and Traffic Engineering" is to form engineers who are capable to understand and to influence the functioning of the transportation systems. The ever-increasing mobility need of the population and of the economy, has created tremendous problems for the transportation systems and the urban mobility networks, which are under a great stress and have to deal with huge congestions, high level of pollution and with great number of accidents. The program is connected mainly to terrestrial transportation systems (road and rail). Other modes as well as multimodal and intermodal transport are included as well.

-  Faculty of Mechanics
-  4 years | 180 ECTS
-  Romanian-taught

Key areas covered

- ✓ **Active mobility:** Bike sharing, improvements to pedestrian and cycle mobility.
- ✓ **Behavioural change & mobility management:** Methods of inducing behavioural changes. Mobility management through different tools.
- ✓ **Road safety & security:** Road safety assessment and finding solutions to improvements.

Polytechnic University of Timisoara

 Timișoara, Romania

 <http://www.mec.upt.ro/fisiere/2015-2016/internationalizare/programe/master/>



MASTER`S DEGREE

Advanced Techniques in Road Transportation

The Master programme focuses on the complex system of road transportation and emphasizes the way technology, operation, management and policy making interact. The ever-increasing mobility need of the population and of the economy, has created tremendous problems for the road network and the urban mobility systems, which are under great pressure and have to deal with huge congestions, high level of environmental pollution and with great number of accidents. The program is connected to the road transportation (passenger and freight), but in the case of the urban and regional mobility systems other transport modes are considered as well.

-  Faculty of Mechanics
-  2 years | 130 ECTS
-  Romanian-taught

Key areas covered

- ✓ **Active mobility:** Bike sharing, improvements to pedestrian and cycle mobility.
- ✓ **Behavioural change & mobility management:** Methods of inducing behavioural changes. Mobility management through different tools.
- ✓ **Demand & urban space management**
- ✓ **Integrated & inclusive planning:** Widening of the planning from "transportation" to "mobility", taking into account sustainability, integration and social inclusion.
- ✓ **Road safety & security:** Road safety assessment and finding solutions to improvements.

Technical University of Civil Engineering Bucharest



Bucharest, Romania



<https://civile.utcb.ro/vreau-sa-devin-student/studii-de-licenta/inginerie-urbana-si-dezvoltare-regionala-2/>



Technical University of
Civil Engineering Bucharest

BACHELOR`S DEGREE Urban Engineering and Regional Development

Urban Engineering and Regional Development is a bachelor degree designed to train engineers specialising in urban planning, local and regional development. Graduates of this study programme can coordinate, within the local and central public administration, projects concerning the infrastructure of localities, prepare studies for the substantiation of urban planning, integrated urban development strategies, studies for the substantiation of public and private investments, plan, organise and manage resources for construction works.

Key areas covered

- ✓ Active mobility
- ✓ Collective passenger transport & shared mobility
- ✓ Public participation & co-creation
- ✓ Road safety & security
- ✓ Smart & connected mobility

- Faculty of Civil Engineering
- 4 years | 240 ECTS
- Romanian-taught
- Highlights:
 - ✓ Opportunity to proceed with a master and a doctoral study after graduating.
 - ✓ Part of the Erasmus programme.

Technical University of Civil Engineering Bucharest



Bucharest, Romania



<https://civile.utcb.ro/vreau-sa-devin-student/studii-de-master/dezvoltarea-urbana-si-regionala/>



Technical University of
Civil Engineering Bucharest

MASTER`S DEGREE Urban and Regional Development

Urban and Regional Development is a professional master program in the field of Civil Engineering. The programme has a broad scope and a pronounced trans-disciplinary character and is open to engineers, architects, economists, geographers or graduates of other complementary specialisations. The aim of this Master's programme is to develop transversal skills for the planning, design, implementation and operation of complex urban and regional development projects.

Key areas covered

- ✓ Active mobility
- ✓ Collective passenger transport & shared mobility
- ✓ Public participation & co-creation
- ✓ Smart & connected mobility

- Faculty of Civil Engineering
- 2 years | 120 ECTS
- Romanian-taught
- Highlights:
 - ✓ Multidisciplinary approach.
 - ✓ Opportunity to proceed with a doctoral study after graduating.

*Information collected from open-source data.

Politehnica University of Bucharest*

 Bucharest, Romania


 <http://ingtrans.pub.ro/education-second-level-masters/>



MASTER`S DEGREE Urban Transport and Traffic

Urban Transport and Traffic Master's Degree proposes study components on:


- Urban planning, transport and mobility interrelation comprehension;
- Framing social mobility in sustainable development requirements;
- Identification of transport demand, transport flows, traffic flows as well as practical applications in transport management and competition studies for different time scales;
- Qualitative performances improvement of urban public transport in pursuit of attraction enhancement;
- Promoting urban logistics solutions for goods distribution in dense urbanised areas;
- Congested traffic and external negative effects adjustment in urban areas. Consequences on life quality (quantitative and qualitative measurements).

 Transport, Traffic and Logistics Department
2 years | 120 ECTS

*Information collected from open-source data.

Politehnica University of Bucharest*

 Bucharest, Romania

 <http://ingtrans.pub.ro/education-second-level-masters/>



MASTER`S DEGREE Transport Management

The programme comprises the following study components:


- Sustainable development requirements in transport systems expansion management;
- Complex and systemic approach of transport system management considering all aspects regarding transport offer and demand, infrastructures, operations, technologies and transport means;
- Urban planning, transport and mobility interrelation in decision making process in terms of development/modernization/ reorganization;
- Technical infrastructure's role in transport and urban planning and sectorial approach overrun;
- Transport system performances analytical assessment. Subsystems assessment (transport means, infrastructures, warehousing, data collection and analysis);
- Innovative technologies adapted to each transport mode and to multimodal or intermodal solutions, interrelated to judicious resource consumes and external negative effects;
- Technological progress assimilation, mainly advanced information systems, in order to safety, security and quality in transportation processes.

 Transport, Traffic and Logistics Department
2 years | 120 ECTS

*Information collected from open-source data.

University of Novi Sad*

 Novi Sad, Serbia

 <http://ftn.uns.ac.rs/1165597754/traffic-and-transport-engineering>



UNIVERSITY
OF NOVI SAD

MASTER`S DEGREE Traffic Engineering

The programme provides the students with the opportunity to understand the fundamental principles of different areas of traffic and transport, acquire the necessary theoretical and professionally – applicable knowledge for the purpose of getting qualifications for solving problems imposed by contemporary society, market and global needs.

- Faculty of Technical Sciences
- 1 year | 60 ECTS
- English-taught

Slovak University of Technology in Bratislava



Bratislava, Slovakia



<https://www.stuba.sk/english-1/stu/ects-label/ects-information-package/information-on-degree-programmes/all-programmes>



SLOVAK UNIVERSITY OF
TECHNOLOGY IN BRATISLAVA

BACHELOR'S DEGREE Spatial Planning

The study programme prepares students for the development and management of spatial planning strategies, including infrastructural, land-use and landscape planning. The study offers knowledge and practical skills in the fields of sociology, economy, geography, ecology and ICTs which would make the graduate competent in the effective development, analysis and coordination of spatial planning activities.

Key areas covered

- ✓ Behavioural change & mobility management
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation
- ✓ Road safety & security
- ✓ Smart & connected mobility



Institute of Management



3 years | 180 ECTS



Slovak-taught
English-taught



Highlights:

- ✓ Opportunity to proceed with a master and a doctoral study after graduating.

Slovak University of Technology in Bratislava



Bratislava, Slovakia



<https://www.stuba.sk/english-1/stu/ects-label/ects-information-package/information-on-degree-programmes/all-programmes>



SLOVAK UNIVERSITY OF TECHNOLOGY IN BRATISLAVA

MASTER`S DEGREE Spatial Planning

This master`s degree has an interdisciplinary character covering a wide range of topics such as natural and human sciences, technology, urban design.

Upon completing this study, graduates are able to:

- Analyse the natural and socio-economic characteristics of territories, social structures and settlement systems;
- Elaborate spatial development strategies, development plans, land-use plans, landscape plans following the principles of sustainability, ecologic stability and diversity;
- Moderate the processes of social participation and mediate conflicts;
- Coordinate the functional, economic and cultural development of territories at all levels: local, regional, national and European level;
- Lead interdisciplinary planning teams in different fields of spatial planning.

Key areas covered

- ✓ Behavioural change & mobility management
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation
- ✓ Road safety & security
- ✓ Smart & connected mobility
- ✓ Urban logistics



Institute of Management

2 years | 120 ECTS

Slovak-taught
English-taught

Highlights:

- ✓ Multidisciplinary approach.
- ✓ Opportunity to proceed with a doctoral study after graduating.

Slovak University of Technology in Bratislava



Bratislava, Slovakia



<https://www.stuba.sk/english-1/stu/ects-label/ects-information-package/information-on-degree-programmes/faculties>



SLOVAK UNIVERSITY OF
TECHNOLOGY IN BRATISLAVA

PhD DEGREE Spatial Planning

Upon completing this PhD study, graduates are able to:

- Describe, analyse and evaluate settlement systems and landscape areas in terms of spatial planning, landscape ecology, socioecology, historical development and social psychology;
- Research the processes of spatial development and to identify the rules and natural regularities;
- Creatively propose new means of access to problems, new tools and methods for the regulation of spatial development with an emphasis on sustainability and new procedures, methods and means that can be used in planning;
- Solve specific tasks of social and economic development related to the localisation of economic activities.

Key areas covered

- ✓ Behavioural change & mobility management
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation
- ✓ Road safety & security
- ✓ Smart & connected mobility
- ✓ Urban logistics



Institute of Management

3 years

Slovak-taught
English-taught

Fundacion Zaragoza Logistics Center

 Zaragoza, Spain

 <https://www.zlc.edu.es/executive-education/>



EXECUTIVE EDUCATION

Logistics and Supply Chain Management

Executive Education program in Logistics and Supply Chain Management with companies and organizations provides customized experiences to individual enterprises and consortia. This programme provides the opportunity to focus intensively on vital issues to company goals. It also organizes open Executive courses to individuals to acquire specific knowledge on relevant topics with the highest level of applicability in Logistics and Supply Chain Management.


Key areas covered

- ✓ Urban logistics

- Department of Executive Education
- English-taught
Spanish-taught

Fundacion Zaragoza Logistics Center

 Zaragoza, Spain

 <https://www.zlc.edu.es/education/master-in-supply-chain-management-mdsc/>



MASTER`S DEGREE Supply Chain Management

This Master in Supply Chain Management is a 9-month, part-time program. The program enables senior professionals to achieve a delicate balance between the management of the supply chain and decision making.


Key areas covered

- ✓ Urban logistics

- Department of Education
- 9 months | 62 ECTS
- Spanish-taught

Fundacion Zaragoza Logistics Center

 Zaragoza, Spain

 <https://www.zlc.edu.es/education/mit-zaragoza-master-of-engineering-in-logistics-and-supply-chain-management-zlog/>



MASTER`S DEGREE Engineering in Logistics and Supply Chain Management

The Master of Engineering in Logistics and Supply Chain Management is a high-quality degree taught in a truly global setting which expertly guides its graduates to become proficient in both problem solving and change leadership.


Key areas covered

- ✓ Urban logistics

- Department of Education
- 10 months | 87 ECTS
 - ZLC Campus, Zaragoza, Spain (9 months)
 - MIT Campus, Massachusetts, USA (3 weeks in January)
- English-taught

Fundacion Zaragoza Logistics Center

 Zaragoza, Spain

 <https://www.zlc.edu.es/education/mit-zaragoza-master-of-engineering-in-logistics-and-supply-chain-management-zlogb/>



BLENDED MASTER`S DEGREE Engineering in Logistics and Supply Chain Management

The blended master's degree allows learners to combine the MicroMasters credential (5 online courses) with a 3-week stay at Massachusetts Institute of Technology in the USA and one semester at Zaragoza Logistics Center in Spain.


Key areas covered

- ✓ Urban logistics

- Department of Education
- 18 months | 87 ECTS
 - Online (5 courses)
 - MIT Campus, Massachusetts, USA (3 weeks)
 - ZLC Campus, Zaragoza, Spain (4 months)
- English-taught

Institute for Advanced Architecture of Catalonia

 Barcelona, Spain

 <https://iaac.net/educational-programmes/masters-programmes/master-in-city-technology/>

iaac | Institute for advanced architecture of Catalonia

MASTER`S DEGREE City & Technology


The Master in City & Technology is a unique program oriented towards redefining the analysis, planning, and design of twenty-first-century cities and beyond. The program offers expertise in the design of digitally enhanced, ecological and human-centred urban environments by intersecting the disciplines of urbanism and data science. The Master in City & Technology is training the professionals that city administrations, governments, industries, and communities need, to transform the urban environment in the era of big data.

To create a better understanding of the increasing importance that mobility is playing against urban and global challenges, the students are immersed in the deep layers of our cities' inner workings, during an intensive seminar on the future of mobility and transportation.

Key areas covered

- ✓ Active mobility
- ✓ Behavioural change & mobility management
- ✓ Clean & energy-efficient vehicles
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management
- ✓ Integrated & inclusive planning
- ✓ Public participation & co-creation
- ✓ Road safety & security
- ✓ Smart & connected mobility
- ✓ Urban logistics
- ✓ Digitization & Automation
- ✓ Big Data
- ✓ Simulations
- ✓ Data-Informed Planning

 Advanced Architecture Group

 9 months | 75 ECTS
18 months | 120 ECTS

 English-taught

 Highlights:

- ✓ Multidisciplinary approach.
- ✓ Collaboration with internationally renowned transport planning firms and experts.
- ✓ Possibility to choose between a one-year or a two-year study.

Polytechnic University of Catalonia

 Barcelona, Spain

 https://camins.upc.edu/en/Studies/master/urban_mobility



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH


MASTER`S DEGREE

Urban Mobility: Sustainable Urban Mobility Transitions

The Master's Degree in Urban Mobility aims to educate professionals that can improve urban mobility in our cities and around the world. Approach encompasses the improvement of technical infrastructure, but also holistic planning, execution and operation. Urban transformation requires that most stakeholders interact and understand the perspectives of others to make this improvement effective. This programme allows professionals from different engineering profiles to be trained, providing specific skills in the sector, and knowledge and deepening in transportation operations, mobility services, data science, ICT and energy technologies for sustainable mobility. Also, the programme provides the fundamental tools of entrepreneurship and innovation to face the rapid transformation of the global society.

 School of Civil Engineering

 2 years | 120 ECTS

 English-taught

 Highlights:

- ✓ The master's degree is offered as an [EIT Urban Mobility Master School programme](#) or as a local master programme at UPC-BarcelonaTech.

Key areas covered

- ✓ **Active mobility:** Tactical urbanism; mobility hubs; pedestrian and bike networks.
- ✓ **Behavioural change & mobility management:** User mindset; demand-oriented planning; supply-oriented planning, Cost-Benefit Analysis, Multicriteria analysis.
- ✓ **Collective passenger transport & shared mobility:** Collective transport design in one route (1D) or in a network (2D); System Optimization by means of continuous approximation models; Demand-Responsive Transport and Taxis.
- ✓ **Demand & urban space management:** 4-step, logit, probit and activity-based models.
- ✓ **Integrated & inclusive planning:** Sequential planning steps; focus groups, quality and user perception.
- ✓ **Public participation & co-creation:** Design thinking and co-creation concepts.
- ✓ **Smart & connected mobility:** Tracking, tracing of vehicles, people and goods with ICT; user patterns and system characterization by data exploitation techniques.
- ✓ **Urban logistics:** Cost structure, location, inventory and routing techniques.
- ✓ **System modelling:** Quantitative approach of mobility systems; optimization approaches, algorithms and ex-ante/ex-post evaluations of the mobility systems.

Polytechnic University of Catalonia



Barcelona, Spain



<https://camins.upc.edu/en/Studies/master/civil-engineering>



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

MASTER'S DEGREE Civil Engineering

The Master's Degree in Civil Engineering provides advanced multidisciplinary and technological training that enables students to work in research, design and analysis of infrastructure and civil engineering projects. The curriculum reinforces prior learning in mathematics, physics, science and technology on the bachelor's degree course by teaching students the most advanced and experimental techniques for modelling in engineering. The master's degree includes study abroad at some of the most prestigious engineering schools in the world in the framework of mobility programmes and agreements. It provides future professionals with a solid technical grounding in designing infrastructure and supervising its development, and in planning and managing environmental services and resources for spatial planning.

Key areas covered

- ✓ **Behavioural change & mobility management:** Planning and management of transportation.
- ✓ **Collective passenger transport & shared mobility:** Collective transport design in one route (1D) or in a network (2D); System Optimization by means of continuous approximation models; Demand-Responsive Transport and Taxis.
- ✓ **Demand & urban space management:** Commodity (gas, water, energy) or mobility service provision to citizens.
- ✓ **Integrated & inclusive planning:** Sequential planning steps; Cost-Benefit Analysis; Multicriteria analysis; focus groups, quality and user perception.
- ✓ **Road safety & security:** Design of roadways for a given interurban/urban context (geotechnical platform, pavement composition, longitudinal design, transversal design, pavement smoothness).

● School of Civil Engineering

● 2 years | 120 ECTS

● English-taught

● Highlights:

- ✓ Multidisciplinary approach.
- ✓ Opportunities for Double Degree arrangements with foreign universities.

Umeå University



Umeå, Sweden



<https://www.umu.se/en/education/master/masters-programme-in-spatial-planning-and-sustainability/>



UMEÅ
UNIVERSITY

MASTER`S DEGREE

Spatial Planning and Sustainability

The Master's Programme in Spatial Planning and Sustainability addresses current challenges of sustainability; from the global to the local. The transition to a more sustainable society raises a strong demand for spatial planners with a knowledge and skills on how to balance different interests. This Master provides you with the required skills and competences. You will learn to ask relevant and scientifically grounded questions about changes and trends in rural areas and cities, regions, and nations and how they are related to the sustainability dimensions.



Faculty of Social Sciences

2 years | 120 ECTS

English-taught

Highlights:

- ✓ Intercultural and interdisciplinary context.
- ✓ Opportunity to proceed with a doctoral study after graduating.

Key areas covered

- ✓ **Behavioural change & mobility management:** Changing mobility patterns such as migration and daily mobility; policy implications.
- ✓ **Demand & urban space management:** Sustainable cities; affordable and sustainable transport systems.
- ✓ **Integrated & inclusive planning:** Societal problems tackling - segregation and lack of accessibility; spatial consequences for vulnerable groups.
- ✓ **Public participation & co-creation**
- ✓ **Sustainable transportation:** Sustainable means of transportation; transport poverty.

Umeå University



Umeå, Sweden



<https://www.umu.se/en/education/master/masters-programme-in-human-geography-with-specialisation-in-geographical-information-systems-gis/>



UMEÅ
UNIVERSITY

MASTER`S DEGREE

Human Geography with specialisation in Geographical Information Systems

The programme offers students development of the GIS knowledge and skills. It encompasses topics as: geodatabase design and applied cartography, advanced editing, geoprocessing and analysis. In addition, the programme covers two important applications of GIS: transport planning and 3D modelling in a planning context. The utilization of computer-aided design in conjunction with GIS is also given attention.

The programme qualifies students for professional positions involving GIS in state agencies, municipal functions, private sector.

Key areas covered

- ✓ Active mobility
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management



Faculty of Social Sciences



1 year | 60 ECTS



English-taught



Highlights:

- ✓ Access to the GIS computer lab equipped with up-to-date software.
- ✓ Parts of the programme may be studied abroad at a partner university.
- ✓ Opportunity to proceed with a doctoral study after graduating.

Umeå University



Umeå, Sweden



<https://www.umu.se/en/education/courses/gis-for-transportation/>



UMEÅ
UNIVERSITY

MASTER`S COURSE GIS for Transportation

The course covers topics as: basic geographic perspectives on accessibility and transportation, GIS-based visualization of transport networks and flows, network data set construction and different methods for network analysis of relevance for transport planning.

Key areas covered

- ✓ Active mobility
- ✓ Collective passenger transport & shared mobility
- ✓ Demand & urban space management



Faculty of Social Sciences



5 weeks | 7.5 ECTS



English-taught



Umeå University



Umeå, Sweden



<https://www.umu.se/en/education/syllabus/2kg502/>



UMEÅ
UNIVERSITY

MASTER`S COURSE

Population, Migration and Mobility

The study of population development, human migration and mobility is central to solving many of the challenges faced by current societies. This course provides the students with the key concepts and ideas for understanding population development and mobility at different spatial and temporal scale. Various theoretical perspectives and empirical examples on population growth and decline, voluntary and forced migration, daily mobility, and tourism mobilities are introduced. The implications to policy, practice, and sustainability are discussed.



Faculty of Social Sciences

10 weeks | 15 ECTS

English-taught

Key areas covered

- ✓ Behavioural change & mobility management
- ✓ Consequences of commuting
- ✓ Sustainable transportation

TO BE CONTINUED...

