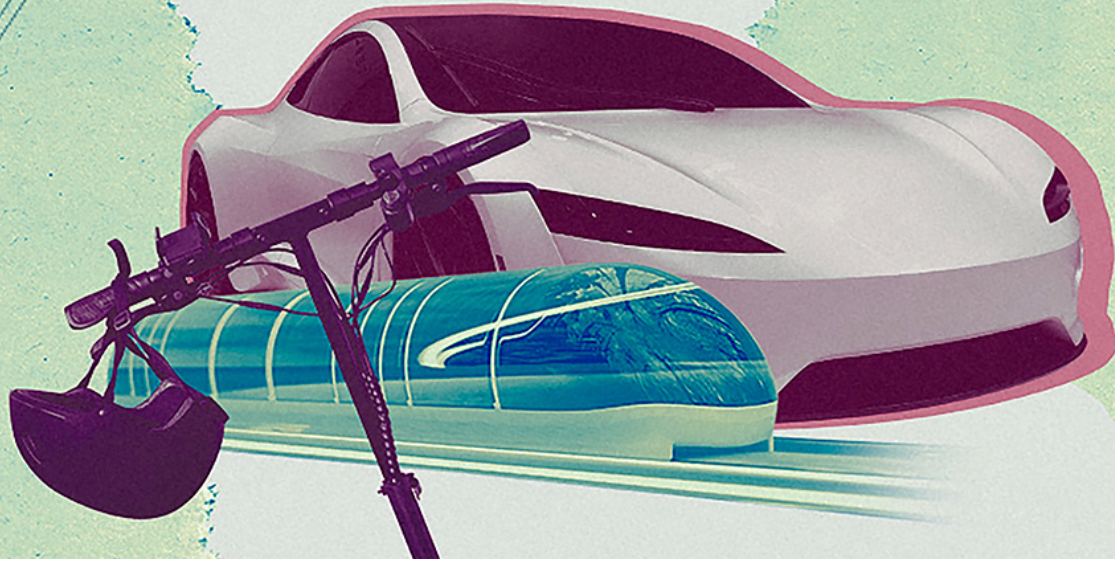


## MOBILITY INNOVATION AND MANAGEMENT

1<sup>ST</sup> LEVEL



UNIVERSITY MASTER  
EDITION III A/Y 2024-2025

### PRESENTATION

The Master's Programme is designed to prepare managers specialising in innovation, policy, marketing, planning and strategy relating to sustainable mobility who can play a strategic role in the current phase of digital and green transition in mobility, with a particular focus on the mobility needs of the new generations, Millennials and Generation Z. The Master's Programme prepares experts in the innovation of sustainable, smart and inclusive mobility through a full review of new mobility business models and services, the new technologies available (from big data to autonomous vehicles), the circular economy, the most innovative engines and vehicle fleet optimisation, to understand the opportunities and challenges that many companies are facing. Carmakers, leasing and rental companies, dealers, energy providers, insurance companies, public transport companies and many others are introducing new sustainable mobility products and services, without forgetting the legislative obligation for all state-owned and private companies with more than one hundred employees to hire a mobility manager. If, on the one hand, the green transition in the mobility sector requires market-leaders to adapt to change, on the other it offers new business opportunities to a growing number of companies that develop mobility products and services. Within this context, the Master's degree in Mobility Innovation and Management (MIMA) integrates various skills, from economics, to management, urban design and the planning and development of sustainable mobility systems, while also examining the regulatory and social context of the new sustainable mobility to understand consumers' different attitudes towards the new mobility services and

communicate with them effectively. The Master's Programme aims to prepare specialised managers capable of leading and accelerating the process of change in the mobility system towards economic, environmental and social sustainability, with a particular focus on the digital transformation of businesses, business models and sustainability-oriented strategies. The Master's Programme also calls for collaboration with key partners with leading roles in their sectors and benefits from a faculty made up of academics and experts from the business world, through project work, case studies and experiential learning.

## OBJECTIVES

The Master's Programme aims to prepare the new professionals in demand in the job market who are capable of:

- leading companies that are developing new mobility-related businesses and that are interested in offering innovative, sustainable and inclusive products and services. Examples include companies that develop carsharing, carpooling or intermodal connection applications and services;
- leading companies that already operate in the mobility sector to achieve the sustainability goals that have now become essential in view of ongoing regulatory and social changes, such as companies in the automotive sector, which in Italy account for approximately 5% of GDP;
- acting as mobility manager in government and private companies;
- working in consulting firms or accelerators that focus on the issue of sustainable, smart mobility, such as our partners Accenture and MobilityUp;
- helping transport companies design new sustainable, inclusive mobility systems that combine green technologies with new forms of micromobility (for example, electric scooters and bicycles).

Preparing those who will fill these new professional profiles helps meet a widespread need that extends across various sectors to manage mobility in pursuit of economic, environmental and social sustainability. There is thus a need for managers able to integrate various types of knowledge. Accordingly, the Master's Programme focuses on honing economic and management skills and expertise in urban design, planning and sustainable system development, with an emphasis on marketing issues relating to analysing and understanding the mobility service needs of consumers, and particularly of members of the Millennials and Generation Z. The overall approach taken by the Master's Programme aims at the acquisition of new skills that facilitate an understanding of the needs of the various stakeholders of new mobility systems and the ability to see new business models.

## SYLLABUS

### MOBILITY

#### **Sustainable mobility**

What is meant by sustainable mobility? How is the sustainability of a mobility system measured? What are the trade-offs? What are the guiding principles behind the new paradigm? The course answers these questions by introducing the principles of sustainable mobility from an economic, environmental and sociological viewpoint. The development of new products and services for mobility and a shift in focus from the product (car) to mobility services, (complementing or replacing the car) together with the

transition from the internal combustion drivetrain to alternative forms of motorisation, provide opportunities for the creation of new value in the direction of sustainability. Conversely, the course also illustrates the presence of multiple and often conflicting viewpoints, introducing the themes of subsequent modules.

### **Evolution of the mobility ecosystem and business models**

How did the mobility industry we know originate? What is the relationship between mobility and the development of society? What are the most significant signs of change? The course examines and focuses on the coevolution of mobility, infrastructure and society in the modern era, illustrating the recent history of the evolution of the mobility ecosystem, to highlight how mobility, society and infrastructure have coevolved and to identify the elements of inertia and opportunities for the future.

### **Trends in the development of urban and regional mobility**

How is mobility changing in cities and the regions that revolve around it? What will be the future of peripheral and rural areas? The course provides the tools needed to understand the complex social, economic and demographic dynamics that are modifying the geography of Italy and Europe and how these will influence the development of mobility systems.

*Course hours: 36*

## MANAGEMENT

### **Strategic management of innovation**

What are the strategic foundations of today's mobility industry? What trajectories will businesses and institutions follow to "navigate" and "be successful" in the new mobility ecosystem? The course offers the elements needed to understand the business models of the most important players in the mobility industry, comparing them with the business models of other industries, such as electronics and ICT. The expansion and success of these platforms could also be a possible line of development for the mobility industry.

### **Development of products and services for sustainable mobility**

How is a new vehicle developed? How is a new mobility service developed? The course examines the organization and management of product/service development processes, illustrating and highlighting the complexity of implementing an innovation strategy.

### **Open innovation**

How does open innovation work? How can the work of players with different skills and objectives be coordinated? Open innovation is the key paradigm in the strategies of many players operating in the mobility field. These will increasingly have to rely on complementary skills and access to specialised services and knowledge offered by third parties. The course provides the instruments required to manage relationships in an open innovation context.

### **Towards the sharing economy**

How does the sharing economy work? How is it connected with mobility? New business models based primarily on double-sided platforms (such as Airbnb) are profoundly changing the economic foundations in many industries.

Mobility is not immune to this revolution (e.g., Uber). The course provides an overview of the sharing economy phenomenon from the viewpoint of mobility.

*Course hours: 52*

## TECHNOLOGY

### **Evolution of the drivetrain**

Which technology is most suitable for the purposes of environmental and economic sustainability? How is the well-to-wheel impact of a technology calculated? How is the life-cycle assessment of a new product performed? The technological choice of the drive-train is complex in that it must take account of the three related processes: power generation, component production and disposal and use and emissions during operation. In addition, technology is evolving rapidly. The course provides the elements required to assess the environmental and economic impact of the technological alternatives.

### **Self-driving vehicles and the connected car**

How do self-driving vehicles function? What technologies do they incorporate? The answer to these questions will provide indications on the timescale for diffusion of self-driving vehicles and the conformation of the parties in the global value chain that will enter the mobility industry. What are the technologies and potential applications of connected vehicles? The course will provide the necessary instruments to realistically assess the factors able to influence the timescale for diffusion of self-driving vehicles, the opportunities for mobility management in urban areas and the configuration of the services and players gravitating around connectivity.

### **Infrastructure for sustainable mobility**

How will road and refuelling infrastructure evolve in the light of future developments in technology? The new forms of mobility can be expected to have a great impact on infrastructure development. However, depending on the technological choices associated with the drivetrain (for example, electric, hybrid, hydrogen, etc.) and the evolution of self-driving and connectivity, the development trajectories of cities and infrastructure might be very different.

*Course hours: 38*

## INSTRUMENTS

### **Consumer behaviour**

How will the ways in which consumers purchase and use mobility products and services change? Will consumers be an element of resistance to change, or will they stimulate it? The trends in the use of public services and individual mobility show that consumer behaviour is changing. The course provides the instruments necessary to analyse this correctly and make appropriate predictions concerning the evolution of demand in the light of the development of new mobility products and services.

### **Analysis of flows for sustainable mobility**

How are mobility flows measured? What are the interdependencies between flows and technologies? The course provides the basic research tools required to correctly contextualize mobility flow management and substantiate urban and regional planning choices.

### **Designing new urban spaces for mobility**

What will the cities of the future be like? New technologies and infrastructures will offer new opportunities for urban development planners. The course explores such opportunities by providing the instruments needed for their deep comprehension.

### **Analysis of patents and technological predictions**

When, where, and how is patenting worthwhile? In which technological

fields are the leaders of industry investing? How is the technological strategy of a competitor analysed? The course provides the instruments required to define a patenting strategy and correctly design predictive analyses concerning development of the technology.

### **Legal constraints and opportunities**

What constraints does our legal system impose on the development of sustainable mobility? Technology is evolving so rapidly that the legal system may potentially hinder opportunities. The course covers the legal framework, with specific reference to insurance and individual and collective responsibility.

*Course hours: 40*

## **OPPORTUNITIES**

### **Business models for mobility**

What can be done to ensure that the transition to sustainable mobility leads to the development of initiatives with the right level of coherence between the target involved, value generation and economic balance? What requisites must a business model have in order to function adequately? What margins of manoeuvre are there for upgrading the existing business models adopted by today's players? The course provides the instruments needed to understand and assess business models, examining the coherence between target, value proposition, process chain and profit model, highlighting the importance of internal and external coherence. The analysis is also performed using the Business Model Canvas method.

### **Competitive analysis for sustainable mobility**

How is the business competitiveness of the various technical solutions and services for mobility in the new business ecosystem assessed? The economic sustainability of the new mobility systems is largely a matter of technology, but even more so of competitiveness with regard to demand and the available alternatives. The new scenarios will change the fundamental value creation mechanisms, progressively abandoning the concept of public subsidies and increasingly orienting the mechanisms towards PPP (public-private partnership) relationships to manage investments and competitive market-based relationships for mobility services with added value. The course will provide useful analysis instruments to define the opportunities, threats and competitive positioning of the business opportunities associated with mobility services.

### **New “applications” and “opportunities” for the mobility of the future**

What opportunities will be created for private players and public administrations downstream of innovations in mobility products and services? From “unicorn” start-ups to major players (e.g., Google, Apple, Toyota, etc.) and cutting-edge cities (e.g., London), the mobility of tomorrow is at the centre of a whirlwind of activity.

The course provides the instruments required to navigate the new ecosystem and ideas for new opportunities for players in the automotive supply chain, new entries and public administrations with a mission to innovate urban, regional and national mobility systems.

### **New opportunities in mobility in cities and urban areas**

What opportunities will arise from the new needs of cities and urban areas? The course is designed to tie together the demands, critical issues and opportunities for synergies between decision-makers in government and private players operating in cities and regional areas.

Particular attention will be devoted to the special cases of management of cities with a high level of occasional transit (business and tourism), such as Milan, Rome, Florence and Venice.

*Course hours: 50*

## EXPERIENCES

### Experiential activities

This module incorporates appropriate external experiential activities designed to develop the content of previous modules according to innovative teaching methods.

### Services in support of mobility: rental, fleet management and the customer service network

What will be the future of businesses and current services linked to mobility in the future mobility scenario? The course analyses how rental operators, fleet managers, workshops and concessionaires will have to innovate their business model downstream of changes in the ecosystem, identifying possible development trajectories and business opportunities.

*Course hours: 40*

## CAREER COACHING A LABORATORY ACTIVITIES

The course is designed to support Master's Programme students in the process of accessing the job market. It offers two different tracks, one designed for students who do not have previous work experience and one designed for more experience attendees. It entails both virtual class room content and workshops and practical exercises to be done online and offline with the support of the Moodle platform. Laboratory and experiential activities are also planned.

*Course hours: 44*

## DURATION AND ACADEMIC CREDITS (CFUS)

The Master's lasts for one year and consists of:

- **300 hours of blended coursework**
- **250 hours of internship** (participants already working in the sector can replace the internship with project work focusing on activities of interest)
- **1875 total hours of study**, including individual study and preparation of a final thesis
- **75 CFUs** awarded

## QUALIFICATION ISSUED

Students who attend didactic activities, complete the internship and pass intermediate and final examinations will be awarded a 1st-level master's degree in **Mobility Innovation and Management**.

## COURSE PERIOD

FEBRUARY 2025 – MARCH 2026

## COURSE CALENDAR

Full time on Fridays, Saturday morning from February to mid-July.  
Two full-time intensive weeks

Teaching will take place half in presence and half online.

*\* The course calendar will be set in detail in suitable advance of the start of didactic activities and will be available for consultation from the official website of the Master's Degree Programme*

## TEACHING METHOD

Blended

|                               |   |
|-------------------------------|---|
| <b>LANGUAGE</b>               | English   |
| <b>ATTENDANCE</b>             | Attendance is compulsory for 70% of total hours and will be monitored by the master's staff. Award of the degree is conditional on completion of activities, including any intermediate examinations, internship/project work and final examination. Students who work in a sector relevant to the Master's degree may apply to have their work counted in lieu of the internship   |
| <b>COURSE LOCATION</b>        | Ca' Foscari Challenge School, Via della Libertà 12, 30175<br>Venice (Vega Park) Online  |
| <b>ADMISSION REQUIREMENTS</b> | FIRST LEVEL<br>/ Degree / Old system university diploma<br>/ Three-year bachelor's degree<br>/ Equivalent foreign university qualification, following approval from the Teachers' Board<br>/ Level B2 English or certificate/experience confirming an equivalent knowledge of English   |
| <b>ADMISSION APPLICATION</b>  | Candidates must fill in the on-line admission application, the details of which are defined under article 3 of the University's Call for Applications. Only applications accompanied by all the required documentation and motivation letter will be considered. The Call for Applications and relative attachments can be downloaded from the Master's web page. Please refer to the Master's Programme profile for information about applying for any scholarships available for the programme. |
| <b>SELECTION PROCEDURE</b>    | A specially appointed commission will assess the candidates through analysis of their CVs, qualifications, motivation letter and a possible face-to-face or video conference interview (date, time and location will be communicated in advance by email).<br>Within the framework of the selection, the evaluation criteria will be: academic qualification, professional experience, knowledge relating to the field of the master's programme and motivation.                                  |
| <b>GRADUATE ELIGIBILITY</b>   | Students about to graduate may also be admitted to the course, provided they qualify within one month from the start of the course. In this case, enrolment on the Master's may be finalised only after the valid qualification for admission has been awarded.   |
| <b>AVAILABLE PLACES</b>       | Maximum number of available places: 30*<br><i>*The Master will only be activated when the minimum number of participants is reached envisaged by the organizational structure.</i>  |
| <b>COURSE FEES</b>            | <b>€ 7.900</b><br>/ First instalment <b>27/11/2024</b> : / <b>€ 4016</b> (inclusive of duty stamp of €16)*<br>/ Second instalment <b>12/04/2025</b> : <b>€ 3900</b><br><i>* Stamp duty is not refundable.</i>   |
| <b>SELECTION FEE:</b>         | € 36 (inclusive of duty stamp of €16)<br><u>Not refundable</u> , to be paid via PagoPA by <b>15/11/2024</b> on presentation of the admission application.   |

Failure to pay the selection fee will result in exclusion from the selection process and from admission to the Master's Programme.

## STUDY SUPPORT

Study grants to cover all or part of the course fees will be assigned according to the rankings for admission to the Master's Programme. The number of grants that will be provided is available on the Master's Programme's webpage. The number of grants will be constantly updated as new funds become available.

Loans are available from the University's partner banks (for more information: <http://www.unive.it/pag/8560/>).

## ENROLMENT

ADMISSION APPLICATION SUBMISSION (online procedure, Call for Applications, art. 3)

**by 15/11/2024**

SELECTION RESULT ANNOUNCEMENT

**by 21/11/2024**

ENROLMENT COMPLETION (online procedure, Call for Applications, art. 6)

**by 27/11/2024**

Start of didactic programme: **17/02/2025**

## DIRECTOR

Professor Anna Cabigiosu

## FOR INFORMATION

For general information concerning the master's programme, enrolment procedures, access methods and internships, please contact the programme's project manager. The director of the Master's Programme is available by appointment for clarification regarding the syllabus and programme.

### **Project manager of Master's Programme**

Ms. Sara Tognon

Email: [tognon.sara@unive.it](mailto:tognon.sara@unive.it)

### **Director of Master's Programme**

Professor Anna Cabigiosu

e-mail: [anna.cabigiosu@unive.it](mailto:anna.cabigiosu@unive.it)

Ca' Foscari Challenge School - Administration Office, from 9 AM to 1 PM

tel. 041 234 6853 e-mail [master.challengeschool@unive.it](mailto:master.challengeschool@unive.it)