

# SUPSI

## CAS in Mobility Advanced Technologies (MAT)

### Descrizione

#### Codice

DTI MT

### Presentazione

The focus of this CAS is to prepare the participants to be able to cope with the challenges of the transportation of the future. It will address specific future mobility topics in both goods and passenger transport fields in the public and private sectors. With an industry minded approach, this course, will cover subject matters such as digitalization, A.I., transformation and innovation related to mobility.

This CAS is included into the MAS Railways and Sustainable Mobility (RSM). It trains both technical and management leaders, seeking a career in the transportation industry or in the public/private sectors of mobility & transportation. The participants acquire the skills needed in departments such as research and development, production, consultancy and public institutions. They will also acquire the knowledge for managing complex interdisciplinary projects.

Attendees are going to study mobility and advanced technologies correlated to transportation in a wide context. They will learn about the latest trend technologies, how to innovate in a sustainable way, how to identify and adapt transportation systems to customer requirements. Furthermore, the ultimate travel possibilities will be analyzed (e.g. autonomous drive). This pioneering course will allow the participants to be at ease in every situation. It will not matter if the subjects are of technical, entrepreneurship or strategic nature, the attendants will have the knowledgeable and reliable counterpart.

### Obiettivi

- Understand the fundamentals and the basic parameters of the overall transport system
- Comprehend mobility as an interconnected system
- Know and understand how to correctly apply new technology to the mobility sector
- Be capable of developing innovative products and services with entrepreneurship flair
- Be capable of developing and implement new integrated and sustainable transport solutions
- Understand the environmental impacts of mobility and implement mitigating actions
- Describe autonomous drive (AD) systems and concepts
- Implement AD projects in a real-life environment

### Destinatari

This CAS is devised for engineers, managers, entrepreneurs and experienced employees from the mobility sector as well as to professionals interested to work in this sector through the acquisition of the knowhow provided by this course.

### Requisiti

Bachelor Graduates from Engineering Programs, Management or other Technical and Scientific faculties. Non-graduates Professionals and Managers from the Railways and Mobility fields with at least 3 years of experience with a presentation of a complete Dossier. The Master is held in English (lessons and documentations) therefore good command of English is required.

### Certificato

Certificate of Advanced Studies SUPSI in Mobility Advanced Technologies

### Crediti di studio

11 ECTS

## Contenuti

### Programma

#### Module 1

Innovation & entrepreneurship (INE) - 24 hours (2 ETCS)

#### Module 2

Integrated mobility (IMO) - 24 hours (2 ETCS)

#### Module 3

Future technologies (FUT) - 36 hours (3 ETCS)

#### Module 4

Autonomous Drive (ADR) - 48 hours (4 ETCS)

Full program description is available on the website:

<http://www.msfi.ch/Certificate-of-Advanced-Studies-SUPSI-in-Mobility-Advanced-Technologies-MAT>

### Durata

132 hour-lessons

### Responsabile/i

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[www.supsi.ch](http://www.supsi.ch) / [www.icimsi.ch](http://www.icimsi.ch)

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### Relatore/i

Industrial experts and academic specialists.

## Informazioni

### Iscrizione ai corsi

Within March 7, 2019

### Date

Innovation & entrepreneurship (INE)  
15 March, 12 April, 25 May 2019

Future technologies (FUT)  
16, 29 March, 24 May, 5 July 2019

Integrated mobility (IMO)  
30 March, 13 April, 25 May 2019

Autonomous Drive (ADR)  
10, 11 May, 7, 8 June, 6 July 2019

### **Orari**

Friday 09:30 – 18:30  
Saturday 09:30 – 18:30

Weekly block classes at company selected location available upon request (1 ON, 1, 2 or 3 OFF).  
All RSM courses can be offered as a continuous 4 days for 4 weeks “Summer School” or “Block” class.

### **Luogo**

At the “Officine FFS” in Bellinzona (5 minutes walking from the station).

### **Costo**

CHF 6'100.–

For those who already have attended a CAS of the MAS – RSM, the cost is CHF 5'700 with a further reduction of 10%. These costs include the final exam, the issue of the certificate and the documentation.

Companies with more than three (3) enrolled participants will be granted a special discount.

### **Osservazioni**

Mandatory 2-day practical experience

Students shall choose two of the following experiences:

- Train conductor - (Chef Kundenbegleiter, chef de train, capo treno)
- Train driver - (Lokführer, conducteur de trains, macchinista)
- Traffic engineer - (Verkehringenieur, ingénieur des transports, ingegnere del traffico)
- Train controller - (Zugverkehrsleiter, chef circulation des trains, responsabile circolazione treni)
- Client advisor - (Kundenberatung, conseiller clientèle, consulente della clientela)
- Transport police - (Transportpolizei, police des transports, polizia dei trasporti)
- AD Project Experience - (Autonomous Drive)
- Vehicle hand-on – (Unterhalt und Service, entretien et service, manutenzione e servizio)

Credits: no credits

### **Lectures**

Tuition and documentation will be in English, but we can assist the students in Italian and German. If you wish to attend the course in another language, please mention it during registration and select between Italian and German. The Course could be held in another language if there were at least 8-10 participants.

### **Informazioni di contatto**

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### **Informazioni**

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