

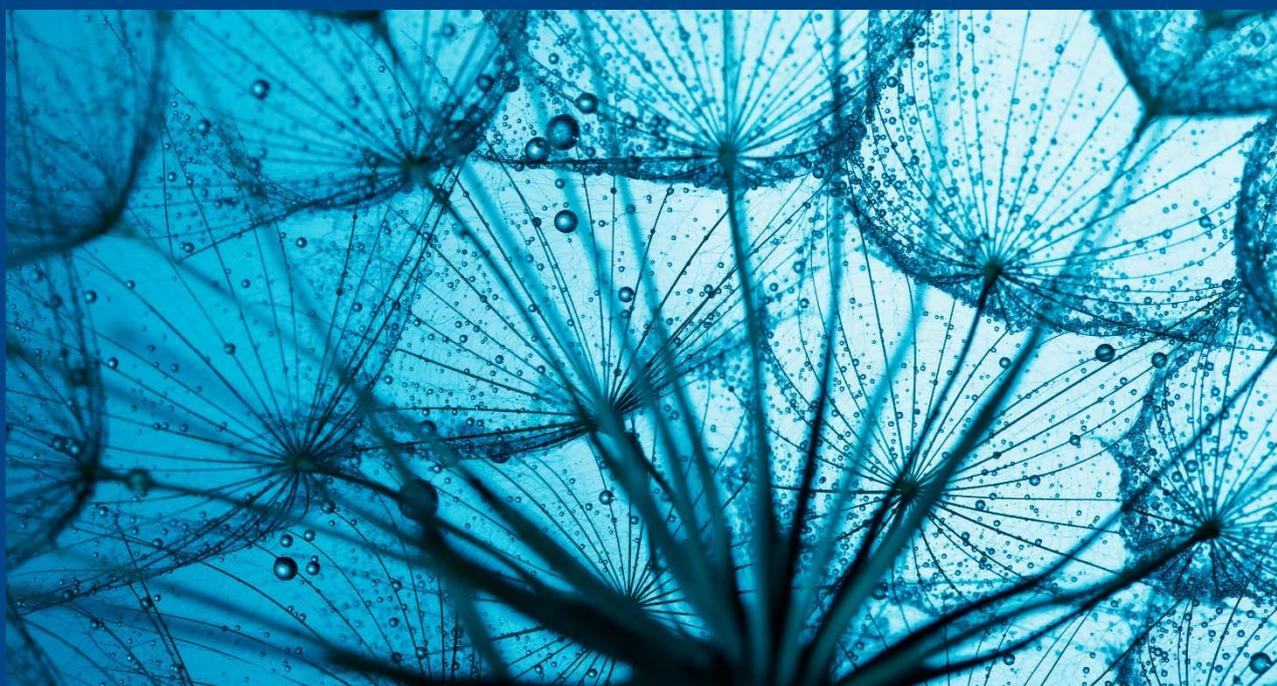
University of Applied Sciences and Arts
of Southern Switzerland

SUPSI



competence centre
sustainable mobility and railways
innovation

Certificate of Advanced Studies SUPSI in Mobility Management



An integrated approach for the
next generation of mobility professionals

With the support of



SBB CFF FFS

SWISSRAIL
Industry Association

The Certificate of Advanced Studies SUPSI in Mobility Management (MoMa)

MoMa is part of the RSM MAS Program.

The understanding of transportation is the key for a sustainable corporate development and for the success.

Frictionless, automated, and personalized travelling, possibly on demand, is the vision for future's mobility. In an extremely fast "mobile-ecosystem", transferring knowledge and assimilating new skills are the foundations for business success.

Transportation is evolving into interdisciplinary conveyance and the services are continuously adjusting to meet new social needs. New innovative approaches are urgently required to tackle the challenges of the next decades.

Thus, providing the next generation of mobility and railways experts is becoming the key aspect of a flourishing economy.

With MoMa you evolve in a new mobility dimension: the mobility experience.

An investment of 7 extended weekends.

RSM, exploring mobility.

CAS Mobility Management

Code

RSM-MM

Presentation

Today's mobility is constantly evolving, and a competent management must be aware of the changes introduced by technology and social evolution. Each of the single modules will contribute to a better understanding of the mobility environment and how to manage the challenges of future transportation systems. The general objective of this CAS is to provide the basis and a general outlook on sustainable mobility.

This CAS is a building block of the MAS Railways and Sustainable Mobility (RSM). It trains both technical and management leaders, seeking for a career in the transportation industry and in the public/private sectors of mobility & transportation. Participants will acquire the skills needed for careers in research and development, production, consultancy as well as public institutions domains and will learn to be capable of taking responsibility for managing complex interdisciplinary projects.

Mobility management in a wide context, the most relevant notions of the regulatory frame work, communication conveyance, information management, today's security challenges as well as capital investment, plus visibility achievement and promotion of your own services are going to be the academic subjects of this Certificate in Advanced Studies in Mobility Management. The multidisciplinary courses will also enable the attendees to be at ease and confident in every situation, be it financial, technical or of operational nature, becoming a knowledgeable and reliable counterpart.

Objectives

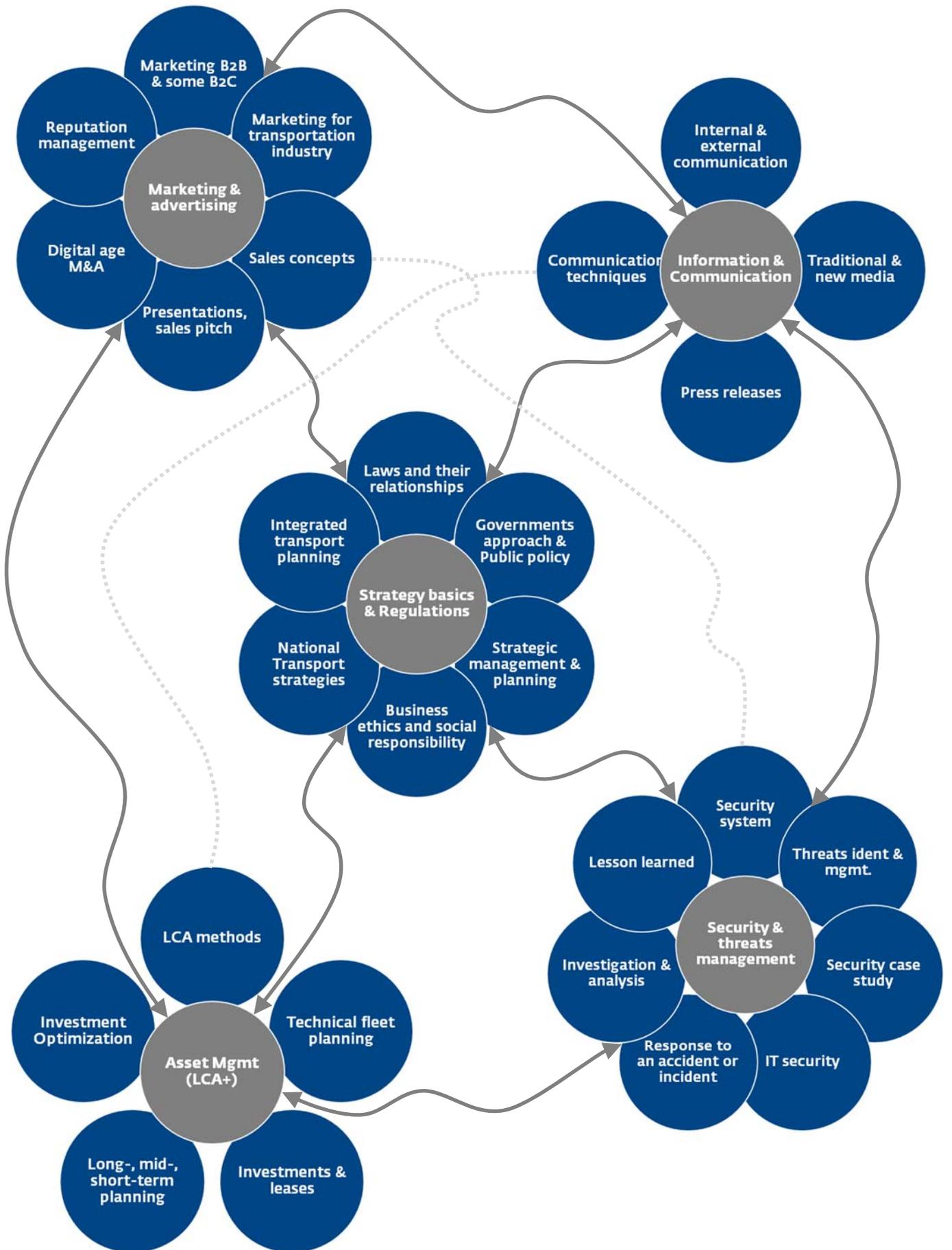
- > Train the future managers in mobility and transportation
- > Know, understand, and correctly use the field terminology of the field
- > Know and understand the specifics of the mobility sector stakeholder
- > Know and be able to apply the procedures needed to ensure the operation
- > Understand and correctly utilize the regulatory framework
- > Know how to describe and apply the concepts of mobility management
- > Know how to manage complex and interdisciplinary transportation issues and projects

Intended Audience

This CAS is devoted to managers, experienced employees and all professionals involved in management in the railways and mobility sector as well as to individuals interested to work in this sector through the acquisition of the knowhow provided by this course.

Training applications

- > Talent development training program
- > Internal employee re-qualification or certification
- > Introductory program for new hired staff
- > Experienced employee cross-qualification
- > Independent professional certification
- > Strategy development training



Practical relevance

The MoMa CAS has a practical approach as the attendees will be actively involved in the discussion about mobility management aspects, being encouraged to present their own examples and ideas in the discussion and debate actual mobility entanglements issued from selected mobility companies. Thereupon, the participants will be able to make a seamless transition to their working environment and familiarize with the awaiting challenges in the different industry-based examples.

Skills

Ensure security for vehicles, network, IT and the mobility infrastructure

- › Planning, designing, executing and monitoring at various levels

Methods and tools to communicate in the transportation system

- › Selection of appropriate media, conveyance of messages, correct use of media creative tools

Organize the information flow and data excess

- › Suitable methods for identification, organization, and prioritization

Invest with a wide-open approach

- › Investment models covering a wide range of industrial and operational aspects

Governments and supranational entities regulating mobility

- › Understand and properly apply the applicable laws and regulations, transfer into internal rules, implement compliances and certifications

Advertise and define your services

- › Apply advertising and marketing tools to promote your services

Requirements

Bachelor Graduates from Engineering Programs, Management, or other Technical and Scientific faculties. Non-graduates Professionals and Managers in 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 English expertise is required.

Certificate

Certificate of Advanced Studies SUPSI in Mobility Management

Credits: 11 ECTS

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

Program

1	Module	Asset Management (LCA+)	LCA
	Lecturer	Claudio Rolandi, Head of Continuing Education DTI, SUPSI	
	Lessons	24 hours (2 ETCS)	
	Contents	<ul style="list-style-type: none"> > LCA methods: general, directional tools, proxy and matrix methods, ISO 14044. > Technical fleet planning: “static” and “dynamic” modelling, trades-off, commonalities, impact of changes in the economic, ecologic, and technological environment. > Investments & leases: lease vs. buy analysis, understand NPV, leases investment types, maintenance, and other costs. > Long-, mid-, short-term planning: definitions and application, planning and scheduling, availability, reliability. > Optimization of investment: continuous improvement, operating margins, repair costs. 	
2	Module	Information & communication	ICO
	Lecturer	Diego Gilardoni, Global Business and Communication Expert	
	Lessons	36 hours (3 ETCS)	
	Contents	<ul style="list-style-type: none"> > Internal and external communication: how to convey messages, timing, means. > Traditional and new media: newspapers, brochures, radio and TV, digital media, online platform, best usage of media-mix, identification of rights mean. > Press releases: structure, addressees, languages, interaction with the media, follow-up, objectives. > Communication techniques and elements: verbal, non-verbal, written, graphic; techniques such as mirroring, silence, compelling humor, cultivate curiosity. > Communication in crisis: responding on transportations Issues; strategies; interview guidelines. > Planning: emergency response plan ERP; preparedness, response, recovery, and prevention (PRRP) circle; communications and media plan; interaction with emergency respond teams; intervention planning; accident response plan. > Response to an accident/incident: parties involved; media coverage and information; crisis team and process; care team and victims support; operational stability. 	
3	Module:	Marketing, sales & advertising	MB2
	Lecturer:	Dr. Daniela Willi-Piezzi, SUPSI	
	Lessons	24 hours (2 ETCS)	
	Contents:	<ul style="list-style-type: none"> > Marketing B2B & some B2C: national and international marketing; markets research; government interactions. > Marketing for transportation industry: application for rail; aviation; road; sustainable transport. > Sales concepts: Product strategies; corporate communication; key account and sales management. > Presentations, sales pitch: techniques to present services and products, basics of design, storytelling, use of media tools. > M&A in the era of digitalization: use of social media in advertising, difference between classic and digital marketing, application of new advertising technology in B2B. > Reputation management: ethics, responding to public criticism, influencing public perception. 	

Program (cont.)

4	Module	Security & threats management	STM
	Lecturer	Alan Lava, Managing Director GISC (Genium Security Concept) Ltd.	
	Lessons	24 hours (2 ETCS)	
	Contents	<ul style="list-style-type: none">> Security system implementation: Intrusion detection, access control; physical security, procedures.> Threats ident & mgmt.: loss prevention, security risk management, types of risks, risk options, terrorism, assessments.> IT security: elements of IT security such as applications, network; disaster recovery, wireless, DB, malware, virus, ransomware....> Response to an accident/incident: emergency evacuations, continuity, protection, casualty and injured.> Investigation & analysis: event review and forensics, evidence protection, coordination with authorities, repetitiveness avoidance, lesson learned> Lesson learned: scheduling review, review contents, proactive approach.> Security case study: airport, nuclear plant, major event, state visit.	
5	Module	Strategy basics & regulations	REL/STR
	Lecturer	Simone Bernasconi, Managing Director msfi & Daniel Roth, SBB Personenverkehr	
	Lessons	24 hours (2 ETCS)	
	Contents	<ul style="list-style-type: none">> Laws and their relationships: legal basis; international agreements; local and national laws; participation in governmental decisions; law and markets interaction; laws applications, compliance.> Governments approach & Public policy: Swiss transport legislation, EU normative, international regulations.> National Transport Strategies: areas of interest such as public transport, private motorized transport, or non-motorized traffic; health, safety, and environmental regulations.> Strategic management & planning: how to develop a strategy for the public transport, interactions, tools and analysis> Business ethics and social responsibility: effect of ethics in strategies development.> Integrated transport planning: planning interconnected transports (strategy)> Law, innovation, and economics: laws, regulations influence on innovation, protection of intellectual property, risks.	

Dates

Strategy basics & regulations

22 September 2018, 5 October 2018, 27 October 2018, 9 November 2018

Asset Management (LCA+)

6 October 2018, 20 October 2018, 23 November 2018

Information & communication

21 September 2018, 19 October 2018, 23 November 2018

Security & threats management

7 September 2018, 26 October 2018, 10 November 2018

Marketing & advertising

8 September 2018, 27 October 2018, 24 November 2018

School Time

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.

Method support

E-learning classes can be proposed by the lecturer (max 15%), as well as skype attendance (max. 10%)

Schedule

MoMa				2018		2018		2018		2018		2018		2018			
				Sep 07	Sep 08	Sep 21	Sep 22	Oct 05	Oct 06	Oct 19	Oct 20	Oct 26	Oct 27	Nov 09	Nov 10	Nov 23	Nov 24
B	#	Start	Finish	Fri	Sat												
Mobility Management	1	07:45	08:30														
	2	08:30	09:15														
	X	09:15	09:30														
	3	09:30	10:15	STM	MB2	ICO		STR	LCA	ICO	LCA		MB2	LCA	STM	REL	MB2
	4	10:15	11:00	STM	MB2	ICO		STR	LCA	ICO	LCA		MB2	LCA	STM	REL	MB2
	X	11:00	11:15														
	5	11:15	12:00	STM	MB2	ICO	STR	STR	LCA	ICO	LCA	REL	MB2	LCA	STM	REL	MB2
	6	12:00	12:45	STM	MB2	ICO	STR	STR	LCA	ICO	LCA	REL	MB2	LCA	STM	REL	MB2
	L	12:45	13:30														
	7	13:30	14:15	STM	MB2	ICO	STR	STR	LCA	ICO	LCA	REL	MB2	ICO	STM	REL	STM
	8	14:15	15:00	STM	MB2	ICO	STR	STR	LCA	ICO	LCA	REL	MB2	ICO	STM	REL	STM
	X	15:00	15:15														
	9	15:15	16:00	STM	MB2	ICO	STR	STR	LCA	ICO	LCA	REL	MB2	ICO	STM	REL	STM
	10	16:00	16:45	STM	MB2	ICO	STR	STR	LCA	ICO	LCA	REL	MB2	ICO	STM	REL	STM
X	16:45	17:00															
11	17:00	17:45	STM	MB2	ICO	STR	STR	LCA	ICO	LCA	REL	MB2		STM	REL		
12	17:45	18:30	STM	MB2	ICO	STR	STR	LCA	ICO	LCA	REL	MB2		STM	REL		
X	18:30	18:45															
13	18:45	19:30															
14	19:30	20:15															

Duration: 132 hour-lesson

Responsible: a.i. Simone Bernasconi

Enrolment

Until **September 1, 2018**. Applications/enrolments possible at any time previous agreement with the course responsible. If you wish to attend the course in another language, please mention it during registration and select between Italian and German.

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

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.

Cost

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.

In cooperation with

Swiss Federal Railways SBB and SWISSRAIL Industry Association

Information

SUPSI, Department of Innovative Technologies
Galleria 2
CH-6928 Manno
T +41 58 666 66 84
F +41 58 666 65 71
dti.fc@supsi.ch
www.supsi.ch/dti
rsm.msfi.ch

Student support direct line: +41 79 500 88 11

Document Version

V05P / 07.09.2018
File name: 2018o709_CAS_MoMa_Mobility Management_V05P

M **o** **M** **a** **R**
A **a** **In** **T** **ech**
T **n** **C** **o**

An integrated approach for the next generation of mobility professionals

With the support of



SBB CFF FFS

SWISSRAIL
Industry Association