

**3-DAY COURSE**

Digital Mobility

Transforming Transportation with Data and Artificial Intelligence

TARGET AUDIENCE

Transportation professionals, planners, and engineers seeking to apply data and AI in mobility. Policy makers from public authorities and consulting firms looking to innovate in planning, operations, or regulation of transportation systems

Researchers and mobility start-ups focusing on digital mobility, automation, and sustainable transport, interested in the technological, operational, and societal impacts of emerging mobility trends

ORGANIZATION

Transport and Mobility Laboratory,
Ecole Polytechnique Fédérale de
Lausanne (EPFL)

OVERVIEW

From connected vehicles to AI-powered traffic systems, data and intelligent algorithms are reshaping how people and goods move. Emerging technologies are transforming established models and unlocking new opportunities: More accurate demand modeling, expanded shared mobility, and smarter traffic management. How can data and AI-driven solutions help public and private stakeholders achieve greater efficiency? And which regulations and policies are framing these new mobility paradigms?

This 3-day intensive course gives professionals the knowledge and tools to harness data, AI, and digital platforms for smarter, safer, and more sustainable transport systems.

OBJECTIVES

- Understand how digital transformation is changing mobility planning and operations
- Learn to use data and AI for demand forecasting, behavioral modeling, and traffic management
- Explore shared mobility business models, operational strategies, and the policies that support them
- Discover real-world applications of AI in mobility – from dynamic fleet control to urban access management
- Connect with experts and peers shaping the next generation of transport solutions



Wednesday March 4,
Thursday March 5, Friday
March 6, 2026



Certificate of attendance



CHF 3'900.-

10% special discount for contributing
members of EPFL Alumni

LEARN MORE



From 9.00 am to 5.30 pm



EPFL, Lausanne, Switzerland



On-line registration

Registration deadline : Dec 15, 2025

Number of participants is limited

PROGRAM

DAY 1 (morning): MOBILITY DEMAND - DATA AND ASSUMPTIONS

- Travel behavior: Trips, tours, activities and origin-destination tables
- Activity-based models
- Aggregated vs. disaggregated travel data
- Mobility data ecosystem for transportation analysis and informed decision-making

DAY 1 (afternoon): AI FOR TRANSPORTATION

- Introduction to AI, Machine Learning and Deep Learning
- AI in transportation: Real-world applications and key challenges
- New mobility paradigms and their impacts on transport systems

DAY 2 (morning): SHARED MOBILITY

- Service Types & Business Models (car-sharing, bike-sharing, e-scooters, ride-hailing, microtransit, MaaS platforms)
- Shared mobility operational strategies: Research-based tools for fleet management, adaptive pricing, and real-time demand response
- Regulation and policies (licensing agreements, data sharing, data protection, urban access policies)

DAY 2 (afternoon): TRAFFIC MANAGEMENT

- Data requirements, system modeling, and optimization of demand forecasts, vehicle flows, and infrastructure usage
- Implementation and challenges

DAY 3: PROJECT SHOWCASES & PEER LEARNING

- From AI-driven mobility solutions to sustainable transport initiatives: Examples of innovative projects led by research teams and industry partners
- Group discussions: From course insights to real, feasible, and innovative mobility project ideas

PROGRAM DIRECTOR

- **Prof. Michel Bierlaire,**
*Transport and Mobility
Laboratory, EPFL*

INSTRUCTORS

- **Prof. Alexandre Alahi,**
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