

ENG-606

EU EIT Urban Mobility 3-day seminar

Invited lecturers (see below), Van Herle Jan, Various lecturers (see below)

Cursus	Sem.	Type
Energie		Opt.

Language	English
Credits	1
Session	
Exam	Written
Workload	30h
Hours	25
Lecture	16
Exercises	7
Project	2
Number of positions	

Frequency

Only this year

Remarque

November 10th to 12th, 2020

Summary

The 3-Day Seminar provides an insight into Urban mobility aspects including fuels (electricity, batteries, fuel cells, hydrogen, biomethane), charging infrastructure, country overviews (CH, FIN, ISR, IT, N, UK), market-active companies, and notions of entrepreneurship in the field.

Content

Technology overviews :

H2 mobility

Battery mobility

Biomethane mobility

Vehicle-to-grid

Optimisation of mobility

Entrepreneurship :

Market Opportunity Navigator Tool

Start-up Support example

Entrepreneurs :

Swisshydrogen - Fuel Cell vehicles

Autonomous vehicles

Country overviews on mobility:

CH, FIN, ISR, IT, N, UK

Exercises:

Study cases, business cases

The objective is to give participating PhD students an overview on current aspects of urban mobility and stimulate them to become actors in that field, including as entrepreneurs. To this purpose both technical overviews on mobility and entrepreneurship tools / examples are combined during the 3-day block course. Participants will be given exercises and have to work out a project example. The course will be taught at EPFL-Sion in a seminar room with pyphysical presence of most Swiss participants, and with external speakers and participants connected remotely.

Invited lecturers: Dr Arthur Wellinger, Dr David Hart, Dr Priscilla Caliendo, Prof Robert Steinberger, Prof Massimo Santarelli, Prof Hugh Middleton, Prof Dario Dekel, Prof Tanja Kallio

Note

By the end of the course, the student must be able to understand and explain connections and complexity in urban mobility planning and the available technologies, to see opportunities to become an actor in the field including as entrepreneur.

This is a three-part course given by Aalto University-Finland / EPFL-Switzerland / Technion-Israel

Each part gives 1 ECTS credit

Program for the Swiss part: <https://eiturbanmobility.net.technion.ac.il/switzerland-seminar-program/>

Keywords

Urban mobility; mobility technologies and infrastructure; urban mobility optimisation; vehicle-to-grid; fuel cells; entrepreneurship in mobility

Learning Prerequisites

Required courses

Optimisation techniques; fuel cells & engines

Resources

Websites

- <https://eiturbanmobility.net.technion.ac.il/>