

# Blended Intensive Programme International Railway Technology and Operations + calculation of CO2Footprint: practical skills for climate change

Nov. 11<sup>th</sup> – Dec. 13<sup>th</sup>, 2024 UAS St. Poelten, Dept. Rail Technology and Mobility, Austria

#### **Overview**

In this course, participants will gain knowledge on historical background and the state of the art in the field of international railways. They broaden those perspectives in the international railway system operations. They will understand the complexity of interdependencies of subsystems in the railway system and develop an attitude towards the integration of that knowledge in practice. The course is also dedicated to exploring the current international research activities in the field. Moreover, the participants will be able to calculate a carbon footprint using the simple example of their own "living environment" and use the knowledge to apply it in their private/companies use cases.

Mo. 11 Nov. 2024  $17:10-18:45 \mbox{ (Virtual)}$  Introduction to BIP during the international week and getting to know each other Hirut Grossberger

Mon, 25 Nov. 2024 08:30 – 09:10 Registration Building A: Main Hall

Mariam Mosiashvili, International office

09:10 – 09:35 – Welcome and getting to know each other Hirut Grossberger, Frank Michelberger

Lecture Hall 3

09:40 – 11:15
History of rail transport and Railway projects in Estonia
Differences in traffic management systems (Austria vs Estonia)
The political context and higher education system in the mobility sector

Mihhail Kirejev

11:20 - 12:30

Creating groups for exercises in each session, digital communication and collaboration tools, digital working platforms

Lecture Hall 3

## ST. PÖLTEN UNIVERSITY OF APPLIED SCIENCES



Tue, 26 Nov. 2024 09:00 – 12:00 Railway operations – Railways in Germany

12:15 - 13:00

Group exercises, discussions and presentations

Phillip Bradt, Robert Bruckner

Lecture Hall 3

13:50 - 15:00

Group exercises, discussions and presentations

15:30 - 17:00

Calculation of CO2 - Footprint

Hirut Grossberger

Wed, 27 Nov. 2024

09:00 - 10:40

Presentation of Vilnius Gediminas Technical University and Lithuanian railway transport system. Introduction to Rail Baltic project

Viačeslav Petrenko

Lecture Hall 3

10:45 - 13:00

Railway operations- Railways in Austria

Lecture Hall 3

13:50 - 15:30

Railway operations- Railways in Austria

Group exercises, discussions and presentations

Robert Bruckner, Phillip Bradt

15:40 - 18:00

The European railway system: Difficult choices – which alternative drive for which application.

**Practical exercises** 

Michael Lehmann

Thu, 28 Nov. 2024 10:00 – 19:30

Excursion: Mariazellerbahn

## ST. PÖLTEN UNIVERSITY OF APPLIED SCIENCES



Fr. 29.11.2024 09:00 – 10:45

Railway system and high-speed railway construction in Czech Republic

Lukas Tittl

11: 00 – 12:30 CO2 calculation and assignments Hirut Grossberger

Lecture Hall 3

13:00 – 13:45 Farewell Lunch

14:00 - Departure

Fr. 13.12 2024 15:30 – 19:00

Presentation of CO2- Footprint calculations and discussion and reflections

Lecture room: B 1.19 (local students) and MSTeams (Incoming students)

### **Side Events**

Mo. 25. – 29. Nov. 2024 Lunch and Networking 13:00 – 13:45

Mon, 25 Nov. 2024 14:00 – 14:15

Group photo- Building B- Main Hall

14:15 - 15: 30

Guided tour at the St. Pölten University of Applied Sciences

16:30 – 18:00 City Tour St. Pölten

Meeting point: Infront of Building B

Wed, 27 Nov. 2024

18:00

Conference dinner – lecturers only