



Blended  
Intensive Programme:  
**International railway  
technology and operations +  
calculate CO<sub>2</sub>- footprint:  
practical skills for climate  
change, 4.0 ECTS**

**November 27 – December 01, 2023**

**St. Poelten UAS, 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.

### Course Contents

- Railways in the Australian states, a technical divided network – Technical overview about Australian railways. Traffic systems in Victoria, Melbourne, development of urban and suburban areas, future of Victorian Rail Network
- Railway transport logistic processes in Lithuania. Lithuanian railways stations operation organization principles. Lithuanian railways signals signalization principles. Lithuanian railway transport system and introduction to Rail Baltic. History of rail transport and Railway projects in Estonia. Differences in traffic management systems (e.g., Austria vs Estonia)
- Introduction to the railway system in Japan as well as New Zealand
- CO<sub>2</sub>-Footprint: methodological approach and the calculation principles and specific applications

### Social Programme

The Social Programme includes a city tour, a field trip and a conference dinner.

### How to participate

Students may apply for an Erasmus+ grant at their home institution for participating in the BIP. Lecturers are also very welcome to accompany their students.

**Deadline for registration: August 11, 2023**

For further details regarding the administrative process, please get in touch with Andrea Steiner-Cardell, [andrea.steiner-cardell@fhstp.ac.at](mailto:andrea.steiner-cardell@fhstp.ac.at)

### Academic Contact Person

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