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Sponsor

The Fund for the Improvement
of Post-Secondary Education
(FIPSE)

Project Title

Policy Project on Tuning Trans-
Atlantic Cooperation in Railway
Higher Education

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Project Summary

Technology Transfer Outreach Publication

Tuning Trans-Atlantic Cooperation in Railway Higher Education

The Tuning Transatlantic Cooperation in Railway Higher Education (TUNRail) The objective of TUNRail is to enhance railway higher education knowledge exchange and collaboration between European and the universities and encourage the establishment of new railroad educational and research programs on both sides of the Atlantic Ocean. The consortium consists of four partners. The two lead universities are Michigan Technological University in the US and Instituto Superior Técnico (Portugal) in the EU. Two partner universities are University of Illinois at Urbana-Champaign in the US and Technische Universität Braunschweig (Germany) in Europe.

TUNRail will use comparisons and benchmarking analyses to define the extent, contents, structure, and objective of academic programs, and identifying how well they address key aspects of modern railway systems. The focus is to develop a “transatlantic” function within the framework of railway higher education that enhances the knowledge exchange between the EU and US and secures a robust collaboration on areas with transatlantic synergies.

Research Objectives

- Identification of synergies and key differences between the railway systems and industry in the EU and US and their effect on demand, type and objectives of railway higher education.
- Inventory and comparison of the status of railway higher education in EU and the US
- Comparison of current levels of industry participation in programs and development of promising approaches to future collaboration
- The development of an Electronic Handbook comprising all major parts of the project to be placed on TUNRail webpage.
- Utilization of the obtained results to multiply railway higher education by convincing stakeholders to consider TUNRail outcomes as part of the evaluation of existing program or the development of future programs



Rail Transportation Program

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University Facts

Total Enrollment	6,550
Graduate Enrollment	916
Number of Faculty	417
Placement Rate	95%

Michigan Tech is located in Houghton, MI on the south shore of Lake Superior. This rural area is known for natural beauty, pleasant summers, abundant snowfall, and numerous all-season outdoor activities. In addition, the University maintains its own downhill and cross-country ski facilities and golf course. There are numerous cultural activities and opportunities on campus and in the community. Michigan Tech has also been rated as one of the safest college campuses in the United States, and the local community provides excellent resources conducive to an outstanding quality of life.

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Anticipated Research Findings

The two main study outcomes are electronic handbook and a web conference to disseminate the results. The handbook will summarize the data collected, add other things for handbook.....here....

The international web conference will allow stakeholders from both continents to learn about the study results and to provide their feedback and questions in a live environment. In addition, a "Technical Dissemination Memorandum" suggesting how to continue the dissemination of the final products of TUNRail beyond the project lifetime will also be developed..

Benefits

TUNRail will directly impact all academic institutions within and outside the EU and US that currently participate in the railway higher education, or are considering an entry into the field. Both academia and industry benefit from the increased transparency and collaboration between stakeholders in each continent. As the demand for rail transportation and railway higher education increases, the information disseminated through TUNRail helps provide assistance and encourage the development of new "globally oriented" railway programs. Railway systems and industries are impacted by the increased number of program graduates for hire, as well as by the implementation of new technologies unveiled through research activities. Other transportation industries that closely collaborate with the railway industry, such as transportation equipment, technology companies and companies who obtain service from the railways, are affected as well.

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