

Drafting of New Large-Scale Hyperloop Research Infrastructure: Design and Roadmap of a Large-Scale Cargo Research Infrastructure

Developing Large Scale Hyperloop Research Infrastructures in European Research Program

Supervisors IHT: Prof. Dr. rer. nat. Walter Neu, Prof. Dr.-Ing. Thomas Schüning

Supervisor UOL: Supervisor by arrangement

Assistant Supervisors: Lukas Eschment

Modules: Master thesis

Major/Field: Engineering Physics, Economics

Term: Winter term 2022/23

Start: September / October 2022

Submission Deadline: March / April 2022

Contact: lukas.eschment@hs-emden-leer.de

Execution: Time and place by arrangement, group work possible, English language

Short description:

Hyperloop is a guided transport system in which so-called pods are designed to transport people and goods at the speed of sound in a partially evacuated tube. Within the framework of the “Hyperloop Development Program” a European research initiative, individual technologies, economics and use cases of this system are being investigated.

This project deals with the drafting of new research infrastructure with a focus on implementation of new testing needs and integration of technical requirements regarding cargo for this new mode of transport. The aim of this project is proposing a structure and budget, defining the testing needs and propose a roadmap compiling next steps for the realization of a Large-Scale Hyperloop Research Infrastructure from previous thesis and student projects in the research program.

Goal:

- Draft and Design a Large-Scale Hyperloop Research Infrastructure with a focus of implementation of cargo testing needs
- Integration of technical requirements from stakeholders and industry experts
- Proposition for a governance structure and budget
- Detail a roadmap with work packages for stakeholder for implementation and certification

Please reach out and visit www.iht-emden.de for more information. We are happy to supply you with more detailed information of the research program



Image: Edda Schneider