

Msc: Transport Infrastructure & Logistics (TIL) organised by the faculties of Civil Engineering & Geosciences, Technology, Policy & Management and Mechanical, Maritime and Materials Engineering

A TIL5050-20 Design Project – Something for your company or agency?



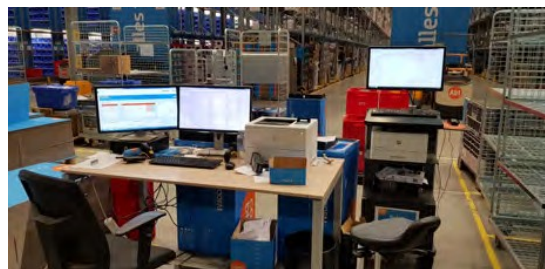
A design project at Msc level

Each year up to 20 Msc TIL Design projects are carried out by small student teams for commercial companies, consultants, governments and non-profit organisations. Their work project can help you to overcome a challenge in passenger or freight transport (all modes), traffic, location choice, area development, building and facilities design, sustainability, safety etc.

Each project consists of a research and a design part. During research, needs are translated into problems, literature is studied, root causes are identified, stakeholder interests and requirements are identified. Next, design criteria and (if applicable) kpi are specified. During design, possible solutions are developed in detail and evaluated to find the most suitable ones.

The result of each project is a set of 'out of the box' and well-grounded solutions that can and in many cases also will be implemented, sometimes already during the project. The results will at least confirm your own ideas, but frequently go much further and offer positive surprises. In other cases, they stimulate your thinking and lead to follow-up studies. As each project is unique, the outcomes are not run-of-the-mill.

Academically, the course raises students to the entry point of a Msc thesis.



Research quality

A design project should strike a balance between your demands and those of the university. A systems engineering method is at the foundation of each project. The research is executed independently, robust research methods are used and results have to be verifiable and replicable.

Supervision and meetings

Teams are supervised by your staff and specialised and practice-oriented TU Delft supervisors (lecturers / researchers) on a weekly basis. Students are used to self-steering, but feedback sessions are needed to align their ideas with yours and those of the TU Delft,

to have on-time access to specialists and data. This takes on average 1-2 hours per week of your time. In parallel to your supervision, two TU Delft supervisors and the course coordinator supervise each project.

There are 4 official project meetings: Kick-off (1 hour) to discuss the project proposal, mid-term (1 hour) and green light (1 hour) to discuss progress and finally the final presentation (2 hours) where the project team will receive a grade. All supervisors should attend.



Planning and organisation

Each design team consists of 4-5 students with at least 2 different specialisations (policy, design, operations and engineering). A design project takes about 20 weeks. 10 weeks for preparation and 10-11 weeks for the project itself. 20-30 hours are invested each week by each team member. Project preparations can start (with some flexibility) in September, November, February or April.

We expect a commissioner, if space allows, to provide office space and technical facilities for 1-2 days per week. Teams should also receive permission and help to access to (internal) specialists and relevant company information, to organize brainstorm sessions and to give in-company presentations (if useful).



Legal and financial

It is common that students sign a bilateral internship agreement (with NDA). Project reports will be confidential unless a commissioner gives permission to do so. Most commissioners also pay each student a fee for the work done.

Course coordination

Dr. Jaap Vleugel coordinates this course. He is also a frequent supervisor. Students have to attract a commissioner and a topic themselves, but Jaap helps them with the process and the content (writing a PVS).

You can contact him if you are contacted by a team and have some questions or suggestions. We also have an extensive list with earlier projects as reference.

Thank you for your attention.

Best regards, Jaap Vleugel

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