At the Chair of **Logistics and Supply Chain Management** of TUM School of Management we are looking for an interested and qualified student to conduct an

**Interdisciplinary Project**

on the topic:

**Transportation Planning**

The Transportation Planning Problem is one of the classical problems in Operations Research. A set of suppliers has to satisfy the demand at a set of customers. The question is: Who is supplying whom? This is the simplest version of the problem and many variants exist to cover different real-world scenarios. This can be more advanced cost-structures or the selection of different transportation modes. The goal of this IDP is to develop a graphical interface (e.g., based on Google Maps) where the user can select locations for demands and destinations. After that, the user can enter different cost scenarios. For solving the problem, the information has to be transferred in to classical data structures and optimized using Operations Research Methods (LP/MILP formulation).

This IDP can be done as a group project or also subsets in single projects.

**Selected tasks:**

- development of an interactive tool for generating datasets
- data processing for the backend
- implementation of a solution method
- attending a course (e.g., Modeling, Optimization and Simulation)
- writing a report
- preparing a presentation

**Requirements:**
The thesis is for student with major in computer science. The ability to work independently as well as analytical skills are required.

**Begin:** ongoing

**Advisors:** Pirmin Fontaine (pirmin.fontaine@tum.de)

**Application:** Email with CV and transcript of records to logtheses.wi@tum.de