

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 his/her

Master thesis

on the topic

Experiment-Driven Development of Supply-Chain Competences in a University "Living-Lab"

Universities purchase, move, consume and dispose of vast amounts of goods—from lab chemicals and catering supplies to technological equipment and construction materials. At the same time, they educate the next generation of supply-chain professionals. This dual role makes the campus an ideal **living-laboratory** for testing how specific learning interventions, digital tools and process changes translate into measurable supply-chain competences such as demand planning, resilience, circularity and analytical decision-making. Yet most academic curricula still evaluate skill acquisition only through classroom assessment rather than **controlled, real-world experiments**. This thesis embeds experimentation to quantify how targeted interventions build supply-chain competences among students,

Key project tasks:

- Literature review on relevant fields of study
- Competence Taxonomy for Higher Education
- Intervention portfolio
- Simulation and Field experiments
- Educational playbook

Requirements:

The thesis is suitable for Master in Management and Master in Management and Technology students with a major in operations and supply chain management. They should demonstrate strong programming and analytical abilities—proficient in at least one general-purpose language such as Python, Julia, or C++—and be comfortable working with data-analysis or machine-learning libraries. A solid grounding in supply-chain management is essential, with prior experience in sustainability assessment regarded as an asset. Finally, successful applicants must be able to work independently, think analytically, and communicate their findings in clear, impactful English.

Earliest begin: July 2025

Supervisor: Laura Visintainer Lerman

Application: Email with curriculum vitae and transcript of records to logtheses.log@mgt.tum.de