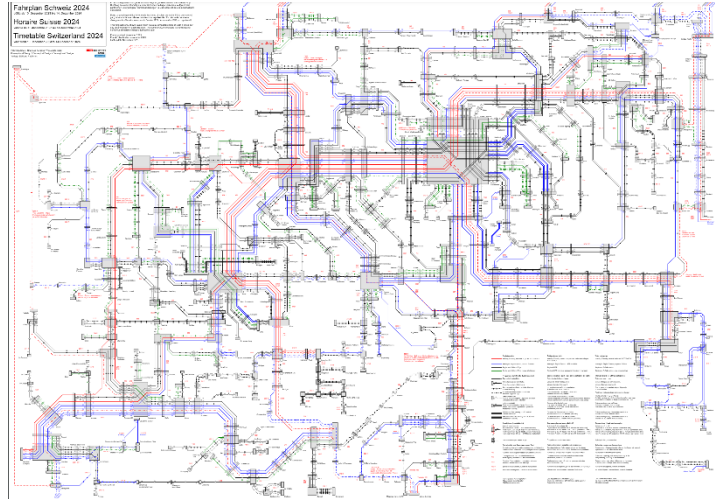


<b>Scientific head:</b>	Prof. Dr. F. Corman
<b>Project title:</b>	What are we automatising? Effort and processes for timetabling.
<b>Supervision:</b>	Jan Lordieck

### Background and problem description

A large share of research in public transportation is dedicated to optimising and automatising timetabling with the aim of improving timetables and operation. Due to labour shortage, also personnel for timetabling might be scarce in the future, hence at least partial automatising might become more important as a goal to reduce the workload for timetabling. However, the effort currently arising for timetabling is largely unknown.



### Research question

This proposal intends a study on how processes for timetabling are designed in different organisations and companies as well as how resource intensive, especially focusing of human workload, those processes are. Furthermore, the question of which specific steps and tasks of timetabling could be automatised and how much workload could be reduced should be answered from a business perspective.

### Expected results

The student taking this challenge is expected to conduct a qualitative study on timetabling processes at Swiss public transport agencies and operators with interviews which serve as a preparation for a standardised survey. Analysing the results of both should allow answering the questions how and with which tools timetabling is conducted in Switzerland, how much human workload is involved and where the biggest automation and optimisation potential lies.

<b>Credits:</b>	10-20 (Bachelor or Project thesis)
<b>Requirements:</b>	<ul style="list-style-type: none"> <li>• Motivation to work on a real-life task with contact to lots of people from the public transport domain</li> <li>• Motivation to set up a survey and making sure that high-quality results are obtained</li> </ul>