

## System Dynamics as part of the curriculum at the Research Center of Transport Planning and Traffic Engineering, TU Wien

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Since the mid 1990s System Dynamics is an integral part of the research and teaching activities at the Research Center of Transport Planning and Traffic Engineering at TU Wien. The aim of the proposed oral presentation is twofold. First, to give an overview of the System Dynamics related teaching activities and second, to illustrate their relevance for and connection to the research activities.

The first System Dynamics based course “Computer aided methods for solving complex problems – Causal loop diagramming, SD-modelling using Stella and Vensim” was introduced in 1994. The syllabus of the course includes an introduction into the concept of “systems thinking”, qualitative and quantitative system modelling and the development of own quantitative SD-models.

Since the winter semester 2001/2002 system thinking and qualitative SD-modelling (causal loop diagramming) is an integral part of the course “Methods and models in land use and transport planning”.

System Dynamics was also part of several guest lectures, e.g. at the Universidad Politecnica de Madrid or Universidade de São Paulo.

Furthermore System Dynamics was part of extra-curricular activities like the institute’s transport planning seminar for practitioners, a dedicated seminar for the government of the federal province Vorarlberg and the expert workshops “Systems Dynamics and MARS short course“ und „System Dynamics in Transport Planning“ organised in Vienna.

The main link between academic teaching and research are PhD students. Members of the institute supervised and reviewed several SD related PhD theses at TU Wien, Universidad Politecnica de Madrid, Universidade de São Paulo and ITS Leeds.