

## IVT - Assignments

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<b>Head:</b>	Dr. A. Kouvelas
<b>Topic:</b>	<b>On the application of ramp-metering for the highway management in Switzerland</b>
<b>Assistant:</b>	K. Chavoshi
<b>Registration:</b>	<a href="http://www.ivt.ethz.ch/en/studies/downloads/assignments.html#registration">www.ivt.ethz.ch/en/studies/downloads/assignments.html#registration</a>

Ramp metering is one of the useful actuators for the traffic management in highway networks. The implementation of ramp metering has improved the traffic conditions in many different countries. The objective of this research is to study the potential benefits of implementing ramp meterings in the highways in Switzerland. To this aim, we simulate the macroscopic traffic flow condition for a Switzerland case study. Afterwards, we employ a ramp metering technique and analyze the results in terms of macroscopic criteria.

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<b>Links:</b>	-
<b>Requirements:</b>	<ul style="list-style-type: none"><li>• Familiar with traffic engineering</li><li>• Good coding skills in MATLAB or Python</li></ul>
<b>Minimum credits:</b>	24 ECTS
<b>Group work:</b>	Maximal two persons

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