

Institute of Environmental Engineering

Prof. Dr. Paolo Burlando Chair of Hydrology and Water Resources Management

Information about the MSc Theses in the HWRM Group

Prof. Paolo Burlando, hydrology and water resources management Prof. Peter Molnar, hydrology and fluvial systems

Research fields

- Hydrological processes in Alpine environments
- Fluvial systems and riverine processes
- Ecohydrology
- Hydrological extremes and natural hazards
- Climate change impacts
- Water resources management
- Sustainable water use

Research methods

- Numerical watershed modelling
- Lab and field measurement and monitoring
- Stochastic processes
- Statistical data analysis and interpretation

Aims of the MSc Thesis

- Address a scientifically and societally relevant problem in hydrology and water resources management in Switzerland or globally.
- Formulate research hypotheses and exercise methodologically appropriate investigations from which conclusions are drawn.
- Use advanced state-of-the-art analysis methods (models, data) and in-depth interpretation to advance knowledge in the field.
- Provide an engineering-relevant synthesis addressing how the results can be used in practice.
- Foster skills of independence, innovation, interpretation, and professional presentation.

Process of selecting a MSc Thesis

- 1. Select a topic from the list of current MSc theses and meet the indicated supervisor for a more detailed description. Do this early in the selection process. Variations in the proposed topics are permitted and your own input is invited and encouraged.
- Prepare a 2 page MSc Thesis research plan which broadly outlines: (a) the definition of the problem; (b) the methods which will be used to address it; (c) the expected results. Discuss/improve this document with the supervisor.
- 3. Once you have the agreement of the supervisor sign up in ETH MyStudies for the Thesis with a supervising professor and upload your research plan.
- Start date: Flexible (talk to your supervisor)
 Duration: 6 months (excl. holidays)
 Presentation: in the last 2 weeks
 Poster and Report: due at the end of the assigned Thesis window

For further information contact the teaching assistants.