Joint Doctoral Programme “Geo-Engineering and Water Management”

**POSTGRADUATE STUDY:** Joint Doctoral Programme Geo-Engineering and Water Management

**COURSE TITLE:** WATER TREATMENT AND ARTIFICIAL RECHARGE (3 ECTS-Credits)

**COURSE STATUS:** Optional course (OW3), Summer School 2017 in Vienna

**LECTURER’S:** Thomas Ertl, Günter Langergraber

**COURSE DESCRIPTION:**

This module aims to provide a basic knowledge of classical and contemporary problems in the management of wastewater for the practising engineer.

It includes basics regarding
- Legal requirements for wastewater (national and European requirements)
- Wastewater generation
- Collection and transport
- Wastewater treatment
- Reuse and discharge

Furthermore the module comprises some of the following issues:
- Management and rehabilitation of wastewater infrastructure
- Treatment wetlands
- Resources-oriented sanitation systems
- Numerical Modelling

**DEVELOPMENT OF GENERAL AND SPECIFIC COMPETENCIES (max. 500 characters – describe main goal of the subject in terms of knowledge and skills that a student would acquire by taking the course):**

After completing this course, students will understand the basics of wastewater systems. This includes wastewater generation and transport as well as treatment. The students will know different technological options for wastewater treatment including technical and natural options. Additionally, students will get specific skills related to modelling of wastewater treatment with activated sludge systems.

**RECOMMENDED LITERATURE (with detailed data on publisher and year of publication):**


**QUALITY ASSURANCE METHODS:**

An anonymous questionnaire will be filled in by all of the course participants. This procedure is compulsory for all subjects and is aimed at evaluation both of the teacher's performance (quality of delivery) and of the overall content and structure of the course.