Module:	Process Engineering
Lead:	Prof. Dr. Kai M. Udert
Title:	**Sensing Nitrite in Wastewater Treatment**
Description:	Nitrite accumulation is a common problem in wastewater treatment, especially in sequencing batch reactors (SBR) and in the treatment of high-strength wastewater such as digester supernatant or urine. A novel amperometric sensor has been successfully applied for measuring and controlling nitrite build-up in urine treatment. In this master's project, the student or students shall determine whether the sensor can also be used for nitrite measurement and control in SBRs or other activated sludge systems operated with municipal wastewater treatment. The objective of this project is to determine the sensitivity and robustness of the sensor and to suggest possible adjustments for its use in municipal wastewater treatment. This project will be conducted in collaboration with Vuna GmbH (Bastian Etter) and Hunziker Betatech (Alexandra Fumasoli).
Grading:	Report = 60 % Presentation = 20 % Practical work = 20 %
Other:	Organization: Eawag Dübendorf Prerequisites: Experience with lab work, Process Engineering II Project period: 14 weeks / 50% Language: English or German Single / Group work: single or group work Contact: Kai Udert (udert@eawag.ch), Bastian Etter (bastian.etter@vuna.ch)