Vision Aided Navigation (086761)

The course focuses on fundamental topics in vision aided navigation (VAN) and simultaneous localization and mapping (SLAM), which are essential for autonomous operation in unknown, uncertain or dynamically changing environments. Topics to be covered include: Bayesian inference, state of the art SLAM and VAN approaches, bundle adjustment, multi-robot cooperative localization and mapping, active SLAM and belief space planning. Upon completion of the course, the student will acquire tools to address challenging problems in mobile autonomous systems and robotics.

This joint-level course will be given in Spring semester 2016 on Mondays, 14:30-17:30. Most probably, the course will be given in English to allow participation of international students.

Additional information:
- **Course syllabus & Further information** (from Spring 2015): link
- **Lecturer**: Assist. Prof. Vadim Indelman (AE, TASP), www