



## ECEN 489 / ENGR 489

### Data Acquisition & Autonomous Systems

Instructors: Prof. J.-F. Chamberland & Prof. G. H. Huff  
 CRNs: 26047 / 26046  
 Semester: Fall 2014

The goal of this multidisciplinary project-based laboratory course is to provide instruction on data acquisition, system-level integration and design through a range of hands-on activities that complement the traditional classroom experience. This includes circuit design, prototyping platforms based on micro-controllers, C++ programming, Qt data visualization, and wireless communication. The main focus is on modular application development, algorithms, PCB/RF circuit fabrication, information management, control and actuation. In addition, emphasis is put on team work, presentation skills, time management, creativity and innovation. The unifying theme for the course is the conception, implementation and testing of building blocks for an autonomous data acquisition system.