

## **Mechatronic Systems Lab**

Course number	5664
Hours per week:	(2 practice session)
ECTS:	3
Scheduled:	Winter Term
Format:	Lab class including team work
Examination:	Presentation of Lab results - Course will be graded: passed/not passed
Lecturer:	Prof. DrIng. Alexander Czinki
Objectives:	All participants are enabled to develop mechatronic systems using various different components, such as controllers sensors and actuators. The main focus of this class is set on the practical realisation/control of the above mentioned systems.
Contents:	Structure, functionality and programming of microcontrollers, mathematical description and simulation of mechatronic systems, computer-based tools for the operation and control of mechatronics systems.
Prerequisites:	Basic knowledge of C computer language
Recommended Reading:	Getting started with Labview, www.ni.com MATLAB and Simulink for Engineers, Agam Kumar Tyagi, Oxford Higher Education