

Title of the course: Open and Closed loop Control	NEPTUN-code: RKXSV1ABNE	Weekly teaching hours: $l+cw+lb$ 2+0+2	Credit: 4 Exam type: tm
Course leader: Lóránt Szabó, Dr.	Position: senior lecturer	Required preliminary knowledge : NMXAN1HBNE	
Curriculum:			
<p>Learning the basic concept of the open and closed loop control. The open loop control using only On/Off signals. Overview PLC systems. Open loop control with pneumatic final elements.</p> <p>Review the theoretical background of closed loop control, structure of a control system, signals and basic control blocs. Time response, frequency response, steady state characteristics.</p>			
Professional competencies:			
<p>In possession of state-of-the-art IT skills, being able to use professional databases and certain design, modelling, and simulation software depending on their specialty. Efforts to improve knowledge by on-going self-education and continuously update their knowledge of the world. Responsible proclamation and representation of the value system of the engineering profession; openness to professionally well-founded critical remarks. Sharing experiences with colleagues, thus promoting their development.</p>			
Literature:			
1. Javad, Mohammadpour: Control of Linear Parameter Varying systems. Chapter: 1, 2, 3; ISBN: 978-1-4674-1832			
2. Keviczky, László: Control Engineering, Chapter: 1, 2, 4, 6, 8; ISBN: 978-963-9819-74-0			
3. E-learning materials in Moodle (lectures)			
Comment:			