| *Title of the course:* **Open and Closed loop Control** | *NEPTUN-code:* RKXSV1EBNE | *Weekly teaching hours:* *l+cw+lb* 1+0+2 | ***Credit*:** 3 ***Exam type:*** tm |
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| ***Course leader:*** Lóránt Szabó, Dr. | ***Position:*** senior lecturer | ***Required preliminary knowledge :*** NMXAN1EBNE | |

***Curriculum:***

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.

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.

***Professional competencies:***

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.

***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: