Course Unit Descriptor

Study Programme: Computing and Control Engineering

Course Unit Title: Control Systems Technology

Course Unit Code: 06 - E238A

Name of Lecturer(s): Kulić Filip

Type and Level of Studies: Bachelor level

Course Status (compulsory/elective): compulsory

Semester (winter/summer): winter

Language of instruction:english

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated:6

Prerequisites: none

Course Aims:

Students learn about modern technologies and development trends in the field of control systems.

Learning Outcomes:

The acquired knowledge can be used in solving practical engineering problems and form the basis for future engineering courses.

Syllabus:

Systematic engineering approach and computer control systems. Basic theoretical knowledge which enables understanding of laboratory classes with semi- industrial plants (temperature regulations, level and flow, Ph value, DC motor, robotic hand, digital signal processing, SCADA), as well as understanding of processes encountered with real life industrial plants. Current computer based automatic control projects for industrial purposes. Visits to industrial plants and other institutions which apply bioengineering technologies in order to examine contemporary technologies of computer based control.

Required Reading: Relevant literature in English TBD

Weekly Contact Hours:2	**Lectures:2**	**Practical work:0**

Teaching Methods:

Lectures. Laboratory and computer-laboratory practice classes. Consultations. Part of the course which forms a logical whole can be taken in the form of colloquium. Colloquium and examination are written and oral. Both parts are taken in written form. The final grade is based on the colloquium, obligatory assignment, written and oral part of the examination.

Knowledge Assessment (maximum of 100 points):100

Pre-exam obligations	points	**Final exam**	points
Group Assignment		Examination Assignment	
Exercises			
Test			
Test			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.