NAME OF THE COURSE	Automatics II						
Code	PMT074	Year of study	1. Graduate study				
Course teacher	Hrvoje Turić, prof.	Credits (ECTS)	2				
Associate teachers		Type of instruction (number of hours)	L	S	E	F	
			15		15		
Status of the course	elective course	Percentage of application of e-learning					

COURSE DESCRIPTION						
Course objectives	Enabling students to the design of simple automation systems.					
Course enrolment requirements and entry competences required for the course	None					
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	1. Define objects 2. Explain the DC and hydraulic motor 3. Explain P value, I value, D value 4. Analyze the requirements of the synthesis of 5. Define types of signal compensator 6. Define the PID controller 7. Explain sensors					
Course content broken down in detail by weekly class schedule (syllabus)	1. Regulating structures 2. Approaching the object 3. The DC servomotor 4. The hydraulic motor 5. P value, I value, D value 6. Synthesis of Control System 7. The requirements in the time and frequency domain 8. (Colloquium) 9. Root locus 10. Compensators 11. Serial compensation 12. PI compensator 13. PD compensator 14. PID controller 15. (Colloquium)					
Format of instruction	☒ lectures ☐ seminars and workshops ☒ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work		☒ independent assignments ☒ multimedia ☐ laboratory ☐ work with mentor ☐ (other)			
Student responsibilities	Class attendance, homework (programs), independent study and literature reading, accessing colloquium and/or written and oral examination.					
Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	0,5	Research		Practical training	
	Experimental work		Report		Colloquium	0,5
	Essay		Seminar essay		(Other)	
	Tests		Oral exam	0,5	(Other)	
	Written exam	0,5	Project		(Other)	
Grading and evaluating student work in class and at the final exam	Class attendance is registered, but not included in the evaluation. Exam and partial exam consists of a theoretical part and assignments. - Theoretical exam (50%) - Assignments (50%) Passing threshold is 50%.					

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	N. Perić, I.Petrović: Automatizacija postrojenja i procesa- zavodska skripta FER		
	I.Mandić Automatika 2		

Optional literature (at the time of submission of study programme proposal)	B.A. Ogunnaike, W.H.Ray: Process –dynamics, Modeling, and Control, Oxford
Quality assurance methods that ensure the acquisition of exit competences	Conducting an anonymous student surveys, talk with students, analyses the success of students on tests and exams, self-assessment.
Other (as the proposer wishes to add)	