

表 GDAŃSK UNIVERSITY OF TECHNOLOGY

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Courses		i			es relat	ted to microc	limate control
Course outcome		Subject outcome			Method of verification		
K7_U06		has the basic skills to implement and test the known automatic control systems, to correct the characteristics, to evaluate the stability of the systems			[SU3] Assessment of ability to use knowledge gained from the subject		
[K7_W11] has knowledge to analyze, evaluate and optimize processes, objects and systems of environmental engineering and knows the principles of rational energy management and resources		has the ability to assess damage to peripheral elements of automation			[SW1] Assessment of factual knowledge		
K7_W04					[SW1] Assessment of factual knowledge		
Basic concepts of automation, basic principles of automatic control, classification of automation systems. Elements of automatic control systems: measuring devices, controllers, actuators. Basic members of linear automatic control systems. Analysis of linear control systems in the time domain. Open-loop and closed-loop systems. Impulse response. Step response. Frequency analysis of linear control systems. Stability of linear automatic control systems: concept and stability criteria. Automation actuators. Sensors in automation. Control systems in heating, ventilation and air conditioning.							
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Subject passin	ng criteria	Pass	ing threshold		Perc	centage of th	e final grade
, ,		50.0%	-				
		50.0%			70.0%		
	Basic literature Kwiatkowski W.: Wprowadzenie do Automatyki, Warszawa 2005. Craig J.: Wprowadzenie do robotyki. WNT, Warszawa 1995 Morecki A. I in.:Podstawy robotyki, WNT, Warszawa 2002 (wyd. II) Olszewski I in.: Podstawy mechatroniki, REA, Warszawa 2006.					995	
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	Supplementary literature	Bishop H.R.: Mechatronic Systems, Sensors and Actuators, CRC Press 2008			
	eResources addresses	Adresy na platformie eNauczanie:			
Example issues/ example questions/ tasks being completed	Calculate stability of regulation system				
Work placement	Not applicable				