

CURRICULUM FOR STUDENTS FROM TALTECH WHO APPLY TO GO TO ITMO UNIVERSITY

FIRST YEAR

Semester	Course title	Number of credits	Evaluation	University
1	Compulsory subjects			
	MLE0010 Estonian Language and Culture*	6		TalTech
	MLI0010 English for Science and research*	6		
	IAS0430 Microprocessor Systems (obligatory course)	6		
	EEM0090 Mechatronics Systems Modeling and Control (obligatory course)	6		
	IAS0065 Control Instrumentation (obligatory course)	6		
	IAS0410 Object Oriented Programming**	6		
	IEE1720 Data Acquisition Means and Methods**	6		
	IEE1550 Electronics**	6		
EEM0020 Dynamics of Robots and Machines**	6			
SUM:				
2	Compulsory subjects			
	TMJ3300 Entrepreneurship and Business Planning (obligatory course)	6		TalTech
	EEM0080 Advanced Robotics (obligatory course)	6		
	IEP1010 Prototyping - project	6		
	UTT0110 Mechatronics and smart systems - project	6		
	EEM0050 Industrial Internship	6		
	IHB0160 Biomedical Sensors	6		
	EIS4080 Fundamentals of Sustainable Energy Engineering	6		
	IAS0060 Robotics	6		
IAS0031 Process Modeling and Identification	6			
SUM:				
SUM of 2 semester:		60		

* from these courses only 6 ECTS required

** from these courses only 18 ECTS required

SECOND YEAR

Semester	Course title	Number of credits	Evaluation	University
3	Optimal control	3	Test	ITMO
	Control of four-wheel drive robots	3	Test	
	Programming control systems	3	Test	
	Modeling and control of electromechanical systems	3	Exam	
	Biomechatronics and biomimetics	6	Exam	
	Man-machine interface	3	Test	
	Robot programming	3	Test	
	Design of mechatronic and robotic systems	3	Test	
	Machine vision	3	Exam	
	Programming industrial controllers	3	Exam	
Research work	7	Test with grade		
SUM:				
SUM:		30		
4	Engineering practice	15	Test with grade	ITMO TalTech
	Undergraduate practice	9	Test with grade	
	Defence of master's thesis	6	Thesis defense	
SUM:				
SUM:		30		
SUM of 2 semester:				
SUM of 2 semester:		60		