

<b>Course Title:</b> Arduino Platform	
<b>Institute/Division:</b>	Department of Automation and Computer Engineering Faculty of Electrical and Computer Engineering
<b>Course code:</b>	E-AP
<b>Erasmus subject code:</b>	0611 Computer use
<b>Number of contact hours:</b>	45
<b>Course duration:</b>	1 semester (Fall/Winter)
<b>ECTS credits:</b>	6
<b>Course description:</b>	<p>The basics of microcontroller programming using the Arduino platform as an example:</p> <ul style="list-style-type: none"><li>• Overview of Arduino boards;</li><li>• Detailed structure of the microcontroller in Arduino;</li><li>• Basics syntax of programming language;</li><li>• GPIO;</li><li>• UART;</li><li>• ADC;</li><li>• Timers;</li><li>• Interrupts;</li><li>• Using Arduino in prototypes;</li><li>• Comparison of Arduino with other prototyping platforms (Raspberry Pi, ESP).</li></ul> <p>Laboratory exercises and individual project are aimed to expand experience in microcontrollers programming. Basic issues related to electronics are presented.</p>
<b>Course type:</b>	Lectures (20h), Laboratory (20h), Project (5h)
<b>Literature:</b>	Selected reviews from scientific literature
<b>Assessment method:</b>	Project, laboratory exercises and exam
<b>Prerequisites:</b>	-
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