

COURSE TITLE:	Arduino Platform
Institute/Division:	Department of Automation and Computer Engineering
	Faculty of Electrical and Computer Engineering
Course code:	E-AP
Erasmus subject code:	611 Computer use
Number of contact hours	45
Course duration:	1 semester (Fall/Winter)
ECTS credits:	6
Course description:	Basics of microcontrollers programming discussed in an example of Arduino Platform:
	Overview of Arduino boards;
	Detailed structure of the microcontroller in Arduino;
	Basics syntax of programming language;
	• GPIO;
	• UART;
	• ADC;
	• Timers;
	Interrupts;
	Using Arduino in prototypes;
	Comparison of ARDUINO with other prototyping platforms (RASPBEERY PI, ESP).
	Laboratory exercises and individual project are aimed to expand experience in microcontrollers programming. Basic issues related to electronics are presented.
Course type:	Lectures (20h), Laboratory (20h), Project (5h)
Literature:	Selected reviews from scientific literature
Assessment method:	Project, laboratory exercises and exam
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