

Projektmunka adatlap

Title of the project work: Making a 3D robot cell and programming it for a desired task, with a special holder arm.		Intézeti azonosító: MEI-064
Aim of the project work: Developing a new robot cell with the help of the RobotStudio (ABB robot) SW in the MEI Robot Laboratory. Making a real task-dedicated gripper with CAD program and preparing its ToolBox. Integrating the ToolBox into the RobotStudio program, and designing the operation in such a way that it would be able to grab soft-skinned parts without causing damage.		
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Group size (min./max.):	2-4 person	
Material requirements available:	RobotStudio 3D modelling and programming environment. CAD modelling environment(s).	
Material requirements pending purchase:	-	
Usable financial frame (max.):	-	
Expected schedule:	week 1-2.	Project team founding, defining the tasks in the project group. Time and work scheduling for the semester. Getting in touch with the microcontroller and its developing kit. Possible problem detecting and solving opportunities. Starting the Work Log(s) . Making the handover and responsibility reports.
	week 3-4.	Designing the gripper.
	week 5-6.	Modelling of the gripper in CAD program. Making the ToolBox containing all the possible positions of the gripper.
	week 7-9.	Building the robot cell (<i>Robot arm, conveyors, safety barriers</i>). Integrating the ToolBox into the program. Writing the operating program.
	week 10-13.	Making the final version of the program. Examination of operation: - if working, final tuning. - if not working, debugging, then final tuning. - making the necessary documentation
	week 14 -15.	Presentation and evaluation, work logs and documentation submitting.