Project	Subject	Description	Owner	DESIGN PROJECT				GRADUATION PROJECT		Extra	Evaluation
				Project Statement Letter (Dead time: 07.10.2022)	Project Plan (Dead time: 21.10.2022)	Interm Report (Dead time: 18.11.2022)	Term Report (Dead time: 13.01.2023)	Interm Report (Dead time: 06.04.2023)	Term Report (Dead time: 09.06.2023)		
1	PCB Design	Design and fabricate your own arduino–uno board with an extra a memory chip at least 512KB	**Emre Berk Aksu**							PCB must carry the designer name-surname, Un. ID, university name, department, lesson and the lecturer name	CD: only Fabrication of PCB CC: İntegration of elements CB-BB: Proper operation of Arduino BA to AA: Proper operation of uC board
			Emre Kemal Kiracı								
			Ömer Halis Demir								
2	PCB Design	Design and fabricate your own arduino–mega board with wi-fi and bluetooth peripherals	**Oğuz Ali Yılmaz**								CD: only Fabrication of PCB CC: İntegration of elements CB-BB: Proper operation of Arduino BA to AA: Proper operation of uC board
3	PID Controller	Design and implement a robot which forward movement will be controlled with a PID controller. Robot has its own precautions to not hit to obstacles.	**Gürkan Ergen**							if an obstacle found on the way, the robot must try turn to right if it's free, otherwise the robot must try to turn left. If both sides are occupied with obstacles, the tobot must turn back if there is enaugh space to turn otherwise it move back and turn to right or left at first free space...	CC: PID works well BB: Turning right or left when an obstacle seen on the way. AA: turning back or move back and turn to right or left at the first free place
4	FPGA Application	Implementation of calculator with FPGA	**Furkan Uyar**							A number pad and a 2 line screen must be used. İn the first line the operation line, in the second line the result of the last operation must be seen. Operations to be realised are +, -, / ,x, sqrt, pow 2, M+, M-	**If the system does not work, the project will not be evaluated** CD : Design with the pheriphreal devices. CB-BB: Some of the oprations are only realised. BA-AA: Well designed calculater.
5	FPGA Application	Implementation of a Tic-Tac-Toe game (XOX)	**?**								
8	PLC Application	Elevator system controlled with PLC: An elevator model with at least 4 floor.	**Abdurrahman Çetin**							At least 4-floor elavator model must be realized. The elevator must be user friendly that there will be enaugh information to the user by the system.	**If the system does not work, the project will not be evaluated.** CD: Design without compact assambly. CB-BB: Some absent properties that a user wants from an elevator. BA-AA: Well designed elavator model.
7	Embedded Systems	Home Automation and Security system: Controler and sensors must communicate wirelessly and microcontroler system must be designed by yourself. (Any on shelf uC board will not accepted)	**Mustafa Emre Kabadayı**							All communication with the senseos to uC must be wireless. At least one motor must be used. At least one window, one door must be modelled. There will be a mobile application that the user must be informed by the system by wi-fi. BT or gsm. An input device or mobile app must be used to activate/deactivate the system.	**If the system does not work, the project will not be evaluated** CD: Implementation of the project with on shelf uC Boards BB: Costum designed uC board for the project with a PCB BB to AA: Proper operation of the project
8	Solar system	Design a elektro-mechanical system that generates electrical energy by solar energy and store it. Solar panels must follow the sun. The uC card must be designed by the owner.	**Ayberk Coşkun**							Solar panels must follow the sun. A custom uC board must be designed for the system. An energy efficiency analysis must be done with stable solar panel system.	**If the system does not work, the project will not be evaluated** CD: Implementation of the project with on shelf uC Boards BB: Costum designed uC board for the project with a PCB BB to AA: Proper operation of the project