The University of Jordan
School of Engineering
Mechatronics Engineering Department
First semester 2025-2026

Course	**Automation and industrial Process Control Lab (0908538)**	**Prerequisite**	**Industrial Automation**
Catalog Descritption	1 Credit hours. Automation Lab experiment Concentrate on the concept studied in Course and other especially ; Wiring & Programming different type of PLC on different Applications, Connect some types of PLC with SCADA system , CNC. Design project.		
Textbook & References	Lab manual Industrial automation course , slides and notes in E-learning websie .		
Instructor	Eng.Safaa Alwreadat Email: : : fpe.lab.engsafaa@gmail.com Office: Mechatronics Engineering Department, basement floor ,Telephone: 5355000 ext 23028		
Course Outcomes	1. Know how to design, build and interface a programmable logic controller (PLC) and Human Machine Interface (HMI) in industrial enviroment . 2. Know how to use of a Laddar Logic to develop programs for PLCs 3. Know how to deal with SCADA and CNC systems		

Topics Covered	**Starting Date**	**Lab**
	14 -15 /10	discussion of Lab Syllabus to the students and introduction .
	21-22 /10	Hard Wiring and Timers Basics
	28-29/10	Practical 1 I/O addressing
	4-5 /11	Introduction to HMI
	11-12/11	I/O Kit exp.
	18-19/11	Elevator Exp.
	25-26/11	Traffic Light Exp.
	2-3/12	**Mid term exam**
	9-10/12	Automatic filling machine exp
	16-17/12	Practical 2
	23-24/12	Practical 3
	30-31/12	CNC
		Project
	Final Exam	

Grading policy	**Course Topics**	**Grade**	**Date**
	In Lab Perfprmance+Reports+Quizes	20%	
	Mid Exam	30%	
	Project	10%	
	Final Exam	40%	

Course Website:	**https://elearning.ju.edu.jo/**