

MAK4482 Industrial Automation Group (1)
SYLLABUS

Semester: Spring (2nd) 2020-2021

Lecture: Monday, 09:00 – 12:50, A405

Instructor: Dr. İlkey KURT

Office: V-210 Yildiz Campus

Office hours: Monday, 14:00 – 16:00, Tuesday, 11:00 – 13:00, or by appointment

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Textbook:

- Programmable Logic Controllers, Frank D. Petruzella, 5th Edition, McGraw-Hill Education.

Other Sources:

- Panasonic Programmable Controller FP Series Programming Manual
- Programmable Controller FPWIN Pro7 Introduction Guidance

PLC Software:

- Control FPWIN Pro

Weekly Subjects

Week	Subject	Related Preparation
1	Introduction to Industrial Automation and Programmable Logic Controllers (PLC)	Chapter 1
2	PLC Hardware Components	Chapter 2
3	Number Systems and Codes	Chapter 3
4	Fundamentals of Logic	Chapter 4
5	Basics of PLC Programming	Chapter 5
6	Developing Fundamental PLC Wiring Diagrams and Ladder Logic Programs	Chapter 6
7	Programming Timers	Chapter 7
8	1 st Midterm Exam	-
9	Programming Counters	Chapter 8
10	Program Control Instructions	Chapter 9
11	Data Manipulation Instructions	Chapter 10
12	Math Instructions	Chapter 11
13	Sequencer and Shift Register Instructions	Chapter 12
14	Industrial PLC Application	-
15	Final Exam	-

Evaluation System

Activities	Percentage of Grade
Homework Assignment	30
1 st Midterm Exam	30
Final Exam	40
Total	100