Engineering Program

Specialization	**Technology of remote industrial sensing and controlling**
Course Number	20413252
Course Title	**Programmable Automation controller**
Credit Hours	**1**
Theoretical Hours	**0**
Practical Hours	**1**

Brief Course Description:

This covers experimental study and investigation of programmable Automation Controllers used in industry and their applications.

Course Objectives:

Upon the completion of this course, the student will be able to:

1. To be able to used PAC
2. To be able to configure PAC for Input and output
3. Programming and testing

Detailed Course Description:

Chapter No.	Content title	Unit content	Time Needed
1	Experiment 1: Configuring Your Hardware -	-	2
2	Experiment 2: Accessing Your I/O		2
3	Experiment 3: PAC Architecture		1
4	Experiment 4: Inter-Process Communication		1
5	Experiment 5: Communicating Between RT Target and Host		3
6	Experiment 6 Real-Time Application Design Flow		3
7	Experiment 7: Network Communication		2
8	Experiment 8: Deployment	-	2

Evaluation Strategies:

		Percentage	Date
1. Exams	**Mid Exam**	20%	**/ /20__**
	Lab activates and reports	30%	**/ /20__**
	Final Exam	50%	**/ /20__**
Total		100%	

Teaching Methodology:

- Working with datasheet
- Practical experimental work in small groups
- PowerPoint slides
- Term projects

Text Books & References:

Textbooks

1. Labartory sheet prepared by instructor

References

1. LabVIEWTM Real-Time 2: Architecting Embedded Systems Course Manual
2. LabVIEWTM Real-Time 1: Architecting Embedded Systems Course Manual