

SIES Graduate School of Technology, Nerul Mechanical Engineering Department

Organize a 5 days Hands on Training on PLC Programming From Scratch 24-29 DEC 2018

Now a days, programmable logic controllers(PLC) are an elementary component of state-of-the-art automation solutions. Intelligent solutions are not based on a conflict between these systems, but on unity. With important advantages like, robustness and easy handling, the PLC continues to guarantee its success. Further development will be dependent on more & more steadfast integration of information & communication technology. For the engineering processes, the integrated workflow will covers all engineering tools for production. This require transparency of the data flow between a company's production processes and its business processes.

This training program is meant to be a hands-on type course, giving students opportunity to work on Allen Bradley PLC and Learn various methods of PLC programming. This course is designed to equip the novice with no prior PLC programming experience with the basic tools necessary to create a complete PLC program.

OBJECTIVES

- To provide knowledge levels needed for PLC programming and its operating.
- ➤ To train the students to create ladder diagrams from process control descriptions.

COURSE CONTENT

- Introduction to PLC and its types
 - Learning PLC programming using Ladder Diagram using the Rockwell software RSLogix 500
 - Basic Inputs and Outputs
 - Fundamentals of the Scan Sequence
 - Understanding Bits and Instructions
 - Basic Instruction XIC, OTE and XIO
- > Different Task will be given to students related to PLC Programming

WHO SHOULD ATTEND

Any student from SE/TE (EXTC/MECH/IT/CE/PPT) – Entry for only first 20 students

Course Fees

Free of charge

Contact for Registration

Prof. Abhishek Kadam Mobile: 9730032260 Email ID: kadam.abhishek@siesgst.ac.in Dr. Pradip P Patil Mobile:9869829395 Email ID: pradip.patil@siesgst.ac.in

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Date Day 1	Day 2	Day 3	Day 4	Day 5	
Abhishek Kadam	Abhishek Kadam	Abhishek Kadam	Abhishek Kadam	Pradip P. Patil	
10:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 AM	
Learning PLC programming using Ladder Diagram using the Rockwell software RSLogix 500 Basic Inputs and Outputs	Fundamentals of the Scan Sequence	Understanding Bits and Instructions	Basic Instruction XIC, OTE and XIO	Interfacing with Hydraulics and Pneumatic Kit	
Assignment/ Activity					
Hands on practice on Rockwell software RSLogix 500	on Rockwell	on Rockwell	Hands on practice on Rockwell software RSLogix 500	Hands on practice on Rockwell software RSLogix 500 and Pneumatic Kit	
	Day 1Abhishek Kadam10:00 AMLearning PLCprogramming usingLadder Diagram usingthe Rockwell softwareRSLogix 500Basic Inputs and OutputsAssignment/ ActivityHands on practice onRockwell software	Day 1Day 2Abhishek KadamAbhishek Kadam10:00 AM10:00 AMLearning PLC programming using Ladder Diagram using the Rockwell software RSLogix 500Fundamentals of the Scan SequenceBasic Inputs and OutputsSequenceAssignment/ ActivityHands on practice on Rockwell software RSLogix 500	Day 1Day 2Day 3Abhishek KadamAbhishek KadamAbhishek Kadam10:00 AM10:00 AM10:00 AMLearning PLC programming using Ladder Diagram using the Rockwell software RSLogix 500Fundamentals of the Scan SequenceUnderstanding Bits and InstructionsBasic Inputs and OutputsAssignment/ ActivityHands on practice on Rockwell software RSLogix 500Hands on practice on Rockwell software RSLogix	Day 1Day 2Day 3Day 4Abhishek KadamAbhishek KadamAbhishek KadamAbhishek Kadam10:00 AM10:00 AM10:00 AM10:00 AMLearning PLC programming using Ladder Diagram using the Rockwell software RSLogix 500Fundamentals of the Scan SequenceUnderstanding Bits and InstructionsBasic Instruction XIC, OTE and XIOBasic Inputs and Outputs	

Photographs:



Report:

A SDP was organized for the Mechanical Engineering student **from** 24 December 2018 to 29 December 2018. The SDP was conducted by Prof. Abhishek Kadam on the topic "PLC programming from scratch" in Mechatronics lab in Mechanical Engineering Department. Altogether 20 students were present for the workshop. The workshop consists of live problems of various domains such as Hydraulics and pneumatics. The detail analysis of the feedback is given below:

Criteria (Tick the appropriate column)	Strongly Agree	Agree	Disagree	Strongly Disagree
The content was as described in publicity materials	75%	25%		
The material was presented in an organized manner	75%	25%		
I will recommend this workshop to other conservators	60%	40%		
The program was well paced within the allotted time	41%	59%		
The instructor was a good communicator	92%	8%		
The instructor was knowledgeable on the topic	93.5%	6.5%		
I would be interested in attending a follow-up, more advanced workshop on this same subject	58.3%	41.7%		