



BMS INSTITUTE OF TECHNOLOGY AND MANAGEMENT

YELAHANKA – BANGALORE - 64

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Open Course Title: PROGRAMMABLE LOGIC CONTROLLERS (PLC)

Target Students from Branches: ECE/TCE/EEE/Mech

The total duration of the course:25 Hours.

No. of Lecture hours: 13hrs

No. of hands-on /Practical: 12

Abstract

The main objective of this open course is to make the aspiring engineers acquainted with the conceptual as well as practical knowledge of the Industrial Automation & latest technologies being used to achieve industrial automation. The idea of organizing this open course is to inculcate the basic fundamentals of automation in the students and provide them with a platform to work on, In The Near Future.

The Most Used Guiding Force Behind An Automated Industrial Plant Is A “Programmable Logic Controller” Generally Known As A PLC. PLCs Along With Certain Other Necessary Ingredients Like Sensors, Motors, Actuators, Valves, Conveyors, Boilers, SCADA Systems, Computers & Many More, Makes A Real Automated Manufacturing Plant.

Open Course Details

CO1: Discuss the history of PLC, main parts, I/O modules, memory devices, PLC programming.

CO2: Explain and apply the concept of electrical ladder logic using a timer, counter, and its relationship to programmed PLC instruction.

CO3: Design and program basic PLC circuits for entry-level PLC applications



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Schedule

Day 1:12/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30 -12:30	Recent Trends in Industrial Automation & PLC-SCADA	Prof . H D Kattimani & Prof.Rajnikanth	CO1
1:30- 4:30	PLC Programming languages		CO1
Day 2:13/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30 -12:30	Detail study on PLC Ladder diagram	Prof . H D Kattimani & Prof.Rajnikanth	CO2
1:30- 4:30	PLC program using Timers, counters. Introduction to PLC software		CO2
Day 3:14/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30 -12:30	Hands on PLC training Kit	M Pratheesh,Prolific systems &System Pvt Ltd.	CO3
1:30- 4:30	Hands on PLC training Kit		CO3
Day 4:15/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30 -12:30	Hands on PLC training Kit	M Pratheesh,Prolific systems &System Pvt Ltd.	CO3
1:30- 4:30	Hands on PLC training Kit		CO3
Day 5:16/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30 -12:30	PLC Programming using MCR	Prof . H D Kattimani & Prof.Rajnikanth	CO2
1:30- 4:30	Students Feedback and valedictory		