

Maratha Vidya Prasarak Samaj's

**Karmaveer Adv. Baburao Ganpatrao
Thakare College of Engineering,
Nashik-422013**

*Learn for work together to build a better
world through automation.....*

A Joint Venture Between



MVP-FOX Automation Training Center

MVP-Fox Automation Training Centre established by Karmaveer Adv. Baburao Ganpatrao Thakare College of Engineering (KBTCOE) in association with FOX Solutions Pvt. Ltd., in the year 2017. This offers high quality professional training programmes related to industrial automation. Offered training programmes are at various levels with a view to address the ever growing demand for qualitative technical manpower for diverse automation environments. The training activities are conducted by industrial experts from FOX Solutions at Instrumentation & Control Engineering department.

Objective

The objective of this course is to enable students to enhance their knowledge about automation in industries using various automation tools like PLC, Drives, SCADA and HMI etc.

Contents

Module-1: Basic Concepts (Industrial Automation Overview, Trend, Process Automation with examples, Automation products selection guide, Panel enclosures, Motor and Drives Basics, specifications, Configuration, application and challenges.)

Module-2: Basics of Electrical (Current, voltage, Switch gears, Relay and Contactor Logic, Starters, Drawing Reading, Power Control / Distribution, AC/DC Motors, Grounding and Earthing.)

Module-3: Basics of Drives (AC Drive Basics, Starter Software for Sinamics, G120, Drive operation with AC Motor, Sinamics V90 and its Configuration Example for positioning with S7-1200 TIA/Portal.)

Module-4: Basics of Instruments (Sensors, Transducer, Transmitters, Final Control Elements, P&ID, PID controllers, DCS / PLC Instrumentation concepts, Instrument Calibration, scaling, Testing.)

Module-5: Basics of PLC (Block diagram and its functioning, Type of signals, Memory, Logical gates, Flip Flop, Timers & Counter, PLC Drawing, PLC panel power distribution, Siemens Product Family - S71200, S7300 and S7400, Communication Protocols.)

Module-6: Introduction to SIMATIC S7-300/S7-400 (Basic Product family overview, System configuration, Simatic Manager overview, programming, Sample program, AI scaling & AO Sample Calibration, Exercises.)

Module-7: Introduction to SIMATIC S7-1200 (Basic Product family view, system configuration, TIA/Portal overview, Sample program, AI scaling & AO Calibration, Exercises.)

Module-8: HMI WINCC Flexible (Type of HMI/SCADA, Static screen Development, Tag Concept, Screen Dynamization, TIA-Portal/WinCC editor, S7-PLC communication with Linking and dynamization through wizards, Tag Logging, Alarm Logging, exercises on PLC, Drive, HMI.)

Module-9: Introduction to SINAMICS V90 (Introduction to Sinamics V90, Basic Product family view, Sample system configuration, Configuration Example for positioning with S7-1200 TIA/Portal- New Project creation, Variable Table, Cross reference & Upload and download.)

Eligibility

Students from Diploma/Degree in Instrumentation, Electrical & E&TC.

Note

20 Students per batch, 03 month full time training

Facilities

MVP-FOX ATC has state of the art highly sophisticated equipment laboratory facility. It includes Siemens PLCs (05 quantities), Drives (03 quantities), HMI Kit (01 quantity), Simulation boards (13 quantities) and required Software.

Recruiters



Contact

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Department of Instrumentation & Control Engineering
NBA Accredited