

DONBOSCO Technical Institute



offers AUTOMATION Courses for PLC/HMI

The candidates learn how to program and troubleshoot PLC and HMI system with hand tools on products during the whole course in our BECKHOFF equipped labs.

BECKHOFF specialist will be conducting the course and certification will be given to all candidates who pass the 4 courses.

BECKHOFF New Automation Technology

Duration of the course: 7 months (120 hrs)

Three days per week: Tuesday, Wednesday and Thursday

Time: From 6:00 pm till 8:00 pm

The course is divided into four levels:

- Level 1: (30 hrs) from 24/05/2016 till 23/06/2016
Cost: 350\$

Main SPONSOR:



For more information: 09-478331-2 / 70-120860

Fax :09-478330

DONBOSCO Technical Institute

Sponsored by Industrial Technologies S.A.L (ITEC)

Industrial Automation (PLC)

Syllabus course 2016

By Level

A) General Basic Function and Process Control Syllabus

Level 1: INTRODUCTION TO PLC HARDWARE AND SOFTWARE

MODULE1: INTRODUCTION

- Definition of Programmable Controllers
- A historical background of PLCs
- Principles of operation
- PLCs versus other types of Controls
- PLC Products application ranges
- Advantages of a PLC

MODULE2: FUNDAMENTALS OF PLC HARDWARE

- Block Diagram of Typical PLC
- PLC processor module – Memory organization
- Input and output section – Module types
- Power Supplies
- Special function modules

MODULE3: OVERVIEW OF PLC PROGRAMMING LANGUAGES

- Introduction to Programming languages
- Sequential Function Chart programming
- Function block Programming
- Instruction List programming
- Structured text programming
- Ladder programming

Aim of first level:

By completing this level the student will be familiar with standard automation languages (IEC 61131-3 software PLC) and will be able to write simple programming tasks/projects.

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Industrial Automation (PLC) Syllabus course 2016

All Courses are presented by Eng. Roy Samia



Roy has over 12 years experience in designing, developing and commissioning complete automation, SCADA and instrumentation systems for different high end market sectors such as oil & Gas, Water & Wastewater, Food & Beverage,...

His areas of special interest include PLCs, SCADA systems, process control and programming.

Having spent many years in programming and troubleshooting PLC and SCADA applications and has extensive experience in multiple well known brands such as BECKHOFF, SIEMENS, ABB, SCHNEIDER ELECTRIC, ALLEN BRADLEY, WONDERWARE,...

Roy is an active member of ISA (The International Society of Automation) and is currently heading the Power and Automation division at EMCO Engineering Group specialized in providing water solutions for different market sectors.