

# INDUSTRIAL ELECTRONICS

## PROGRAMMABLE LOGIC CONTROLLERS (PLC/SCADA)

Course Code	Course Name	Duration in (weeks)	From	To
PLC-101	Fundamentals of PLCs & Ladder Programming	01	26.05.2014	30.05.2014
			04.08.2014	08.08.2014
			27.10.2014	31.10.2014
			15.12.2014	19.12.2014
			19.01.2015	23.01.2015
			09.03.2015	13.03.2015
PLC-102	Industrial Applications using Allen Bradley PLCs	01	02.06.2014	06.06.2014
			18.08.2014	22.08.2014
			03.11.2014	07.11.2014
			02.02.2015	06.02.2015
			16.03.2015	20.03.2015
PLC-201	Configuration and Programming of Control Logix processors	01	14.07.2014	18.07.2014
			13.10.2014	17.10.2014
			22.12.2014	26.12.2014
PLC-301	Automation using Micro PLCs (Siemens LOGO!)	01	21.04.2014	25.04.2014
			30.06.2014	04.07.2014
			25.08.2014	29.08.2014
			05.01.2015	09.01.2015
PLC-401	SCADA (RS VIEW) Programming and Applications	01	02.03.2015	06.03.2015
			28.07.2014	01.08.2014
			10.11.2014	14.11.2014
PLC-501	S7 - 300 / 400 (SIEMENS) Programming	01	23.03.2015	27.03.2015
			05.05.2014	09.05.2014
			23.06.2014	27.06.2014
			01.09.2014	05.09.2014
			29.09.2014	03.10.2014
PLC-601	HMI / SCADA using SIEMENS WINCC	01	24.11.2014	28.11.2014
			09.02.2015	13.02.2015
			12.05.2014	16.05.2014
PLC-701	Total Integrated Automation with SIEMENS PLCs	01	08.12.2014	12.12.2014
			23.02.2015	27.02.2015
			08.09.2014	12.09.2014
			01.12.2014	05.12.2014
			16.02.2015	20.02.2015

**ELIGIBILITY :-** For courses PLC 101 to 701 : NCVT / HNTC Certificate in Electronic Mechanic or equivalent with experience in the relevant field or Degree / Diploma in ECE / EEE / EIE / Computer Engineering or equivalent.

For the courses 102, 201 & 401 : **PLC - 101 is essential.**

For the courses 601 & 701 : **PLC - 501 is essential**

## MICROCONTROLLERS / EMBEDDED SYSTEMS LAB

Course Code	Course Name	Duration in (weeks)	From	To
MC-101	8051 Microcontrollers - programming and Applications	01	21.04.2014	25.04.2014
			02.06.2014	06.06.2014
			07.07.2014	11.07.2014
			08.09.2014	12.09.2014
			10.11.2014	14.11.2014
			22.12.2014	26.12.2014
			02.02.2015	06.02.2015
			09.03.2015	13.03.2015
MC-102	PIC Microcontrollers - Programming and Applications	01	28.04.2014	02.05.2014
			09.06.2014	13.06.2014
			14.07.2014	18.07.2014
			15.09.2014	19.09.2014
			17.11.2014	21.11.2014
			29.12.2014	02.01.2015
			09.02.2015	13.02.2015
			16.03.2015	20.03.2015
MC-103	ARM Microcontrollers - Programming and Applications	01	05.05.2014	09.05.2014
			21.07.2014	25.07.2014
			22.09.2014	26.09.2014
			24.11.2014	28.11.2014
			05.01.2015	09.01.2015
MC-201	Advanced Embedded System Programming & Application Development	03	23.03.2015	27.03.2015
			21.04.2014	09.05.2014
			07.07.2014	25.07.2014
			08.09.2014	26.09.2014
			10.11.2014	28.11.2015
MC-301	VLSI Design	01	09.03.2015	27.03.2015
			19.05.2014	23.05.2014
			30.06.2014	04.07.2014
			25.08.2014	29.08.2014
			27.10.2014	31.10.2014
			08.12.2014	12.12.2014
			19.01.2015	23.01.2015
			23.02.2015	27.02.2015

**ELIGIBILITY:-** NCVT / HNTC Certificate in Electronic Mechanic / Instrument Mechanic with some experience in the relevant field or Degree / Diploma in ECE / EEE / EIE / Computer Engineering or B.Sc. (Electronics) or equivalent.

**For the course MC-103:** Those who have completed MC-101 or MC -102 or working experience in Microcontrollers are only eligible.

**Note:** Those who are completing MC-101, MC-102 and MC-103 continuously will only be eligible for the award of the certificate on ADVANCED EMBEDDED SYSTEM PROGRAMMING & APPLICATION DEVELOPMENT and the applicant have to register for each course separately.

**ELECTRICAL SECTION**

Course Code	Course Name	Duration in (weeks)	From	To
EL-101	Installation & Configuration of AC Drivers	01	16.06.2014	20.06.2014
			20.10.2014	24.10.2014
			22.12.2014	26.12.2014
			09.03.2015	13.03.2015
EL-201	Industrial Motor Control	01	14.04.2014	18.04.2014
			14.07.2014	18.07.2014
			25.08.2014	29.08.2014
			12.01.2015	16.01.2015
			23.03.2015	27.03.2015
EL-301	Electrical Maintenance & Safety	01	05.05.2014	09.05.2014
			18.08.2014	22.08.2014
			17.11.2014	21.11.2014
			09.02.2015	13.02.2015
EL-401	AC/DC Motor Control	02	26.05.2014	06.06.2014
			01.12.2014	12.12.2014
EL-501	Electrical House Wiring	01	30.06.2014	04.07.2014
			15.09.2014	19.09.2014
			23.02.2015	27.02.2015
SS-101	Supervisory Development Programme	01	13.10.2014	17.10.2014
			19.01.2015	23.01.2015
SS-102	HRD for workers	01	03.11.2014	07.11.2014
			02.02.2015	06.02.2015

**ELIGIBILITY :-** Degree / Diploma/ NCVT / HNTC Certificate in the relevant field or Industry sponsored candidates.

**For SS-101:-** Degree / Diploma / ITI/NCVT in any discipline/10th / 10+2 with industrial experience / Industry or Office sponsored candidates.

**For SS-102:-** All Categories of industrial work force / Multi Skill staff / all clerical staff / industry or office sponsored candidates.

## GENERAL ELECTRONICS LAB

Course Code	Course Name	Duration in (weeks)	From	To
GE-101	Applications of Linear ICs	01	09.06.2014	13.06.2014
GE-102	Applications of Digital Electronics	01	09.02.2015	13.02.2015
GE-103	Microprocessor 8085 Applications	01	23.03.2015	27.03.2015

**ELIGIBILITY :-** Degree / Diploma/ NCVT / HNTC Certificate in the relevant field or Industry sponsored candidates.

## INFORMATION TECHNOLOGY

Course Code	Course Name	Duration in (weeks)	From	To
IT-101	Windows Networking and Security	01	05.05.2014	09.05.2014
			16.06.2014	20.06.2014
			04.08.2014	08.08.2014
			13.10.2014	17.10.2014
			05.01.2015	09.01.2015
IT-201	Wireless Networking and Security	01	12.05.2014	16.05.2014
			23.06.2014	27.06.2014
			18.08.2014	22.08.2014
			10.11.2014	14.11.2014
			23.02.2015	27.02.2015

**ELIGIBILITY :-** NCVT / HNTC Certificate in Electronic Mechanic / Data Preparation and Computer Software (DPCS) / Computer Operator & Programming Assistant (COPA) / IT & ESM / electrician or Degree / Diploma in any discipline. Basic Knowledge of Computers is essential.

### PROCESS PLANT LAB

Course Code	Course Name	Duration in (weeks)	From	To
PPL-101	DCS Programming for Process Control (HC 900 Controller Honeywell)	01	28.04.2014	02.05.2014
			07.07.2014	11.07.2014
			01.09.2014	05.09.2014
			24.11.2014	28.11.2014
			02.02.2015	06.02.2015
PPL-102	SCADA Programming for DCS (Honeywell Experion)	01	09.03.2015	13.03.2015
			05.05.2014	09.05.2014
			14.07.2014	18.07.2014
			08.09.2014	12.09.2014
			01.12.2014	05.12.2014
PPL-201	PLC Application in process industry	01	09.02.2015	13.02.2015
			16.03.2015	20.03.2015
PPL-301	Industrial Control using LabVIEW	01	13.10.2014	17.10.2014
			23.03.2015	27.03.2015
			16.06.2014	20.06.2014
PPL-401	Industrial Pneumatic control	01	18.08.2014	22.08.2014
			05.01.2015	09.01.2015
			23.06.2014	27.06.2014
			03.11.2014	07.11.2014

### THERMAL LAB

Course Code	Course Name	Duration in (weeks)	From	To
TH-101	Industrial Process Sensors and Applications	01	30.06.2014	04.07.2014
			13.10.2014	17.10.2014
			29.12.2014	02.01.2015
TH-102	Industrial Temperature measurement and Control	01	19.05.2014	23.05.2014
			18.08.2014	22.08.2014
			10.11.2014	14.11.2014

**ELIGIBILITY :-** NCVT / HNTC Certificate in Electronic Mechanic / Instrument Mechanic with some experience in the relevant field or Degree / Diploma in ECE / EEE / EIE / Chemical / Mechanical Engineering / B.Sc. (Electronics) or equivalent. Preference will be given to the candidates having experience in the relevant field.

**Note:** For the course PPL -102 , PPL-101 is essential.



### III. MEDICAL ELECTRONICS

Course Code	Course Name	Duration in (weeks)	From	To
ME-101	Operation & Maintenance of X-Ray & Darkroom Systems	01	01.09.2014 10.11.2014	05.09.2014 14.11.2014
ME-201	Operation & Maintenance of Diagnostic Ultra Sound Scanners	01	08.09.2014 06.10.2014	12.09.2014 10.10.2014
ME-301	Operation & Maintenance of Imaging Systems	02	14.07.2014	25.07.2014
ME-401	Operation & Maintenance of ICU Equipments	01	15.09.2014 20.10.2014	19.09.2014 24.10.2014
ME-501	Operation & Maintenance of Ventilators	01	25.08.2014 22.09.2014 27.10.2014	29.08.2014 26.09.2014 31.10.2014
ME-601	Operation & Maintenance of ECG Recorder	01	28.07.2014	01.08.2014
ME-701	Operation & Maintenance of Physiotherapy Equipments	01	03.11.2014	07.11.2014
ME-801	Operation & Maintenance of Clinical Lab Equipment	01	07.07.2014 13.10.2014	11.07.2014 17.10.2014

**ELIGIBILITY :-** Engineering Degree / Diploma in ECE Medical Electronics / Bio-Medical Engineering / B.Sc. in MPC, MPE / Intermediate vocational course.



### IV. CONSUMER ELECTRONICS

Course Code	Course Name	Duration in (weeks)	From	To
CE-101	Maintenance and Repair of Cell Phones	02	21.04.2014 23.06.2014 18.08.2014 10.11.2014 09.03.2015	02.05.2014 04.07.2014 29.08.2014 21.11.2014 20.03.2015
CE-201	PCB Design	01	07.04.2014 12.05.2014 08.09.2014 08.12.2014 02.02.2015	11.04.2014 16.05.2014 12.09.2014 12.12.2014 06.02.2015
CE-301	OPTICAL FIBER COMMUNICATIONS	01	16.06.2014 04.08.2014 01.09.2014 13.10.2014 01.12.2014 16.02.2015	20.06.2014 08.08.2014 05.09.2014 17.10.2014 05.12.2014 20.02.2015

**ELIGIBILITY :-** NCVT / HNTC Certificate in Electronic Mechanic / Radio & TV Mechanic / Electrician / Instrument Mechanic / IT & ESM with some experience in the relevant field or Degree / Diploma in ECE / EEE / EIE / B.Sc. (MPC / Electronics) or equivalent / Inter vocational course.

**Note:**

For all short term courses the qualification can be relaxed for sponsored candidates with experience in the relevant field.