

APCS[®]
automation

www.apcsautomation.com

**INDUSTRIAL AUTOMATION
TRAINING PROVIDER**



World-Class Training Company

Aytech Power and Control Systems Limited

Company Profile

APCS Automation is a leading Automation training provider in Ghana and Africa offering World-Class Industrial Automation, Control Systems, Instrumentation, Building Management System (BMS) and Generator Plant Training.

APCS Automation is specialized in providing various hands-on practical skills training in PLC, PAC, DCS, SCADA, HMI, VFD, Industrial Controls, Instrumentation, Electrical Controls and Panel Design etc. for Engineers and Technicians as well as Professionals working in Industries such as Manufacturing, Mining, Oil and Gas, Pharmaceutical, Food and Beverage, Processing, Petrochemical, Power Generation, Transmission & Distribution, Refineries, Processing, Packaging, Telecommunication and Complex Facilities.

APCS Automation training programs provide the best practices in the latest technologies trends to the challenges in the immensely competitive area of PLC, DCS, PAC, SCADA, HMI, VFD, PAC, Instrumentation, Electrical Controls and Panel Design. Our training programs is highly practical-oriented aim at supporting and encouraging fresh engineers to foray into Automation Industry and fine each engineer's skills.

The methodology of our training is fully hands-on-practical. This offers the field engineers and technicians the skills, competence and the confidence to handle any PLC and Automation related Installation, Maintenance and Troubleshooting.

TRAINING OBJECTIVES

- 1 *To upskill the Professionals already working in the field of Automation, Controls and Instrumentation to be more productive and efficient in their area of operations.*
- 2 *To provide the hands-on practical skills training to fresh engineers and technicians to enable them acquire the needed skills for the job market.*
- 3 *To bridge the skills gap between academia (Universities, Polytechnics, Technical institutions) and industry*

Training Facility

We have state-of-the-art training facilities in Accra, Kumasi and Takoradi, equipped with top branded PLCs such as Allen Bradley, Siemens, ABB, Delta, Schneider, GE-Fanuc, Omron, Mitsubishi and Keyence, various field instruments, Controllers and Industrially Compliant programming Software.

Trainers

We have Industry Experienced Top-Notch Trainers with up to 10 years of experience in the field of Automation, Controls, Instrumentation, Electrical Engineering and Generator Plant.

On - Site Training

We also offer on-site training to companies and institutions that prefer to have their engineers and technicians trained at their own facilities/premises. Eg. We have provided onsite training for VRA Academy, Sewerage System Ghana Limited, Golden Star Resource Bogoso/ Prestea and Akyeampim Mines, Bunge Loders Croklaan etc...



Industrial Automation Training Programs

These short courses are designed to upskill Engineers / Technicians for productivity and efficiency in Automation and Process Control industry. These courses are very relevant to the industry today.

ITEM	COURSES	DURATION
PROGRAMMABLE LOGIC CONTROLLERS (PLCs)		
1.	Allen Bradley MicroLogix (RSLogix 500)	10 DAYS
2.	Siemens Simatic S7-300 / S7-400	10 DAYS
3.	Schneider M340	10 DAYS
4.	Delta	10 DAYS
5.	ABB	10 DAYS
6.	GE-Fanuc	10 DAYS
7.	Omron	10 DAYS
8.	Keyence	10 DAYS
9.	Mitsubishi	10 DAYS
PROGRAMMABLE AUTOMATION CONTROLLERS (PACs)		
10.	Allen Bradley ControlLogix / CompactLogix (RSLogix 5000)	10 DAYS
11.	Siemens Simatic S7-1200 / S7-1500 TIA Portal	10 DAYS
12.	Schneider M580	10 DAYS
DISTRIBUTED CONTROL SYSTEMS (DCS)		
13.	Siemens Simatic PCS 7	10 DAYS
14.	Emerson DeltaV	10 DAYS
SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)		
15.	Wonderware	10 DAYS
16.	WinCC	10 DAYS
17.	RSView	10 DAYS
18.	Citect	10 DAYS
19.	iFix	10 DAYS
20.	AB Factory Talk SE / ME	10 DAYS
HUMAN MACHINE INTERFACE (HMI)		
21.	AB Panel View	5 DAYS
22.	Siemens Touch	5 DAYS
23.	Schneider Magelis	5 DAYS
24.	Delta	5 DAYS
VARIABLE FREQUENCY DRIVE (VFD)		
25.	Siemens Micromaster / Sinamics	5 DAYS
26.	AB Powerflex	5 DAYS
27.	Yaskawa	5 DAYS
28.	Delta	5 DAYS
29.	ABB	5 DAYS
30.	Danfoss	5 DAYS
31.	Servo Drive	5 DAYS

ITEM	COURSES	DURATION
32.	INSTRUMENTATION & PROCESS CONTROL	10 DAYS
33.	INDUSTRIAL CONTROLS	10 DAYS
34.	ELECTRICAL CONTROL AND PANEL DESIGN	10 DAYS
35.	INDUSTRIAL NETWORKING/ COMMUNICATION	5 DAYS
36.	ELECTRICAL CIRCUIT READING TECHNIQUES	5 DAYS
37.	GENERATOR WIRING & CONTROLS	10 DAYS
38.	INDUSTRIAL HYDRAULIC SYSTEMS	10 DAYS
39.	INDUSTRIAL PNEUMATIC SYSTEMS	10 DAYS
40.	PROFIBUS & PROFINET TRAINING	3 DAYS
41.	TECHNICAL REPORT WRITING	3 DAYS
42.	HEALTH, SAFETY & ENVIRONMENT (HSE)	3 DAYS



Diploma & Certificate Training Programs

These Professional Certificate of Competency Training Programs are designed for fresh Graduate Engineers & Technicians to enable them acquire hands-on practical skills in Automation, Control and Instrumentation and other related fields.

PGDIA

POST GRADUATE DIPLOMA IN INDUSTRIAL AUTOMATION

- 6 - PLC
- 2 - PAC
- 4 - SCADA
- 4 - HMI
- 4 - VFD
- Instrumentations
- Industrial Controls & MCC
- Industrial Networking
- Electrical Control & Panel Design

DURATION: 6 MONTHS

ADIA

ADVANCE DIPLOMA IN INDUSTRIAL AUTOMATION

- 5 - PLC
- 1 - PAC
- 3 - SCADA
- 3 - HMI
- 3 - VFD
- Industrial Controls & MCC
- Industrial Networking
- Electrical Control & Panel Design

DURATION: 5 MONTHS

DIA

DIPLOMA IN INDUSTRIAL AUTOMATION

- 4 - PLC
- 2 - SCADA
- 2 - HMI
- 4 - VFD
- Industrial Controls & MCC
- Electrical Control & Panel Design

DURATION: 4 MONTHS

CASE

CERTIFIED AUTOMATION SYSTEM ENGINEER

- 3 - PLC
- 1 - SCADA
- 1 - HMI
- 1 - VFD
- Industrial Controls & MCC
- Electrical Control & Panel Design

DURATION: 3 MONTHS

CCIE

CERTIFIED CONTROL & INSTRUMENTATION ENGINEER

- 2 - PLC
- Level Measurement
- Flow Measurement
- Pressure Measurement
- Temperature Measurement
- Process Control
- Instruments Calibration
- HART Communicator Usage
- Industrial Controls & MCC

DURATION: 2 MONTHS

CECPD

CERTIFIED ELECTRICAL CONTROL PANEL DESIGNER

- 1 - HMI
- 1 - VFD
- Industrial Controls & MCC
- Electrical Control & Panel Design
- Electrical Circuit Reading Techniques

DURATION: 2 MONTHS

SAE

SIEMENS AUTOMATION ENGINEER

- Siemens S7 - 300 / 400 PLC
- Siemens S7 - 1200 / 1500 PLC
- WinCC SCADA / HMI
- Industrial Networking
- Remote I/O Configuration
- Siemens DCS - PCS 7
- Industrial Controls
- Variable Frequency Drive

DURATION: 2 MONTHS

ABAE

ALLEN BRADLEY AUTOMATION ENGINEER

- Micrologix 1000, 1100, 1200
- ControlLogix/ CompactLogix
- RSView 32 Factory Talk
- HMI (Panel View)
- Remote I/O Configuration
- Industrial Networking
- Industrial Controls
- VFD (PowerFlex)

DURATION: 2 MONTHS

BMSE

BUILDING MANAGEMENT SYSTEMS ENGINEER

- IP/ Digital CCTV Design & Installation
- Access Control System
- Fire Alarm System
- Intruder Alarm System
- HVAC System
- BMS Configuration
- PLC, SCADA, HMI, VFD
- Electrical Control & Panel Design

DURATION: 5 MONTHS

CCSST

CERTIFIED CCTV & SECURITY SYSTEM TECHNICIAN

- IP/ Digital CCTV Design & Installation
- CCTV Control Room Operator
- Access Control System
- Fire Alarm System
- Intruder Alarm System
- Networking

DURATION: 1 MONTHS

CHT

CERTIFIED HVAC TECHNICIAN

- Introduction to MEP
- How HVAC project Executes
- Physics used in HVAC
- Psychometric
- Air Conditioning System
- BMS Software Configuration

DURATION: 1 MONTHS

CGT

CERTIFIED GENERATOR TECHNICIAN

- Engine wiring
- Control wiring
- AC Alternator
- Troubleshooting & Maintenance
- General Servicing
- Automatic Transfer Switch (ATS) design, wiring & installation

DURATION: 1 MONTHS

Building Management System (BMS) & CCTV Training

Building Management System Training is designed for Engineers and Technician who wants to build their career and have broad knowledge and hands-on skills in Building Automation, Surveillance, Security, Safety, HVAC system, Energy Management, General Electricals and Automations of the Machines and Processes in the Industries.

This training enable the participant to manage the power and resources of the building thereby reducing the over consumption and wastage of energy, and also the security and safety of the building.

BMS field has a shortage of skilled technicians and engineers, so the demands for such technical personnel are always high in Ghana and Abroad.

ITEM	COURSES	DURATION
1.	CCTV DESIGN AND INSTALLATION (Digital Cameras)	10 DAYS
2.	CCTV DESIGN AND INSTALLATION (IP Cameras)	10 DAYS
3.	CCTV CONTROL ROOM OPERATOR	10 DAYS
4.	FIRE ALARM SYSTEM (Conventional and Addressable)	5 DAYS
5.	ACCESS CONTROL SYSTEM	5 DAYS
6.	INTRUDER ALARM SYSTEM	5 DAYS
7.	HVAC SYSTEM	15 DAYS
8.	VIDEO DOOR INTERCOMM	3 DAYS
9.	LIFT AND ELEVATOR CONTROL	10 DAYS
10.	NETWORKING	5 DAYS
11.	AUTOMATIC GATE AND BARRIER	5 DAYS
12.	CAD DRAWING	10 DAYS
13.	LIGHTING CONTROLS	5 DAYS
14.	PABX INSTALLATION AND PROGRAMMING	3 DAYS
15.	GENERATOR, SOLAR PANEL, INVENTER AND UPS	10 DAYS
16.	PLC, AUTOMATION, SCADA, HMI, VFD	30 DAYS
17.	ELECTRICAL CONTROL PANEL	5 DAYS
18.	ELECTRICAL WIRING / INSTALLATION	10 DAYS
19.	MAINTENANCE & TROUBLESHOOTING OF ELECTRICAL WIRING AND CONTROL PANEL	5 DAYS



HVAC

INTRUDER ALARMS



FIRE ALARMS



CCTV



ACCESS CONTROL

Generator Training

This training is designed to for Engineers/ Technicians who want to have knowledge and hands-on skills in Electromechanical equipment (Generator Plant) to have experience in troubleshooting and repairing of Diesel Generators. In addition to that we provide training on Automatic Transfer Switch (ATS) Building, Installation and Troubleshooting.

ITEM	COURSES	DURATION
1.	Engine (Prime Mover Part)	5 DAYS
2.	AC Alternator (Power Generation Part)	5 DAYS
3.	Genset Controller (Controlling, Monitoring and Protection Part)	5 DAYS
4.	Servicing and Maintenance Procedure	5 DAYS
5.	Automatic Tranfer Switch (ATS)	10 DAYS
6.	Synchronizing and Paralleling of Generator Sets	10 DAYS
7.	Engine Rebuild / Overhauling	10 DAYS
8.	Installation Assessment / Generator Sizing	3 DAYS
9.	Generator Installation	3 DAYS
10.	Generator Troubleshooting / Maintenance	3 DAYS
11.	General Electricals and Controls	10 DAYS

Remarks: Training Fees are provided on request



Engineers & Technicians

— we have Trained

Since our inception in Ghana, APCS Automation has trained Professional Engineers and Technicians as well as graduate engineers from countries like Congo, Gabon, Equatorial Guinea, Angola, Guinea, Chad, Conakry, and Ethiopia. We have also trained engineers /Technicians from reputable organizations in Ghana which includes;

- Volta River Authority (VRA) (Aboadzi, Akosombo, Tema, Akuse)
- Golden Star Resource Ltd. (Bogoso/Prestea & Akyeampim Mines)
- Barry Callebaut Company Ltd.
- Fan Milk Ghana Ltd.
- Electricity Company of Ghana
- Bunge Loders Crocklaan Industries Ltd.
- Ayrton Drug Ltd.
- Nantou Mines S.A Ltd - Burkina Faso
- Electricity Generation & Transmission Company (EGTC) - Sierra Leone
- Sewerage Systems Ghana Ltd.
- Accra Composite & Recycling Plant
- Usibra Ghana Ltd.
- MTN Ghana Ltd.
- Chocomac Ghana Ltd.
- Blue Skies Industries
- Ghana Airport Company Ltd

AN OUNCE OF EVIDENCE IS BETTER THAN A TON OF EXPLANATION. WE INVITE OUR PROSPECTIVE CLIENTS TO TOUCH BASE WITH JUST ANY OF OUR CHERISHED CLIENTS ABOVE AND FIND WHAT APCS AUTOMATION STANDS FOR AND HOW IT IS CAPABLE OF ADDING VALUE TO THE CLIENT'S OPERATIONS.

Why train with APCS AUTOMATION?

- We use Real PLC, Real Software, Real Training Rig
- Our Training is based on Real Time projects
- We provide 100% Hands-on Practical Skills Training
- We have flexible Training schedule
- We provide one - on - one Training
- Our Training is Job Oriented
- Huge Job opportunities in the core industries
- Hostel facilities for foreign students

Who will BENEFIT?

- Electrical & Electronic Engineers/ Technicians
- Mechanical Engineers/ Technicians
- Instrumentation Engineers/ Technicians
- Computer Engineers
- Automation & Process Engineers/Technicians
- Maintenance Engineers and Supervisors
- Production Managers
- Chemical Engineers
- Industrial Electricians
- And those who wish to build their career in Industrial Automation, Controls, Instrumentation and other related fields

CERTIFICATION

After completion of the training program the participant is awarded "Professional Certificate of Competency"



APCS Automation is Accredited by (COTVET), (NVTI) and approved by (GES)



Accra:

Ashongman Estate
Near Atakora Estate (Gate 2)
Tel: +233 30 220 1191

Takoradi

Bankyease
I. Adu Road
Tel: +233 31 200 5308