

— SYLLABUS · REVIEWED 23 OCTOBER 2026

AEP

Automation Engineer Program

PLC, SCADA, HMI, drives and AI for automation across **20 PLC brands**, taught phase by phase in our Bangalore lab, then **project work on real Wartens automation projects**, backed by a **written job guarantee**, conditions apply.



20

PLC brands

67

classroom sessions

7

phases, each with a gate

4

sessions on AI for automation

— UK REGISTERED LEARNING PROVIDER

Wartens Ltd, UK · UKPRN 10096641

UKRLP UK Register
of Learning
Providers
UKPRN : 10096641

ISO 9001:2015
certified

— AWARD-WINNING

7 awards, 2025-2026

UKStartUp
Awards
2025 National
Winner

UKStartUp
Awards
2025 Midlands
Winner

THE JALISCO
GREAT BRITISH
2025 FINALIST

LEMON
2025 WINNER

BUSINESS
AWARDS UK
2025 FINALIST

2025 WINNER

Karnataka Excellence Award
Winner 2026

Job guarantee or programme fee refunded, conditions apply: the conditions are in the course overview brochure and at edwartens.co.in/placement-policy.

🌐 **GLOBAL PRESENCE** India · United Kingdom · Germany · UAE · United States

Seven phases, each closed by a gate

67 classroom sessions in phases 0 to 5, then the placement and project phase. You move up only when you pass the gate, so the programme runs three to twelve months.

PHASE 0	Foundation 7 sessions Ends with: Evaluation gate 0
PHASE 1	Basic Engineering 4 sessions Ends with: Evaluation gate 1: a practical panel drawing and starter circuit wiring
PHASE 2	Siemens in depth 19 sessions Ends with: The Siemens exam (theory and practical)
PHASE 3	Allen-Bradley in depth 14 sessions Ends with: The Allen-Bradley exam (theory and practical)
PHASE 4	Multi-platform breadth and AI 15 sessions Ends with: Evaluation gate 4
PHASE 5	Interview and resume preparation 8 sessions Ends with: Evaluation gate 5 and the AEP final exam (theory, practical and a capstone)
PHASE 6	Placement and Wartens project experience Month 3 to 12

Job guarantee or programme fee refunded, conditions apply. Meet every condition and, if you are not placed within the nine months after you complete the programme, the programme fee you paid is refunded. Full terms: edwartens.co.in/placement-policy.

Foundation

Engineering physics, electrical fundamentals, single and three phase power, load and cable sizing basics, measuring instruments and electrical safety, automation fundamentals, PLC core concepts (scan time, inputs and outputs)

D1	Engineering physics
D2	Electrical fundamentals
D3	Power systems
D4	Power calculation and load analysis
D5	Measuring instruments
D6	Automation fundamentals PLC, HMI and SCADA; communication protocols; PLC vs SCADA
D7	PLC core concepts

Ends with: Evaluation gate 0

Basic Engineering

Engineering drawing and symbols, control panel layout, star-delta and DOL starter logic and wiring, VFD basics and parameter setting, Industry 4.0 concepts

D8	Engineering drawing and design
D9	Panel design
D10	Control logic and wiring
D11	Drives and Industry 4.0

Ends with: Evaluation gate 1: a practical panel drawing and starter circuit wiring

Siemens in depth

TIA Portal projects; bit logic, edges, timers, counters, comparators, maths, move and conversion; program control; analog inputs and PID introduction; Siemens HMI; WinCC SCADA; SINAMICS VFD integration; SIMATIC Manager (S7-300) with PLCSIM

D12	Siemens TIA Portal introduction
D13	Bit logic I
D14	Bit logic II
D15	Signal edges
D16	Timers
D17	Counters
D18	Comparators
D19	Math operations
D20	Move operations I
D21	Move operations II
D22	Conversion operations
D23	Program control and shift
D24	Analog and PID introduction
D25	Siemens HMI I HMI device and IP configuration, communication, screens and navigation
D26	Siemens HMI II Pop-up and global screens, alarm view, trends, user administration
D27	Siemens SCADA (WinCC) I SCADA configuration, communication, objects, screens and navigation
D28	Siemens SCADA (WinCC) II Alarms, trends, user administration, data acquisition, reporting
D29	SINAMICS VFD Parameters, commissioning and PLC to VFD integration
D30	SIMATIC Manager (S7-300) and PLCSIM

Ends with: The Siemens exam (theory and practical)

Allen-Bradley in depth

Studio 5000: bit logic, timers, counters, comparators, maths, move and file, program control, PID, messaging and scaling; FactoryTalk View alarms, trends, data logs, security and reports; system integration; RSLogix 500 with MicroLogix; Connected Components Workbench and LogixPro

D31	Studio 5000 introduction
D32	Timers and counters
D33	Comparators and math
D34	Move and file
D35	Program control
D36	Conversion and advanced
D37	Advanced instructions
D38	FactoryTalk View I Communication setup, tag configuration, graphics
D39	FactoryTalk View II Alarm management, real-time and historical trends, data logs
D40	FactoryTalk View III Security and permissions, reports, event logging, expressions
D41	Allen-Bradley system integration Architecture, networking and databases; a full SCADA project
D42	RSLogix 500
D43	RSLogix 500 and MicroLogix
D44	Connected Components Workbench and LogixPro

Ends with: The Allen-Bradley exam (theory and practical)

Multi-platform breadth and AI

Schneider, Mitsubishi, Omron, Delta, ABB (CODESYS), WECON and OpenPLC; Function Block Diagram and Structured Text; InTouch, iFix and Movicon SCADA and HMI; drives, DCS and robotics in one session; pneumatics and IIoT; four sessions on AI for automation engineers

D45	Schneider: Machine Expert Basic, Zelio and Twido
D46	Mitsubishi GX Developer and Omron CX-Programmer
D47	Delta WPLSoft and Honeywell SoftMaster
D48	ABB CODESYS
D49	WECON, OpenPLC Editor and AutomationDirect
D50	Function Block Diagram basics
D51	Structured Text basics
D52	SCADA and HMI: InTouch, iFix, Movicon, INVT InTouch with OPC and Modbus, animations, alarms, trending and scripting; GE iFix; Movicon
D53	Drives, DCS and robotics
D54	Pneumatics and IIoT OPC UA, MQTT, edge devices and digital twins
D55	AI for automation engineers
D56	AI-assisted code generation
D57	AI for conversion, debugging and documents
D58	AI, vision and predictive maintenance, with a capstone
D59	Consolidation and doubt clearance

Ends with: Evaluation gate 4

Interview and resume preparation

Automation CV and project portfolio, LinkedIn and job portals, technical and troubleshooting interview practice, aptitude, HR and communication, two recorded mock interviews with written feedback

D60	Resume and portfolio
D61	LinkedIn and job portals
D62	Technical interview preparation I
D63	Technical interview preparation II
D64	Aptitude and company preparation
D65	HR and communication
D66	Mock interview I
D67	Mock interview II

Ends with: Evaluation gate 5 and the AEP final exam (theory, practical and a capstone)

Placement and Wartens project experience

Interview drives and applications, project work as a junior engineer on Wartens automation projects, weekly mentor reviews, and the experience certificate at the end



Ready to start AEP?

Book a free counselling session: we check the programme fits you and answer every question.

Call

+91 96068 68686

Online

edwartens.co.in/courses/aep

WhatsApp

+91 81979 78653

Centre

NVR Complex, GS Palya Road, Electronic City, Bangalore
560100, Karnataka

Industry photographs are free-licence stock (Simon Kadula (Unsplash), RDNE Stock project (Pexels)) and illustrate the work, not EDWartens premises. Photographs tagged "At our centre" are stills from EDWartens' own published class videos at Electronic City. Vendor and tool names and logos are trademarks of their owners and are used only to describe what the course teaches; EDWartens is not affiliated with or endorsed by them. EDWartens India is the training brand of Wartens Automation Private Limited. This syllabus follows the curriculum the portal runs on 23 October 2026; topics may be updated as software and standards change.