CINPAA | INTERNATIONAL COOPERATIVE FOR TRAINING & CONSULTING

سينبا | التعاونية الدولية للتدريب والاستشارات



Training programme:

Smart Home Installation (Electrical)

Delivered in several cities and dates

Smart Home Installation (Electrical)

About the programme:

Overview This Conference is for candidates working in the engineering sector who wish to update their skills to specify, design, install and maintain automation systems in domestic or commercial buildings. The course will benefit companies and individuals that wish to align their businesses with these realities and prepare for the growing demand in this area. Entry Requirements Qualified electrical contractors/specifiers or engineers from various construction related disciplines. Candidates who are currently undergoing/completed training in these areas will also be considered. A good level of

Objectives:

Developing participants' skills, knowledge, values and professional approaches in:

a. Specify the functional requirements of a home automation installation.

b. Develop a coordinated wiring and control layout for a domestic automation project.

c. Configure automation hardware and check communication between devices.

d. Design schedules for heating, cooling and lighting controls.

e. Evaluate access controls and energy monitoring in an integrated installation.

Target audience:

a. Electrical contractors working on building installations.

b. Electrical and building services engineers specifying automation systems.

c. Installation technicians with relevant electrical training.

Daily programme:

• Day 1: Home automation fundamentals and project planning

a. Introduction to home automation and the components of a domotics system

b. Specifying the functional requirements of a home automation installation

c. Planning a home automation project: survey, scope and client needs

d. Wired and wireless communication options and their installation implications

e. Workshop: writing a functional specification for a domestic automation project

f. Day output: agreed functional specification for the client project

• Day 2: System hardware and installation design

a. System hardware: controllers, actuators, sensors and power supplies

b. Designing an installation with a coordinated wiring and control layout

c. Wiring up the system and segregating power and data circuits safely

d. Safe isolation, testing and compliance with the applicable national wiring rules

e. Workshop: drawing a coordinated wiring and control layout for a dwelling

f. Day output: wiring and control layout drawing

• Day 3: System integration and programming

a. System integration and uploading the programme to the controller

b. Configuring automation hardware and addressing devices

c. Checking communication between devices and diagnosing faults

d. Documenting the configuration for handover and future maintenance

e. Workshop: configuring a training rig and verifying device communication

f. Day output: commissioning checklist with device address list

• Day 4: Scheduling, heating, cooling and lighting control

a. Advanced programming and scheduling of automation functions

b. Heating and cooling control strategies and schedules

c. Light sensor control, lighting scenes and occupancy-based lighting

d. Balancing comfort with energy savings in control settings

e. Workshop: programming heating, cooling and lighting schedules for a typical household

f. Day output: control schedule set for heating, cooling and lighting

• Day 5: Security, access control and energy monitoring

a. Intruder alarm, door entry and access control integrated with automation

b. Graphic displays and user interfaces for occupants

c. Energy monitoring and consumption reporting to occupants

d. Cybersecurity basics for connected home devices and networks

e. Case study: evaluating access control and energy monitoring in a completed installation

f. Day output: installation evaluation and client handover pack

Training methods and certificates:

Our programmes are built on modern pedagogy that combines theoretical knowledge with practical application, in line with participants' needs and the demands of the workplace. Methods include:

- **Interactive workshops:** analysis of real data and group discussions that strengthen practical understanding.
- **Case studies:** examples from international organisations that highlight real successes and challenges.
- **Realistic simulations:** participants train through professional scenarios that mirror real situations requiring decisions and situation management.
- **Advanced tools and technologies:** hands-on practice with up-to-date training software and tools suited to each field.

Certificates:

On successful completion, participants receive a certificate issued by CINPAA, a training institute officially registered in the European Union, Spain and the United Kingdom.

CINPAA - Cooperative International for Training and Consulting

Our programmes are delivered within academic and professional partnerships, cooperation agreements and memoranda of understanding with a number of academic and professional institutions, including:

- **Camilo José Cela University - Spain**
- **ISDE - Law & Business School - International**
- **Professional Development Institute - United Kingdom**

These partnerships aim to exchange expertise, develop training content and raise programme quality in line with international best practice.

Kind regards,

International Programmes Department

"CINPAA" INTERNATIONAL COOPERATIVE FOR TRAINING & CONSULTING

Course details and registration

Course Details | Registration

Programme	**Smart Home Installation (Electrical)**	Course Title
Language	**English**	Course Language
Venue	**Several cities and dates – see the table below**	Venue
Financial offer	**Sent separately, according to the number of participants and the delivery conditions.**	Financial Offer

Registration and confirmation:

To register, please use one of the following:

a. Complete the programme request form on our website.

b. Or send an email from your training department.

c. Or a nomination letter from your organisation.

Send your confirmation by:

Email	info@cinpaa.org
WhatsApp	+34 635 867 686

Our team is ready to advise on accommodation and logistics before and during your stay.

Planned programme dates:

City	Dates
London, United Kingdom	30 Nov - 04 Dec 2026
London, United Kingdom	04 - 08 Jan 2027
Cairo, Egypt	05 - 09 Apr 2027
Madrid, Spain	05 - 09 Jul 2027
Barcelona, Spain	04 - 08 Oct 2027

The programme can be delivered in other cities and on other dates to suit your organisation, at the length you need. The cities are listed on the last page.

سينبا التعاونية الدولية للتدريب والاستشارات | CINPAA – International Cooperative for Training & Consulting

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Scan to save our contact

Cities where we deliver our programmes:

This programme can be delivered in any of the following cities, and elsewhere on request.

Albania Tirana, Saranda	**Australia** Sydney	**Austria** Vienna, Hallstatt, Salzburg / Zell am See	**Azerbaijan** Baku
Bahrain Manama	**Belgium** Brussels, Bruges	**Bosnia and Herzegovina** Sarajevo	**Canada** Toronto, Montreal
China Hong Kong, Shanghai, Beijing, Guangzhou	**Croatia** Dubrovnik	**Cyprus** Nicosia, Limassol, Larnaca	**Czech Republic** Prague
Egypt Cairo, Sharm El Sheikh, Alexandria, Hurghada	**France** Paris	**Georgia** Tbilisi, Batumi	**Germany** Munich, Berlin, Düsseldorf, Frankfurt
Greece Athens, Rhodes	**Hungary** Budapest	**Indonesia** Bali, Jakarta	**Ireland** Dublin
Italy Rome, Florence, Milan, Venice, Como	**Japan** Tokyo	**Jordan** Amman, Aqaba	**Kuwait** Kuwait City
Malaysia Kuala Lumpur	**Maldives** Maldives	**Mauritius** Mauritius	**Montenegro** Budva, Kotor
Morocco Casablanca, Marrakech, Tangier, Rabat	**Netherlands** Amsterdam	**Oman** Muscat, Salalah	**Philippines** Manila
Poland Krakow, Warsaw	**Portugal** Lisbon, Porto	**Qatar** Doha	**Russia** Moscow
Saudi Arabia Riyadh, Jeddah, Dammam	**Serbia** Belgrade	**Slovenia** Ljubljana	**South Korea** Seoul
Spain Madrid, Barcelona, Valencia, Alicante, Benidorm, Malaga / Marbella, San Sebastian, Granada, Cordoba, Canary Islands, Seville, Bilbao	**Switzerland** Geneva, Luzern, Zurich, Interlaken, Zermatt, Lugano	**Thailand** Bangkok, Phuket	**Tunisia** Tunis
Turkey Istanbul, Antalya, Trabzon, Bursa, Izmir, Bodrum, Antakya (Hatay)	**United Arab Emirates** Dubai, Abu Dhabi	**United Kingdom** London, Edinburgh, Manchester, Birmingham	**United States** Miami, New York, Los Angeles, Washington