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: Introduction to home automation

a. Principles of home automation and its main application areas

b. Types of automation systems: wired, wireless and hybrid installations

c. Functional requirements of a home automation installation

d. Planning a home automation project from client brief to handover

e. Case study: specifying the functions required for a family home automation project

f. Day output: functional requirements specification

• Day 2: System hardware and set-up

a. System hardware: controllers, actuators, sensors and interfaces

b. Setting up the system and addressing connected devices

c. Communication media used between automation devices and their limitations

d. Power supplies, enclosures and the location of system components in a dwelling

e. Workshop: identifying and addressing devices on a training hardware rig

f. Day output: hardware schedule with device addresses

• Day 3: Installation design and wiring

a. Designing an installation with coordinated wiring and control layout

b. Electrical safety and compliance considerations in automation work

c. Wiring up the system and checking terminations and connections

d. Cable routes, segregation of power and control circuits, and labelling

e. Workshop: drawing a wiring and control layout for a domestic installation

f. Day output: coordinated wiring and control layout

- **Day 4: System integration, programming and upload**

a. System integration and checking communication between devices

b. Programming and uploading the configuration to the controller

c. Fault finding during commissioning of automation hardware

d. Recording the configuration so that the installation can be maintained later

e. Workshop: wiring, configuring and uploading a programme to a training rig

f. Day output: commissioned training rig with test record

- **Day 5: Advanced programming, scheduling and sensors**

a. More advanced programming of scenes, logic and conditions

b. Scheduling heating, cooling and lighting to occupancy patterns

c. Heating, cooling and light sensor control for comfort and efficiency

d. Remote control and monitoring through mobile apps and voice assistants

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

f. Day output: scheduled control programme

- **Day 6: Security, access control, energy monitoring and handover**

a. Security and access control functions in an integrated installation

b. Graphics displays and user interfaces for occupants

c. Energy monitoring and reports that show consumption patterns

d. Network security for connected home devices and user data

e. Case study: evaluating access control and energy monitoring in an integrated home

f. Day output: handover checklist for an integrated installation

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
Cairo, Egypt	20 - 25 Dec 2026
Cairo, Egypt	10 - 15 Jan 2027
Madrid, Spain	11 - 16 Apr 2027
Barcelona, Spain	11 - 16 Jul 2027
London, United Kingdom	10 - 15 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