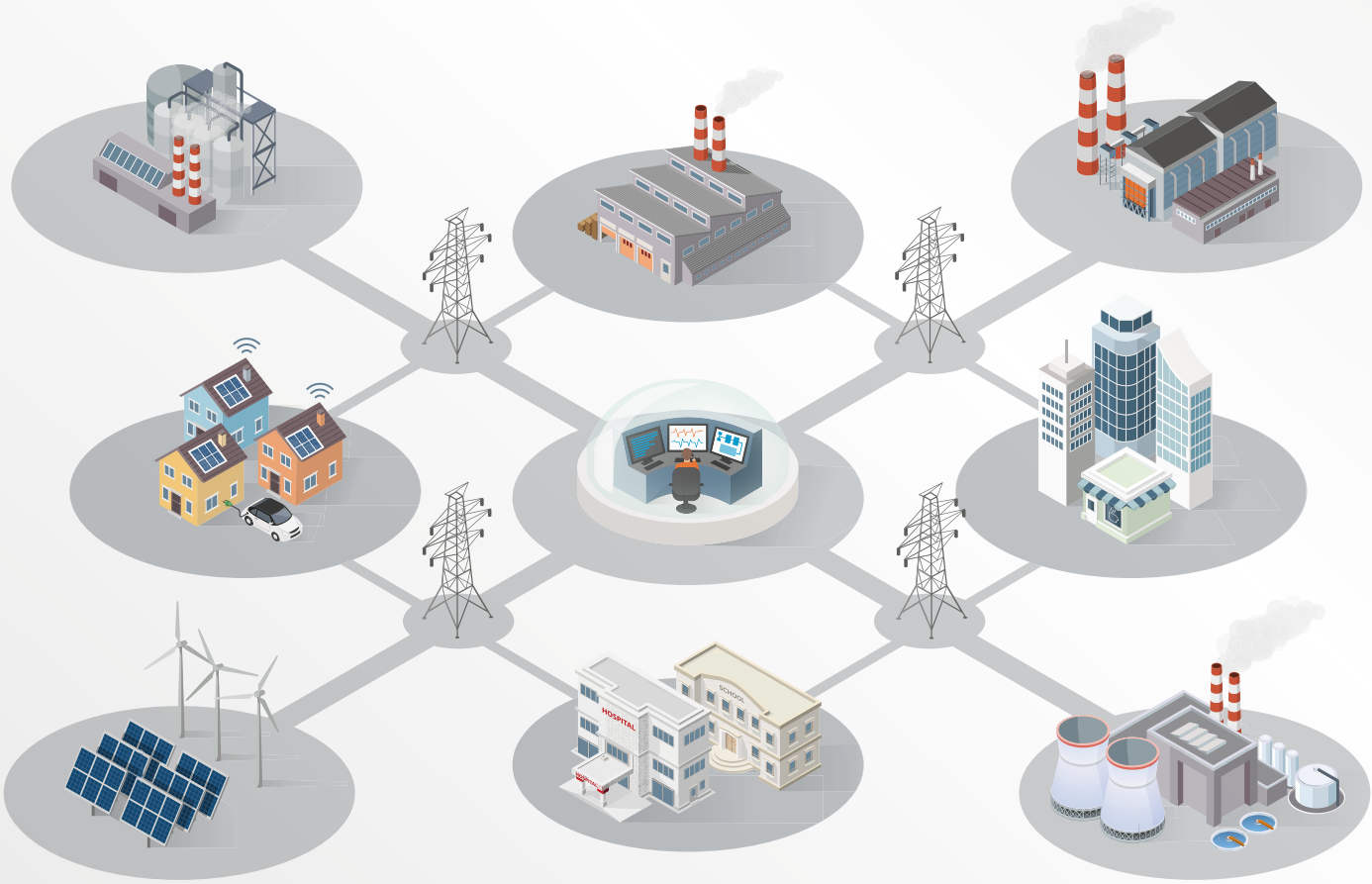
EDA ELECTRICAL DISTRIBUTORS' ASSOCIATION

PRINCESS ROYAL TRAINING AWARD 2022

COURSE DIRECTORY

EDA Electrotechnical Product Knowledge Programme

12 distance-learning training courses for EDA members and affiliates



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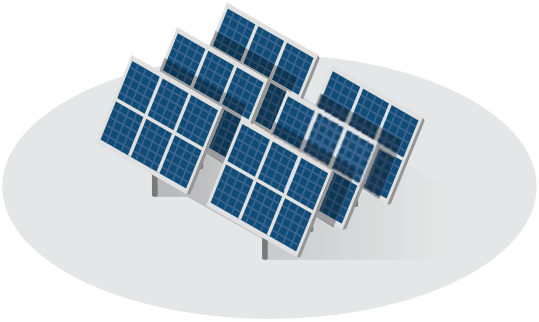

Electrical Distributors' Association (EDA)
Rotherwick House
3 Thomas More Street
London
E1W 1YZ
020 3141 7350
www.eda.org.uk
training@eda.org.uk

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INTRODUCTION

This Course Directory introduces you to the EDA's Electrotechnical Product Knowledge Programme, a suite of 12 stand-alone distance-learning training modules.

Inside you'll find a preview of the contents for each of the 12 modules, instructions on how to order and pay, as well as where to go if you have further questions.

The modules are now available as electronic courses available on the EDA Academy as well as the original distance learning book.

This training is especially suited to customer-facing staff in both wholesaler and manufacturer businesses. It is designed to build product knowledge and understanding very quickly, giving your team the ability to deal with suppliers and customers with confidence. It is appropriate for new recruits who need to get up-to-speed quickly, as well as long-standing employees who want to deepen their knowledge or learn about the latest technology, such as IT and Data Infrastructure products.

This Programme is now being used by companies as part of their induction processes, which means non customer-facing staff also have a greater understanding of the sector and the products going through the business.

The Programme is very flexible. The modules can be ordered one by one or in a batch and can be studied in any order and combination, it's completely up to you.

The Programme is rewarding. As a City & Guilds Accredited Programme every successful learner receives a City & Guilds' certificate showing their grade - Pass, Credit or Distinction. Those who achieve 5 City & Guilds' Certificates earn an EDA Certificate and those who achieve 10 earn an EDA Diploma. Outstanding learners are recognised each year at the EDA Learning Achievement Awards and those managers who have most success with the Programme are also recognised at the EDA's Annual Awards Dinner.

The Programme is approved for Continuing Professional Development (CPD). Each module takes between 30 - 40 hours of study to complete, depending upon previous knowledge. Each hour counts as one CPD point. If you have achieved a Pass, Credit or Distinction contact the EDA for your personalised CPD certificate.

The EDA partnered with the Institution of Engineering and Technology (IET) in the production of the modules.

City & Guilds provide accreditation and certification for the Programme.

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The CPD Certification Service

HOW THE PROGRAMME WORKS

Electronic Course	Textbook Course
Each module is a stand-alone training course comprising of a login to the EDA Academy, an electronic course (videos, activities, and a PDF of the textbook) and an End of Module Assessment (EMA).	Each module is a stand-alone training course comprising 2 elements: a hardcopy Textbook and an electronically fillable End of Module Assessment (EMA).
In most cases, the modules are ordered and paid for by the Manager on behalf of their learner.	In most cases, the modules are ordered and paid for by the Manager on behalf of their learner.
Each module and assessment must be completed within 10 weeks of the start date. Typically, that's 8 weeks working through the module and 2 weeks to complete the End of Module Assessment (EMA).	Each module and assessment must be completed within 10 weeks of the start date. Typically, that's 8 weeks working through the module and 2 weeks to complete the End of Module Assessment (EMA).
The EMA is an open-book assessment. Learners can use the electronic course, the PDF textbook, the internet, ask colleagues, or refer to any technical material or catalogues to inform their answers.	The EMA is an open-book assessment. Learners can use the Textbook, the internet, ask colleagues, or refer to any technical material or catalogues to inform their answers.
The EMA will be on your dashboard at the same time as your course.	The EMA is ordered by the Manager and sent out by email (the EMA is not sent out automatically). It can be ordered at a time to suit the individual, so long as it's returned within the 10 weeks.
The EMA multiple choice test is marked immediately by computer and your results shared with you once you have submitted. The other parts of the EMA are uploaded by you to the EDA Academy and marked by an Assessor. Results are issued within 6 weeks. City & Guilds registers the grade and issues the certificate. Some EMAs are moderated to ensure that marking is fair.	The EMA is returned (by email) to the EDA to be marked by an Assessor. Results are issued within 6 weeks. City & Guilds registers the grade and issues the certificate. Some EMAs are moderated to ensure that marking is fair.
The Manager receives the personalised City & Guilds' Certificate of Achievement for every Pass, Credit or Distinction.	The Manager receives the personalised City & Guilds' Certificate of Achievement for every Pass, Credit or Distinction.
EDA issues a Certificate for 5 successfully completed modules and a Diploma for 10 modules.	EDA issues a Certificate for 5 successfully completed modules and a Diploma for 10 modules.
The EDA is keen to receive photos of your certificate presentations so we can share your success on our website photo gallery and social media channels.	The EDA is keen to receive photos of your certificate presentations so we can share your success on our website photo gallery and social media channels.

Other important information about the Programme

- Modules can be studied in any order and combination;
- Each module PDF textbook / Textbook is kept by the learner as a valuable reference tool to support them in their future role;
- Unfortunately we are unable to offer any refunds however the programme's built-in flexibility means there are options to:
  - transfer the modules if someone leaves, as long as the EMA has not been completed and uploaded/returned and it is within 12 months of your initial order.
  - extend the deadline beyond 10 weeks in exceptional circumstances, and
  - request learning support.
- Distance-learning means study is tailored around job and home life commitments.

PRICE AND PAYMENT

Electronic Course	Textbook Course
Each module costs £99 + VAT	Each textbook module costs £130.00. VAT is not charged on the textbook modules

Without a purchase order, payment of the invoice is required in full prior to the course being set up electronically or the book/(s) being despatched. Payment is required on receipt of the invoice. Payment can be made by BACS or credit card and full details will be on the invoice. Set-up of courses/despatch of books will be standard 3-5 working days. Returns are not accepted.

1

By BACS

2

By card

PLACING YOUR ORDER

For each order there are two forms, both of which can be downloaded from www.eda.org.uk and filled in electronically:

1. Learner Application Form – use one for each learner you're ordering for. You can include multiple Learner Application Forms in one order;
2. Manager Payment and Order Form – only one per order, summarising the Learner Application Form(s).

To place your order, send your completed forms to **training@eda.org.uk**
If you have provided a PO number or paid your invoice, your courses will be set up on your EDA Academy learner dashboard, or your first Textbook will be sent to the ordering manager within 5 working days.

Read emails and joining letters carefully. They contain vital information including: :

- Email support
- Instructions for downloading 'Studying for Success: A Guide for Managers'
- The End of Module Assessment (EMA)

WHERE TO GO FOR HELP

Contact the EDA team on **020 3141 7350** or email **training@eda.org.uk**

You'll also find plenty of information at **www.eda.org.uk**

www.eda.org.uk/training-apprenticeships/modules/

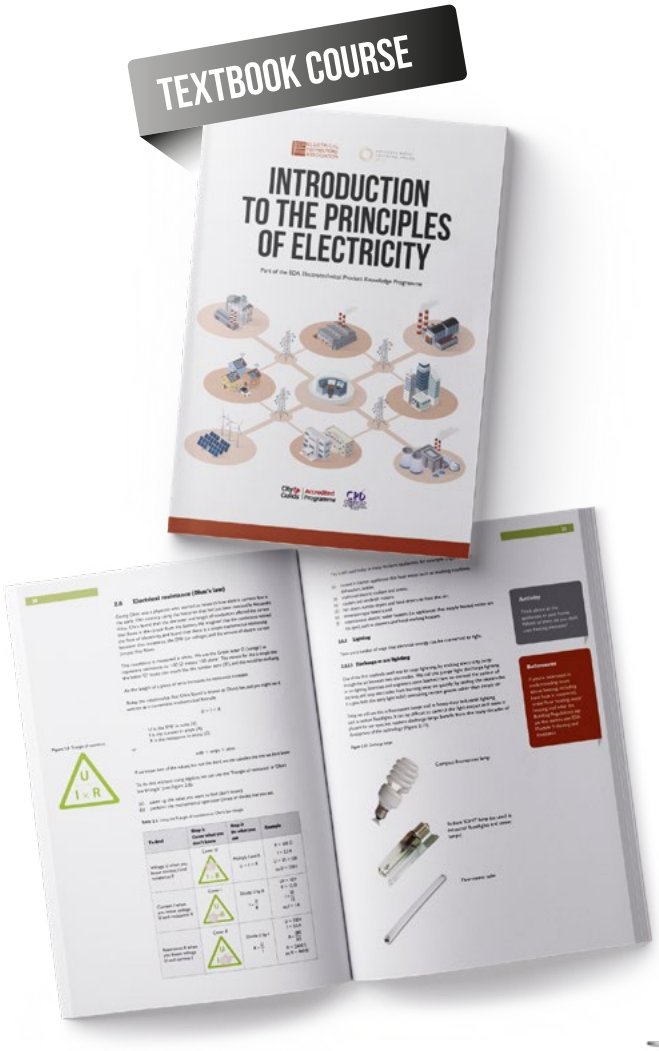
INTRODUCTION TO THE PRINCIPLES OF ELECTRICITY

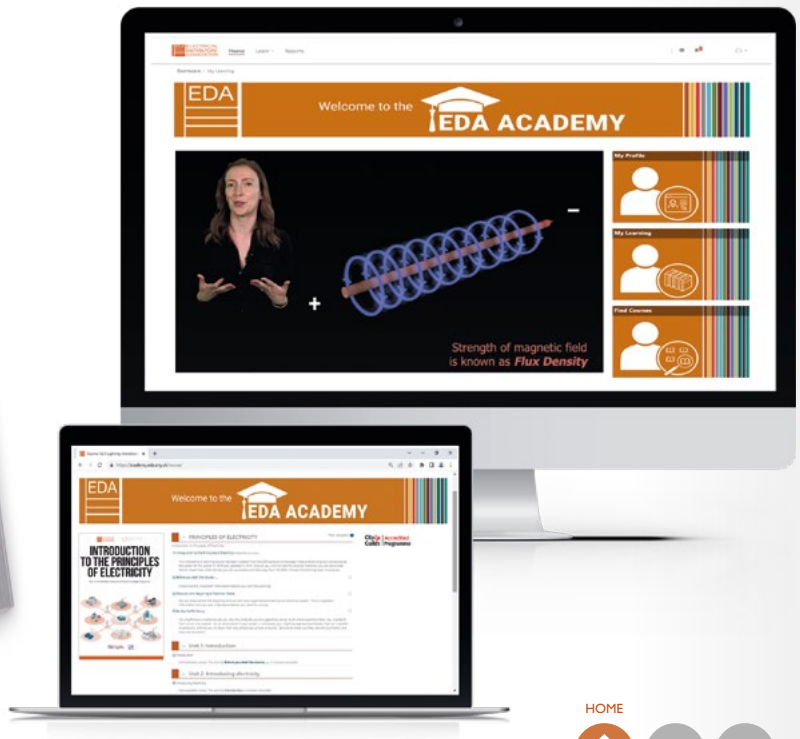
Providing excellent underpinning knowledge of the products you sell. Highly recommended as a starting point for those new to the electrotechnical sector and who are planning to study other modules in the Programme.

"This module gave me the basic knowledge I needed. It's a great springboard to further study"

Key areas:

- Introducing electricity
- Direct current and alternating current
- Electrical safety
- Ratings and markings of electrical equipment
- Introduction to low-voltage electrical installations
- Electricity and the environment
- Qualifications and accreditations for electrical installation work





HOME

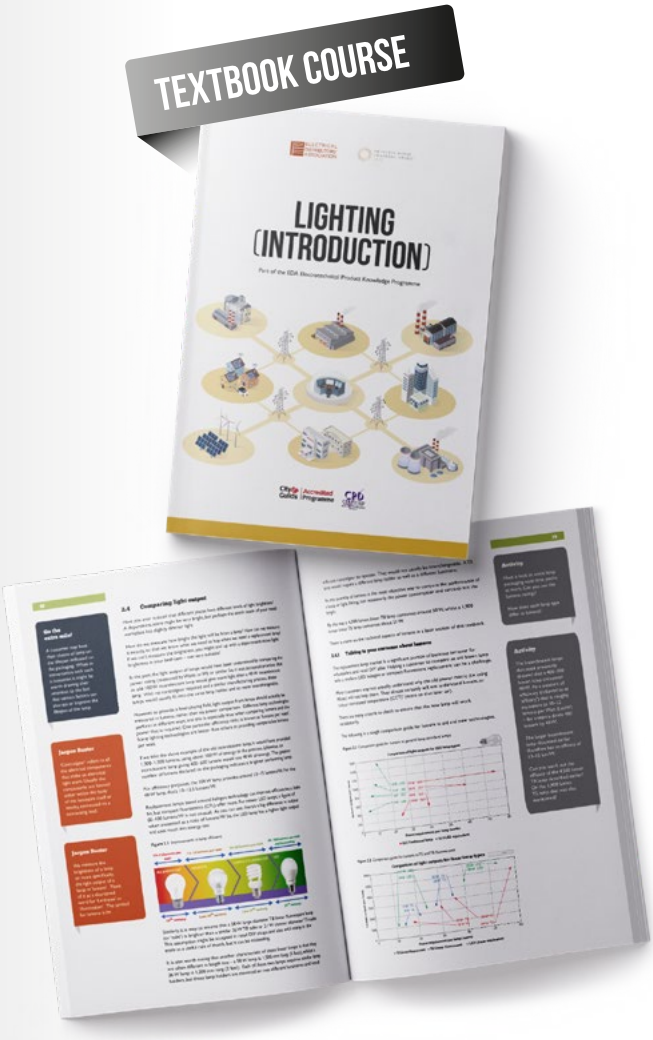
LIGHTING INTRODUCTION

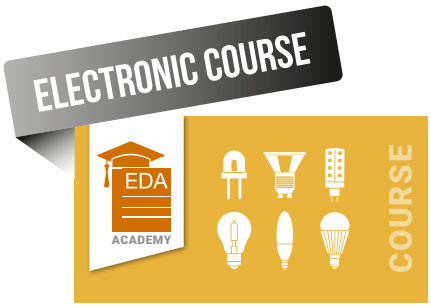
The first of two modules on Lighting. This module provides a good working knowledge, plus underlying theory, for anyone who needs to have informed discussions with customers. Lamp technology, particularly LED lamps, has advanced significantly as have the associated laws and regulations. If you are interested in further training in this subject, Lighting Systems and Controls is the next step.

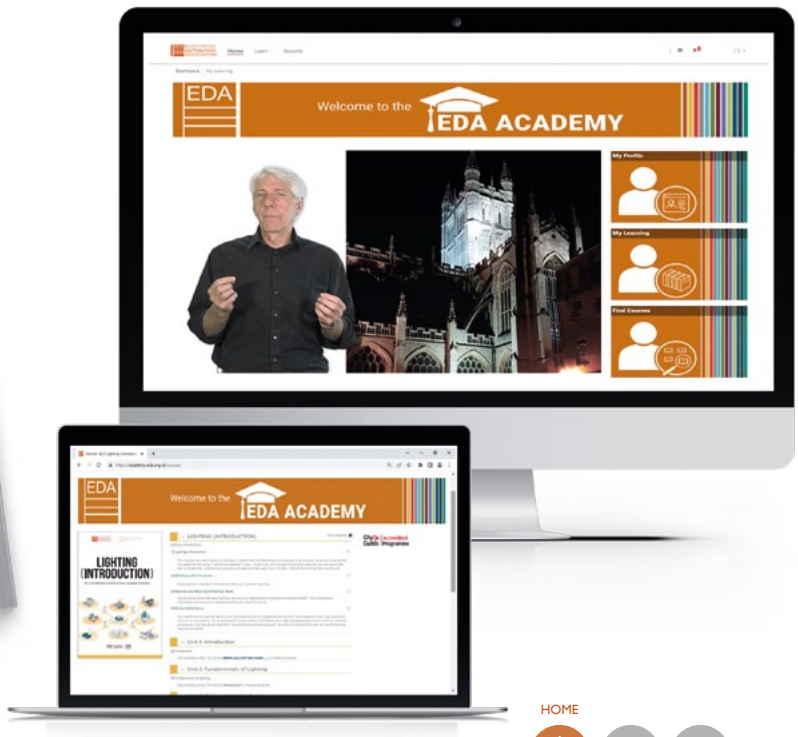
"Lighting is a fast-changing market, probably the fastest changing of all product sectors, hence the need to keep up-to-date with technology."

Key areas:

- Fundamentals of Lighting
- Basics of Lighting Design
- Safety Considerations of Lighting
- Maintenance Considerations of Lighting
- Environmental Considerations of Lighting







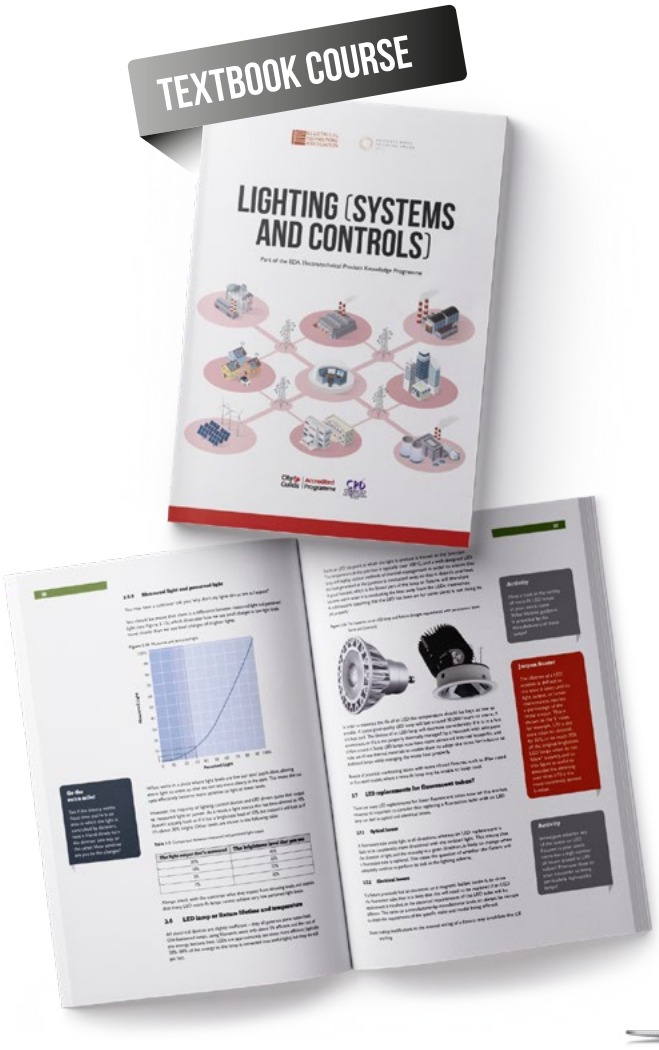
LIGHTING
SYSTEMS AND CONTROLS

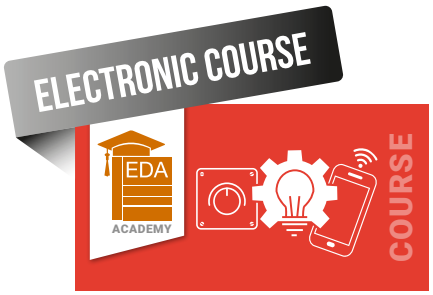
The second of the two modules on Lighting. This module covers the wide-ranging topic of lighting controls, such as dimmers, sensors and switches, and their connection with lamps and fixtures, creating lighting systems.

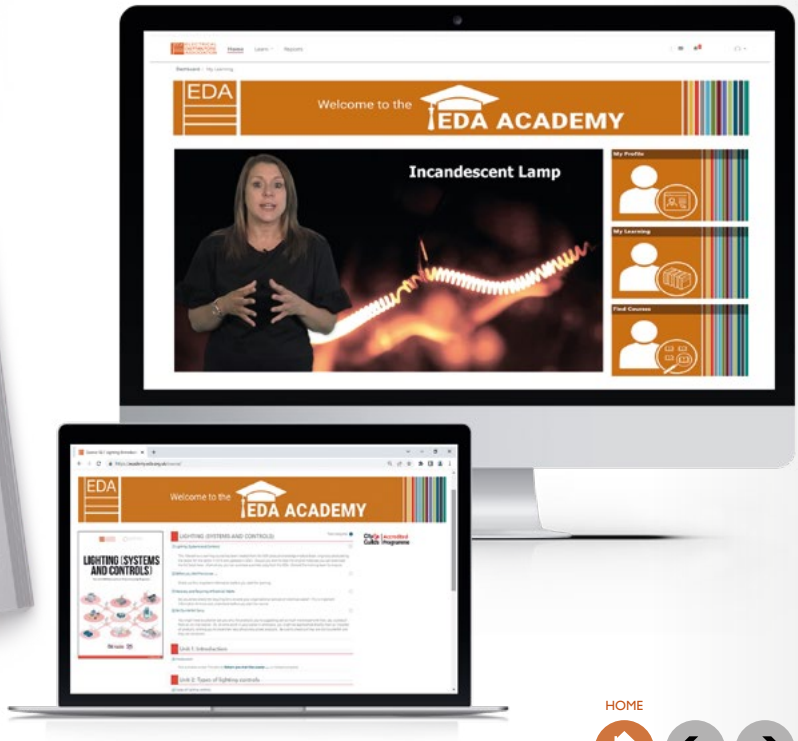
"This second lighting module is more technical and builds on Lighting (Introduction). Those who complete both Lighting modules may wish to think about a lighting design course at the LIA Training Academy as a next step."

Key areas:

- Types of lighting controls
- Dimming LED Retro-Fit lamps and LED fixtures
- Multi-way control of stand-alone dimmers
- Wired low-voltage lighting control protocols explored
- Low-voltage wiring for lighting controls
- Motion sensors
- Wireless lighting controls
- The Internet of Things and smart-phone app controls
- Emergency lighting controls
- Lighting control modules in commercial buildings







HOME

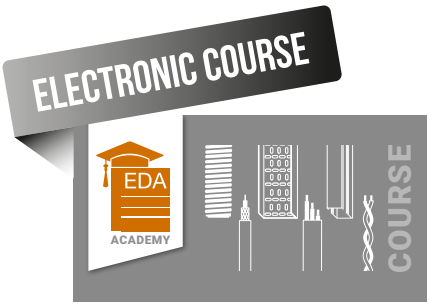
CABLES AND CABLE MANAGEMENT

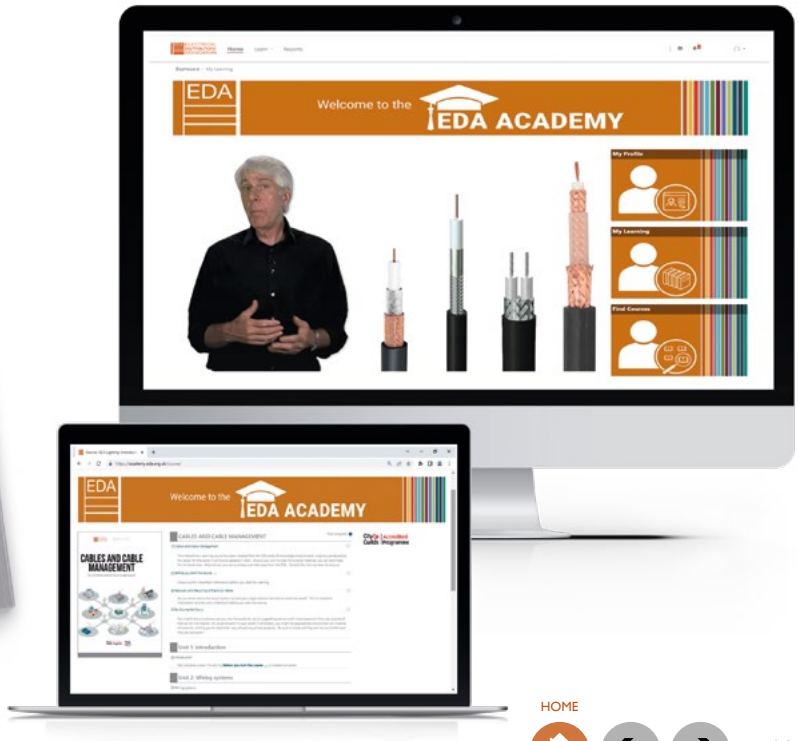
Cables are used in almost all electrical supply, control and information technology installations, and account for over 20 per cent of sales through the wholesaler. This training covers everything from low voltage to high voltage, fibre optics to specialist cables. Plus, you'll cover Cable Management and the components and systems used to support, protect and route the cables from source to power.

"Our experienced electrical contractor customers know their way around the world of cables. This training helped me answer their questions with confidence."

Key areas:

- Wiring systems
- Telecommunications cables
- Optical fibre cables
- Special cables
- Substandard and counterfeit cables
- Cable fire performance
- Cable management systems
- Cable termination





WIRING DEVICES AND CONTROLS

Wiring devices are used to terminate wiring that is used by appliances, luminaires etc – what are referred to as 'current using equipment'. Controls are the light switches, cooker controls, shower pull cord switches which control the power to the devices. This module introduces you to wiring devices for fixed wiring installations, wiring devices and appliance couplers for appliance cords, and related accessories.

"This module takes you through the basics, starting with the different types of circuit – radial, ring, spur, looping – right through to the benefits of smart lighting and smart power control. It's a real eye-opener, the benefits of smart technology are endless!"

Key areas:

- Introduction to wiring devices and controls
- Switches
- Styles, mounting arrangements and backboxes for wall-mounted socket-outlets and switches and associated products
- Plugs and socket-outlets
- Fixed wiring to free wiring connection devices
- Modular wiring accessories
- Other overhead lighting accessories
- Ancillaries
- Smart controls

HOME

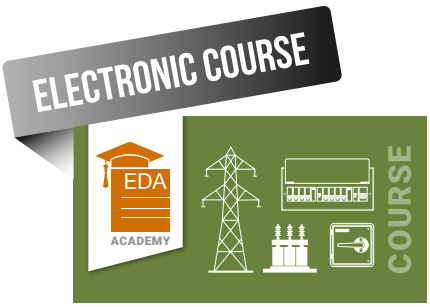
DISTRIBUTION, SWITCHGEAR AND PROTECTION

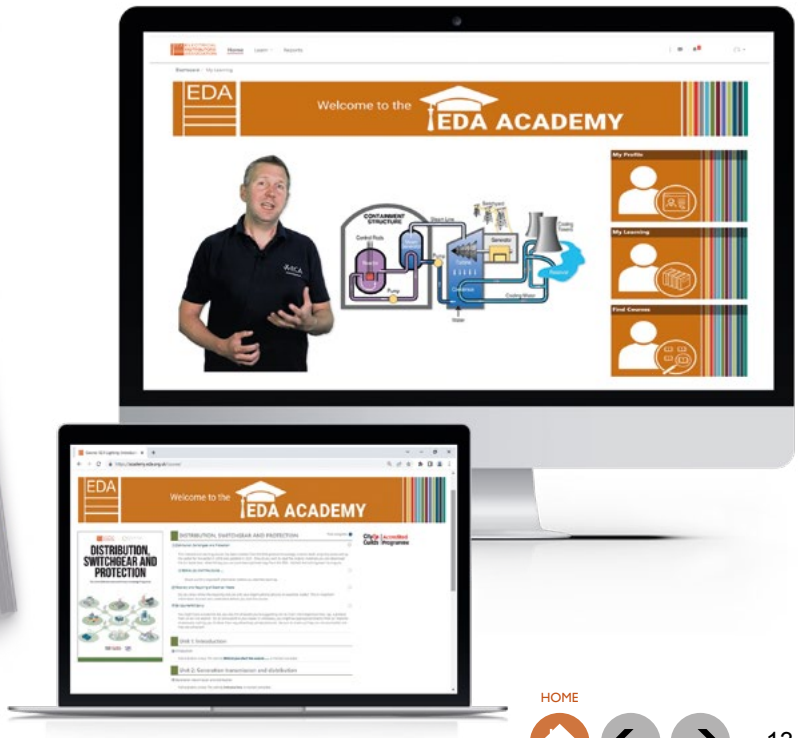
From electricity generation right through to protecting the end user, this module takes you through the entire generation, transmission and supply process. You'll cover domestic, commercial and industrial intake, earthing arrangements, billing meters as well as the products used to protect the end user including consumer units, distribution boards, and residual current devices.

"This comprehensive training covers not only protection and control devices, but also additional protection. It has really improved my technical know-how and my confidence."

Key areas:

- Generation Transmission and Distribution
- Distributing Electricity within a Property
- Protection and Control Devices
- Additional Protection
- Supply and Metering
- Specialist Applications





FIRE SAFETY AND SECURITY SYSTEMS

This module gives your team a greater understanding of the industry. How fire and security components and products complement and integrate with other electrical technologies and networks. It also delivers equipment grading knowledge and an understanding of the technical terminology your customers use.

"This training module gives customer-facing sales teams greater confidence in advising and informing clients about the key equipment and component parts used, and the rules and regulations. As a result, they'll create improved sales opportunities - cross-selling and up-selling - for your business."

Key areas:

- Fire detection and alarm systems for non-domestic buildings
- Domestic (household) fire alarm systems
- Emergency lighting systems
- Intruder detection and alarms
- Access control and building intercom systems
- Video surveillance systems

HOME

HEATING AND VENTILATION

Taking you through the principles of thermal energy and the inner workings of different types of heating and water systems. This module will help you understand which types of heating, cooling, ventilation and water systems suit the different spaces in our homes or business and why.

"Whether our customer is completing a domestic or commercial project, the scope of this training module means I now understand the impact of the products available and can give reliable advice."

Key areas:

- Principles of heat
- Heating – Elements, controls and types of heaters
- The principles of hot water
- Types of water heaters
- The principles of ventilation
- Ventilation applications

RENEWABLES INCLUDING EV CHARGING

Technical innovation and dwindling fossil fuel supplies are driving cheaper and cleaner energy for homes and businesses. Photovoltaic, wind, geothermal, combined heat and power, energy storage and energy conservation are covered in this module, focussing on the products you sell. And of course, there's a whole chapter dedicated to Electric Vehicles (EV).

"This is an exciting time for electrotechnical and renewables. The knowledge acquired through this training means I can help give advice to customers involved in installing renewable generation or purchasing parts for existing installations."

Key areas:

- Promotion of uptake of renewables
- Solar photovoltaic
- Electrical energy storage systems
- Electric vehicles
- Heat pumps
- Wind turbines
- Energy conservation

HOME

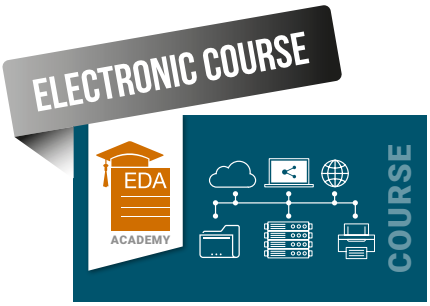
IT AND DATA INFRASTRUCTURE

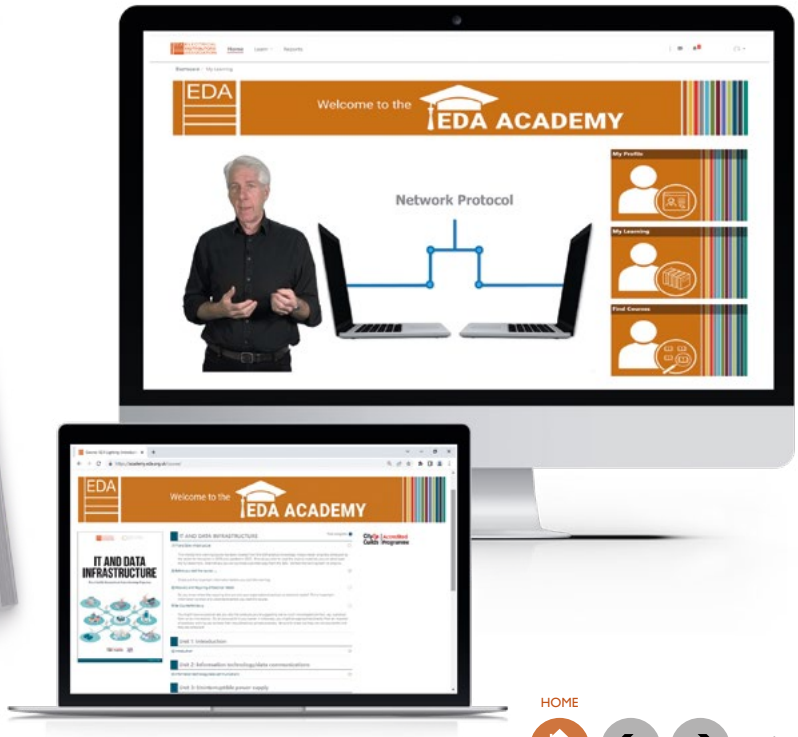
Increasingly electrotechnical installers are involved in data-related projects, in part due to the evolution of smart technologies and the convergence of networks over common infrastructure, creating greater business opportunities. Significant improvements in network connectivity speeds (both wired and wireless), along with reductions in cost for internet access are factors contributing to the demand.

"We are seeing an increase in the requests from electrotechnical installers for data-related products. Access to this training module has come at exactly the right time for us. We can adapt to this new language, this new technology, and develop our own skills to help us benefit from this new business stream."

Key areas:

- Information technology/data communications
- Uninterruptible power supply
- Structured cabling
- Cabinets and racks
- Connectivity
- Termination
- Test equipment
- Cloud computing and data centres
- Quality and best practice





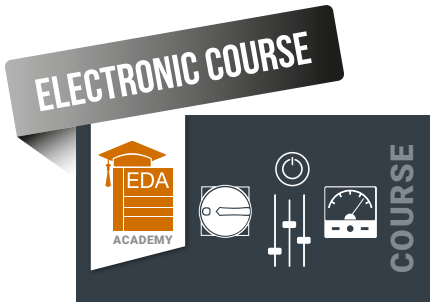
INDUSTRIAL CONTROLS

Helping you support those customers who work on the big, heavy-duty and highly automated projects. Whether that's new installations or replacement products for modifications, repairs and upgrades. The world of industrial control is constantly changing and is a key component of the digital revolution – often referred to as Industry 4.0. The robotics and AI revolutionising our domestic lives are trickled down from industrial controls, so what you learn in this training could also help you understand domestic or smaller commercial projects.

"From PLCs to power supplies, the knowledge in this training module helps our sales teams understand the needs and requirements of the engineering and maintenance managers we deal with. Including the time-critical nature of their operation and how we need to meet their expectations in terms of product supply."

Key areas:

- Switches and Indicators
- Relays and Contactors
- Fuses and Breakers
- Motors and Motor Control
- Power Supplies
- Enclosures and Panel Layout
- Programmable Control and Automation
- Sensing and Instrumentation
- Environmental Considerations
- Trends in Industrial Controls



HOME

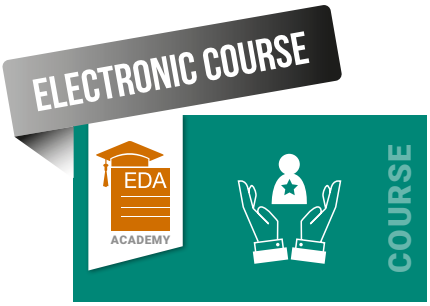
CUSTOMER SERVICES

In a crowded market where there is little differential in the product offer, or even the price offered, the one thing that will always set you apart from the competition is your service. It is brought to life by every member of your team, none more so than those working directly with your customers face-to-face, over the phone or making deliveries. This training module will give your team the practical skills, knowledge and tools to help your business stand out – for all the right reasons.

"This step-by-step Customer Services training is ideal for anyone who is customer facing, either new to the role or in need of a refresher. It has made our whole team focus on creating a great customer service experience, including getting the order right first time, every time. We're also looking at new ways to measure customer satisfaction and displaying the results in the branch, so everyone knows how important it is to us."

Key areas:

- Introducing our customers
- What is excellent customer service?
- The customer journey
- Customer service: right first time, every time
- The importance of stock availability
- Time management
- The skills of questioning and listening
- Selling add-ons as a service
- Measuring customer service and going the extra mile



PROGRAMME MADE POSSIBLE BY INDUSTRY WORKING TOGETHER

Industry collaboration have been the watchwords of this Programme's development. For 10 of the 12 modules in the Programme the EDA created a Working Group (each chaired by a wholesaler) of between 4 and 20 industry experts from EDA affiliate manufacturers and allied trade associations such as BEAMA, the LIA and the British Cables Association (BCA).

Each expert brought an average of 12 years' electrotechnical experience to the table. Often rivals in business, these manufacturers pooled their knowledge so your team and business can benefit.

EDA ELECTRICAL DISTRIBUTORS' ASSOCIATION

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E1W 1YZ
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training@eda.org.uk

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