LED Lighting
11 hour professional course

Course Introduction
This course will ensure learners remain up to date with the latest in LED lighting. It looks at the rapid development of LED lighting, technology in the lighting industry, market advancements, LED lighting design, selection and specification, applications of human centric lighting, controls available for LED lighting, inspection, testing and maintenance and retrofitting. It uses real world examples and case studies to aid learners in their understanding of LED lighting and its latest updates.

The world of lighting is constantly evolving, and energy efficient LED lighting is transforming the marketplace.

For professionals in the lighting industry it is vital to continuously acquire knowledge, not only to stay up to date, but also to get recognised in the industry for expertise and to feel confident in discussions when advising others about lighting.

In 2014, the IET published the Code of Practice for the Application of LED Lighting Systems. Since then there has been little in the way of literature and training materials with regards to updates in this area. This course will bridge this gap.

Course units
Each part is sub-divided into units of approximately one study hour each. Each unit has mini-assessments built in to help you ensure you understand what you have learned in each unit. This is important because many units require understanding of previous terms, concepts and methods.

- Unit 1 Introduction
- Unit 2 The LED Lighting Industry and Market Advancements
- Unit 3 Standards Relevant to LED Lighting and Key Terminology
- Unit 4 Interior LED Lighting Design
- Unit 5 Exterior LED Lighting Design
- Unit 6 Human Centric LED Lighting Principles and Applications
- Unit 7 Automatic Lighting Controls Compatible with LED Lighting
- Unit 8 Selection and Specification of LED Luminaires
- Unit 9 Installation, Inspection, Testing and Maintenance of LED Lighting Systems
- Unit 10 Retrofitting LED Lighting
- Unit 11 Final Assessment

Learning outcomes
- Understand the principles behind and key terms related to LED technologies, lamps and luminaires
- Evaluate LED lighting solutions
- Understand the past and present LED lighting industry and market advancements
- Learn about human centric lighting and its applications
- Understand design principles for LED lighting solutions
- Recognise the considerations taken in the selection and specification of LED lighting
- Evaluate control strategies for LED lighting
- Evaluate energy performance improvements
- Calculate the benefits of LED lighting
- Be able to consider approaches to new build and retrofit applications.

Course content may be subject to change or updates. Please contact the IET for the latest course content.
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