

AIRFIELD ENGINEERING

Airfield Lighting and Pavement Courses













Contents

ntroduction to PPL Training	3	
competency Requirements	4-5	

Training Courses

Aeronautical Ground Lighting 6

Technician

Authorised Person Aeronautical

Ground Lighting

Management of Aeronautical 8

Ground Lighting Maintenance

Airfield Pavement Maintenance 9

11

Airfield Pavement Design 10

Airfield Pavement Management

with MicroPAVER™

Authorising Engineer 12

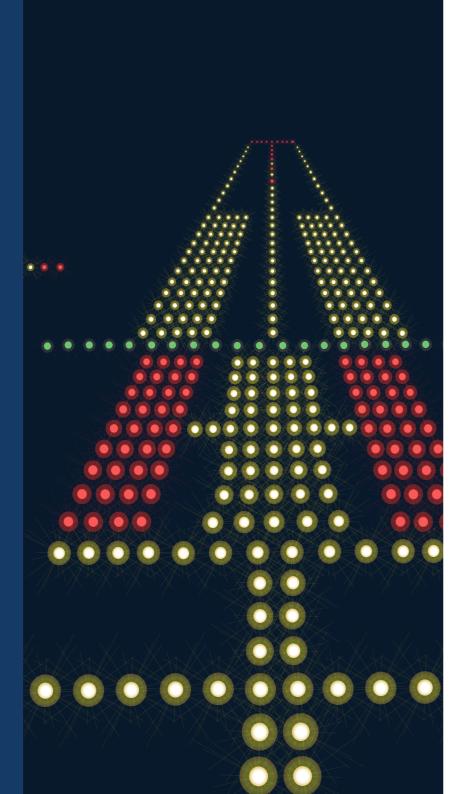
Related Courses 13

Training Staff 14-15
Our Facilities 16-17
Clients and Feedback 18-21
PPL Engineering Services 22-23

Head Office

PPL House, Opus Avenue, York, YO26 6BL

Printed May 2019 V7 E&OE



A Leading UK and International Training Provider



LeadingTraining Staff



10,000+
Delegates Per Year



500+
Independent
Reviews



100+ Courses

UK and International provider of Mechanical and Electrical Safe Systems of Work, Technical, Legionella and Compliance training.

Excellence as Standard



We are a City & Guilds Approved centre providing Accredited and Qualified training courses.

View Courses on Pages 6 - 13











CompetencyRequirements









Our City & Guilds Accredited Airfield Lighting training courses are designed to assist in meeting the competency requirements of British Standard BS EN: 61821:2011. We have two large training centres situated in York and Slough which offer a variety of Airfield circuits





Meeting Requirements



We are the only UK Airfield Lighting training provider to offer City & Guilds Accredited courses.

within our practical areas. These help to recreate realistic site scenarios using different types of Airfield Lighting equipment.



Current Competency Requirements

Current Competency Requirements

It has long been recognised that staff working on UK Aeronautical Ground Lighting (AGL) systems need to demonstrate a high level of competence. With the introduction of new technology, and the requirements for European standardisation there has been a much greater emphasis on the need for continual training and development of airfield staff.

The UK's Civil Aviation Authority and Ministry of Defence specify the need for all staff working on AGL systems to be competent. In the UK, staff working on the airfield engineering infrastructure need to demonstrate competency to meet EASA, CAA, or Ministry of Defence requirements. Internationally, bodies such as ICAO and the International Electrotechnical Commission (IEC) also specify a competency based approach.

Since the publication in 2003 of the IEC (BS EN)61821 – Electrical installations for lighting and beaconing of aerodromes: Maintenance of aeronautical ground lighting constant current series circuits, significant work has been undertaken to help implement this competency requirement. The IET's AGL Competency and Safety Working Group, in conjunction with the Airfield Lighting Association, has produced an AGL Competency Matrix and additional guidance documents.

Worldwide, the IEC and the IES (Illuminating Engineering Society – Aviation Lighting Committee of North America) are also currently working on the publication of documents supporting AGL Competency Requirements. PPL Training is very pleased to support these initiatives and proud to have representatives on these committees.

View Pages 6-11 for our Airfield Engineering and Lighting Training Courses

City Cuilds ACCREDITED PROGRAMME

Authorised Person Aeronautical Ground Lighting Course Duration: 3 Days | Course Cost: £795+VAT

Course Overview:

ACCREDITED PROGRAMME

This City & Guilds Accredited course will provide you with the skills and knowledge required to carry out the installation and maintenance of Aeronautical Ground Lighting (AGL) systems and equipment. The course is suitable for meeting both Civil airport or Military airfield requirements and standards. It is designed to develop technical knowledge and practical application across the full range of AGL services. It will also help in meeting the competency requirements identified in BS EN 61821:2011 – Electrical Installations for Lighting and Beaconing of Aerodromes – Maintenance of Aeronautical Ground Lighting Constant Current Series Circuits.

This is ideal for engineering staff with the responsibility for the operation, installation or maintenance of AGL systems to either Civil Airport (EASA, CAA and ICAO) or MOD Airfield standards.

Key Learning Areas:

- Understanding the use of lighting as a visual aid
- AGL series circuits and system components
- Maintenance standards and procedures
- Operation constant current regulators
- The application of AGL safe working practices
- AGL control and monitoring systems and airside asset management
- Installation and commissioning requirements testing and fault finding
- Practical exercises and final assessment exercise

Available in York and Slough

Course Overview:

This City & Guilds Accredited course will provide you with the skills, and knowledge required to carry out Authorised Person duties and responsibilities in compliance with safety rules, and procedures, which meet the requirements of the Electricity at Work Regulations 1989. It will also help in meeting the competency requirements identified in BS EN 61821:2011 – Electrical Installations for Lighting and Beaconing of Aerodromes – Maintenance of Aeronautical Ground Lighting Constant Current Series Circuits.

This course is designed for engineering staff with responsibility for the control, operation or maintenance of installed AGL systems and who may be appointed as Authorised Person Electrical (AGL). It is suitable for implementation of either MOD Airfield or individual Civil Airport AGL Safety Rules and Procedures.

Key Learning Areas:

- · Review of AGL systems as a visual aid
- Series circuits and system components
- Statutory requirements for electrical systems
- Application of safety rules and procedures (JSP 375 Vol 3 or individual airport rules)
- Safe systems of work as applied to AGL circuits
- Correct identification of circuits and practical safe isolation exercises
- Requirements for the completion and issue of safety documentation

Available in York, Slough and On-site



Airfield Pavement Maintenance Course Duration: 3 Days | Course Cost: On Request

Course Overview:

ACCREDITED PROGRAMME

This City & Guilds accredited course will provide you with the skills and knowledge required to implement, supervise or manage an aeronautical ground lighting (AGL) system to comply with the required maintenance standards. It will also help in meeting the competency requirements identified in BS EN 61821:2011 - Electrical Installations for Lighting and Beaconing of Aerodromes - Maintenance of Aeronautical Ground Lighting Constant Current Series Circuits.

Management of Aeronautical Ground Lighting Maintenance

This course is designed for engineering staff with responsibility for the management, operation or maintenance of installed AGL systems and who wish to develop a more detailed understanding of current procedures and modern practices. It is suitable for meeting ICAO, UK MOD, EASA or CAA requirements. As a prerequisite, potential delegates should have previously attended the AGL Technician course or an industry equivalent.

Key Learning Areas Covered in This Course:

Review of Aeronautical Ground Lighting as a visual aid

. . . .

- ICAO, EASA, UK CAA and MOD maintenance standards
- Producing and operating a proactive maintenance system
- Photometric measurement and evaluation
- Asset management maintenance systems
- Airside safety procedures
- Power supplies and AGL circuits
- Testing and measurement
- Meeting competency requirements

Course Overview:

This course is ideal as a refresher, or as an update for those already involved in the maintenance of airfield pavements. It is also suitable as an introduction to airfield pavement maintenance for anyone who doesn't currently work on airfields.

This is aimed at delegates at graduate, or technician level, in the maintenance of airfield pavements or anyone transferring from the highways sector, general Civil Engineering or other related disciplines.

Key Learning Areas:

- Fundamental serviceability requirements of airfield pavements
- Strength classification systems
- Civilian and military standards
- Common rigid, flexible and composite construction types, including characteristics of concrete and bituminous mixtures, and component pavements layers
- Common defects, causes, and repair solutions
- Surface treatments, pavement marking systems and joint sealants
- In-pavement' components drainage, airfield lighting, and utilities
- CAA and MoD requirements for pavement inspections
- A practical exercise at an airfield is arranged wherever possible

Available On-site

Airfield Pavement Design Course Duration: 2 Days | Course Cost: On Request

City Guilds ACCREDITED PROGRAMME

Airfield Pavement Management with MicroPAVER™ Course Duration: 2 Days | Course Cost: On Request

Course Overview:

This course provides both an introduction to the history and development of pavement design principally in the United Kingdom (UK) and the United States of America (USA). This also includes an overview of pavement evaluation methods practised around the world.

This is aimed at graduates, and other practising Engineers wishing to enhance their skillset in a consulting or contracting environment.

Key Learning Areas:

- Empirical and analytical evaluation methods
- UK civilian and military geometrical and functional requirements (CAP168 and MADS) and current ICAO standards
- Aircraft load characteristics via ACN/PCN system or actual undercarriage loads
- BAA Design Guide for Heavy Aircraft Loading Methodology and UK Defence Infrastructure
- Organisation Guide to Design (DMG 27)
- Examples of pavement thickness design for new and strengthened pavement structures
- Reference to layered elastic and finite element methods are covered, but a working knowledge of computational mechanics is not required

Available On-site

Course Overview:

This City & Guilds Accredited course provides a knowledge on how to use MicroPAVER's standard and customised management reports, both GIS and alphanumeric together with its condition prediction and budgetary functionality. This course is ideal for those involved in the management of airfield pavements, in particular within UK Defence Infrastructure Organisation.

Key Learning Areas:

- Reasons for having a Pavement Management System
- Construction of a database for your airfield 'from scratch'
- Asset inventory and condition records
- Inspection methodology based on ASTM D 5340-11
- Options for use of ruggedised tablet PCs
- Defect identification and classification for both rigid and flexible pavements
- Practical site exercise on defect identification wherever practicable

Available On-site





Authorising Engineer
Course Duration: 2 Days | Course Cost: £595+VAT

Course Overview:

This City & Guilds Accredited course will provide you with the background knowledge required to carry out Authorising Engineer duties in support of statutory health and safety compliance. Our course can also be used to demonstrate meeting the competency requirements of mandatory standards (MOD's JSP 375 Volume 3), guidance documents (Healthcare Technical Memoranda) or company rules.

This is for experienced engineering staff who have a responsibility for the implementation, administration, monitoring and management of engineering Safe Systems of Work, and who are looking to be appointed as an Authorising Engineer. The course will also cover the key requirements within the role of an Authorising Engineer such as the appointment of operational staff who will implement and work with the defined Safe Systems of Work.

Key Learning Areas:

- Understand the management of Safe Systems of Work
- Compliance and the role of the Authorising Engineer
- · Authorised person selection, training and appointment
- Safety documentation setting and maintaining standards
- Auditing and monitoring
- Incident investigation
- Maintaining competence
- · Completion of log books and associated documentation

Available in York, Slough and On-site

Airfield Engineering Training Course Prices

Training Course Name	Code	Days	Price
City & Guilds Accredited AP Aeronautical Ground Lighting	APAGL	3 Days	£795+VAT
City & Guilds Accredited Aeronatical Ground Lighting Technician	AGLT	5 Days	£1,280+VAT
City & Guilds Accredited Management of Aeronatical Ground Lighting Maintenance	MAGLM	3 Days	£795+VAT
City & Guilds Accredited Airfield Pavement Design	APD	3 Days	On-Request
City & Guilds Accredited Airfield Pavement Maintenance	APM	2 Days	On-Request
City & Guilds Accredited Airfield Pavement Management	APMM	2 Days	On-Request
City & Guilds Accredited Authorising Engineer	AUENG	2 Days	£595+VAT

Related Training Course Prices

Training Course Name	Code	Days	Price
City & Guilds Accredited AP High Voltage Operation and Safety	APHV1	5 Days	£1,280+VAT
City & Guilds Accredited AP/SAP High Voltage	APHV3	5 Days	£1,280+VAT
Substation Entry	SUBE	1 Day	£260+VAT
City & Guilds Accredited AP Low Voltage	APLV	4 Days	£1,080+VAT
City & Guilds Accredited CP/SKP Low Voltage	CPLV	2 Days	£470+VAT
City & Guilds 2382-18 18th Edition Wiring Regulations	2382	3 Days	£475+VAT
City & Guilds 2391-52 Inspection, Testing and Certification of Electrical Installations	2391	7 Days	£1,100+VAT
City & Guilds 2392 -10 Fundamental Inspection and Testing	2392	4 Days	£720+VAT

Meet Our Team Senior Training Staff









We employ some of the UK's leading training staff. They have a wealth of practical, industry based knowledge which they can bring to our delegates in a personable manner. This helps us deliver optimal, consistent training. We provide a full complement of courses for Authorised Persons, Competent Persons

Staff Feedback

"Another Excellently Delivered Course by PPL"

From the initial contact to the quick delivery of my certificate the experience with PPL was as good as always.

Amey - City & Guilds Accredited Authorised Person Aeronautical Ground Lighting

and Responsible Persons within specific private and public sectors, including the Healthcare Estates markets and the Ministry of Defence (MOD).



Steve Martin BSc (Hons) IEng MIET LCGI

Airfield Engineering and Lighting Manager Steve is our Airfield Engineering and Lighting Manager. He has been involved with Airfield Lighting training, and competency since the early 1990's. Steve is an electrical engineer with over forty years' experience in the design, installation, operation and maintenance of electrical and airfield engineering systems. He first became involved with training and assessment during his time with the Property Services Agency at Cardington. Steve is also a regular contributor to Industry led technical committees, and currently represents the UK on the IEC TC97 AGL committee. He is also a frequent presenter of papers on AGL competency and safety.



John Barling

Airfield Pavement Training Consultant

John is an Airfield Pavement Training Consultant. Formerly with BAA plc as a pavement designer he has worked with major Airports including Heathrow and Gatwick. With a background in design, maintenance and pavement management he has also had papers published in the Proceedings of the Institution of Civil Engineers.



Tony Clarke

Airfield Engineering and Lighting Training Consultant

Tony is an Airfield Engineering and Lighting Training Consultant.

He has a wealth of experience within the Airfield environment, with over 33 years spent at Gatwick Airport as an Airfield Senior Technician and the Airfield Ground Lighting Manager.

Tony has been delivering training for over 2 years including Authorised Person AGL and Aeronautical Ground Lighting courses.



Daniel Rodgers

Senior Account Manager -Responsible for Airport Training

Daniel joined PPL Training in 2012 to further develop AGL, Electrical and Mechanical customer accounts. He has a wealth of product knowledge across many disciplines. This is aided by his time spent working closely with our industry leading tutors. Daniel is responsible for some of our largest client accounts including Airports, Facilities

Management, and Manufacturing.

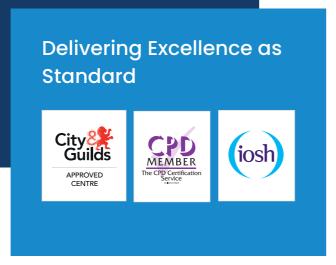
TrainingFacilities







We deliver over 100 accredited training courses from our two ideally situated centres in York, and Slough. These offer facilities for both the North and South of the UK. We also have access to training locations in Scotland where we can deliver a select number of our courses



as well as the ability to deliver bespoke on-site training.



Our head office is conveniently based at York Business Park, on the outskirts of York city centre, it is easily accessible by car (with direct links to the M1/A1/A59/A64) or public transport (less than 4 miles away from York railway station).

This well-established training centre accommodates a number of practical assessment areas for a highly interactive and participative training experience, alongside comfortable classrooms.

York Head Office: PPL House, Opus Avenue, York Business Park, York, YO26 6BL



To meet training demand across the UK, we successfully extended our course offering and consultancy services with a training facility in Slough. This is ideally situated and in reach of Central London and Heathrow airport.

This modern training facility covers 15,000 square feet, including 7,000 square feet of practical assessment training space, which is filled with the latest specialist equipment.

Southern Office: PPL House, 468 Malton Avenue, Slough Trading Estate, Slough, SL1 4QU

Our Clients







We work with some of the largest airport, facilities management, health and safety, and healthcare estates companies across the UK and overseas. We also work heavily with the public sector including the local Government and the Ministry of Defence (MOD).



View a selection of our Aeronautical Ground Lighting training clients opposite.



Working
with 30+
UK and Irish
Airports





































AGL Training Client Feedback

We value reviews from our delegates and use the feedback to help improve our service.

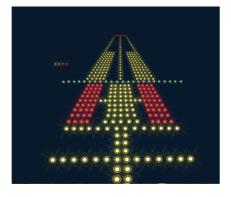


"Another Excellently Delivered Course by PPL"

From the initial contact to the quick delivery of my certificate the experience with PPL was as good as always. They get back to you very quickly and when onsite they are happy to deal with any other enquires you may have.

Adam - Amey





Would Definetely Recommend Attending"

Tony Clarke was an excellent instructor and passed on his knowledge of agl very well. Good practical exercises to get you out of the classroom. Would definitely recommend attending.

Shaun - Dyer and Butler



Alderney Airport

"Excellent and very well presented course"

Very informative and Helpful. Great Course.

0



"Excellent Courses & Tutors"

lecturers were very friendly and knowledgable the practical sessions were informative.

e9

0

e9



"Would Definitely Recommend and go Back"

The courses were very good tutors are really knowledgeable.

Leeds Bradford Airport **e**9



"Targeted at the Right Level"

The lectures and course material were excellent. The lecturer was very knowledgeable and presented the course content professionally.



"Well Thought Out Course"

Very interesting, and the way it was taught made it easy to understand. A well thought out course, and practical made it better.



"Good Course to Refresh AP Skills and Procedures."

Good practical on safety isolations and theory on the different systems.

Edinburgh Airport



""Excellent and very well presented course."

Very informative and Helpful. Great Course.

Lee - Amey



"Friendly and Helpful"

All involved were friendly and helpful and the training was informative and ran well. Need this to further my progression in this field.



"Good Coverage of the Topic"

Completed two sessions in 3 weeks and both were 5 star. Steve adds his little twist to make it a little more exciting. You also get fed well.

0

RAF Mildenhall



View Our Latest Reviews

PPL Engineering Services

Assisting Towards Compliance

Authorising Engineer Consultancy

Provision and Review of Safety Rules

Electrical Design Services

Discrimination Studies

Asset/Condition Surveys

CDM Support



PPL Engineering Services provide independent and professional advice to assist, and support your company.

We work as Authorising Engineers or independent consultants for

Engineering Systems, where a Safe System of Work (SSoW) is required to ensure compliance with Statutory Regulations.

Meet Our Engineering Team



Our team cover areas such as writing and the implementation of safety rules, to auditing and appointing Authorised Persons. They also provide a wealth of experience across different industries including Airports, Healthcare and the MOD. We currently provide Authorising Engineer services for several Airports and have provided Safe Systems of Work and safety rules for these and many NHS Trusts, and commercial organisations throughout the UK.



James Godwin
(IEng MIET MIHEEM)

Head of Engineering Services



Perry Dixon
(MEng BEng (Hons) CEng MIMechE)
Authorising Engineer



Aaron People (FdEng LCGI EngTech MIET) Authorising Engineer



Gary Cooper (MIHEEM Tech IOSH MSOE MIPlantE) Authorising Engineer



Steve Martin
(BSc (Hons) | Eng MIET LCGI)
Authorising Engineer



Jackie Brigham

Business Support Coordinator

Contact Our Friendly Team

Find out how we can assist in meeting your specific requirements.

Call: 0333 121 1215
Email: info@ppltraining.co.uk

TRAINING COURSES AVAILABLE NATIONWIDE

York Training Centre

Opus Avenue, York Business Park, York, YO26 6BL

Slough Training Centre

468 Malton Avenue, Slough Trading Estate, Slough, SL1 4QU

Bespoke & On-site Training

We can run bespoke training courses throughout the UK



Scan this QR code to view our courses and dates online