

Training, Assessment, Consultants for Hazardous & Industrial Areas

EPIT provides specialist training, assessment and consultancy services for engineers working in hazardous and industrial environments, in accordance with the current national and international standards. Our extensive portfolio comprises of competency based courses, technical training, assessment and consultancy.

EPIT is a certified CompEx centre and offers the nationally recognised courses to electrical and instrumentation technicians. The 5 day CompEx and 2 day Refresher courses are delivered in our purpose built training facility at Blackburn, Aberdeen. The practical area is designed for selecting and installing Ex equipment in hazardous areas and guidance is given in the process and completion of cable glands, for all locations.

The Competency Plus Programme, which consists of a range of Ex, ATEX, HV/LV and Electrical Safety Courses are accredited by City & Guilds and are presented in our tailor-made facility which is stocked with a wide variety of Ex demonstration modules. These courses can also be carried out on any site worldwide, and can be customised to suit specific requirements.

For companies which require to attain compliance with the Dangerous Substances and Explosive Atmosphere Regulations (DSEAR), we offer a consultation service including area classification, risk assessments & verification of equipment and installations in hazardous areas. In addition, we offer full consultancy on assessment for compliance with CE and UKCA Marking criteria as stipulated in the relevant EC and UK Directives, including the conformity of hazardous area equipment in accordance with ATEX and product certification.













Explosion Protection International Training Ltd (EPIT)
Blackburn Industrial Estate, Aberdeen AB21 ORX
Tel: 01224 798635, email: info@epitgroup.com
www.epitgroup.com







Training, Assessment, Consultants for Hazardous & Industrial Areas

These services are provided by a team of highly qualified professionals, each with many years of industrial experience and expertise, covering a diverse range of subjects, including ATEX, IEC, EAC, CSA, CE and UKCA marking.

EPIT have training facilities in the UK, Oman and Trinidad all of which have lecture rooms and hands-on practical areas that are stocked with a wide variety of Ex demonstration modules.

Additionally, we offer a range of standard and bespoke E-Learning courses for a number of Ex related topics, accessible remotely through our easy-to-use learning management systems (LMS).

EPIT have a demonstrated history of supporting global training needs through the online delivery of certified courses to a number of clients in the oil & gas and electrical industries.

We have an extensive working relationships with many of the leading operating and service companies worldwide and have carried out training of their personnel in our custom built facilities, to date we have trained, assessed and certificated over 20,000 personnel.

Our experience within the industry is exemplary and we are committed to ensuring that we remain a first class partner for our clients.















Training, Assessment & Consultancy for Hazardous and Industrial Areas

CompEx Scheme

- CompEx Ex01 Ex04
- CompEx Refresher Ex01 Ex04
- CompEx ExF

Maritime & Coastguard Agency

- STCW High Voltage Training A-III/1 (Operational)
- STCW High Voltage Training A-III/2 (Management)

Competency Plus Programme (City & Guilds)

- HV/LV Safe Working Practices Awareness
- HV/LV Safe Working Practices Guidance
- High Voltage Safe Working Practices ROV's
- HV & LV Electrical Protection
- Explosion Protection Awareness
- Explosion Protection Awareness Dusts
- Explosion Protection Refresher
- Explosion Protection Guidance
- Explosion Protection Guidance Mechanical
- Explosion Protection & ATEX Awareness
- Explosion Protection & Inspection
- Explosion Protection Installation & Inspection
- ATEX Directives & CE Marking Awareness
- ATEX Directives & CE Marking Guidance
- Cable Glanding & Installation Practice
- A.C Motors
- Ex Motor Repair & Overhaul
- Ex Motor Repair & Overhaul Advanced
- Electricity at Work Regulations 1989
- IET Wiring Regulations 18th Edition (BS7671:2018)
- IET Wiring Regulations 18th Update Edition (BS7671:2018)
- Management, Inspection & Testing of Portable Electrical Equipment (PAT Testing)

Operator Specific Programs

- Shell Electrical Safety Rules (LV, LV&HV)
- Chrysaor Electrical Codes of Practice (LV, LV&HV)
- CNOOC Electrical Safety Awareness

Professional Services

- CE and UKCA Marking
- DSEAR Surveys
- Hazardous Area Classification
- Product Certification
- Area Classification
- ATEX QA Assessment
- Competency Assessment





ATEX















CompEx Ex01 – Ex04

Course Overview

The course provides competence based training and assessment for electrical and instrument technicians working in hazardous areas. Practical training and assessment takes place within a realistic simulated working environment which allows operatives to meet national competence standards.

Course Content

- General principles, ignition properties and apparatus protection
- Standards, Certification and marking
- Flameproof Ex'd' protection
- Increased safety Ex'e',
- Type Ex'n' protection
- Pressurisation Ex'px', Ex'py' and Ex'pz' protection
- Intrinsic safety Ex 'ia', 'ib' and 'ic' protection
- Other methods of protection, Ex'o', Ex'q' and Ex'm'
- Combined (hybrid) methods of protection
- Wiring systems, enclosure entries, cable glanding and earthing
- Inspection and maintenance to EN / IEC 60079-17
- Sources of ignition
- Induction to competence validation testing
- Permit to work system and safe isolation
- **Practical Assessment**

Target Audience

Personnel with an electrical or instrument background involved in the selection, installation, inspection and maintenance of electrical/instrumentation equipment for use in potentially hazardous areas onshore and offshore.

Venue Blackburn Industrial Estate Aberdeen

UK AB21 ORX

Tel: 01224 798635

Course Times 9.00am - 5.00pm

Course Price Price on application

Duration

5 - Days

Lunch Included **Dates**

Dates on application

Min/Max delegates

6/10

Special Requirements

PPE

Proof of all electrical qualifications

Certification

CompEx - National Certificate of Competence issued by JTL. Validity 5 Years



CompEx Refresher Ex01 – Ex04

Course Overview

The course provides update and refresher training and assessment for electrical and instrument technicians working in hazardous areas. Theoretical selection and fault identification training and assessment takes place within a number of simulated situations which allows operatives to continue to meet national competence standards.

Course Content

- General principles, ignition properties and apparatus protection
- Standards, Certification and marking
- Flameproof Ex'd' protection
- Increased safety Ex'e',
- Type Ex'n' protection
- Pressurisation Ex'px', Ex'py' and Ex'pz' protection
- Intrinsic safety Ex 'ia', 'ib' and 'ic' protection
- Other methods of protection, Ex'o', Ex'q' and Ex'm'
- Combined (hybrid) methods of protection
- · Wiring systems, enclosure entries, cable glanding and earthing
- Inspection and maintenance to EN / IEC 60079-17
- Sources of ignition
- Equipment selection
- Fault finding exercises
- Assessment

Target Audience

Personnel with an electrical or instrument background involved in the selection, installation, inspection and maintenance of electrical/instrumentation equipment for use in potentially hazardous areas onshore and offshore, whose CompEx certificate is approaching expiry.

Venue Blackburn Industrial Estate Aberdeen UK AB21 ORX Tel: 01224 798635	Course Times 9.00am - 5.00pm	Course Price Price on application
Duration 2 - Days	Lunch Included	Dates Dates on application
Min/Max delegates 6/12	Special Requirements None	Certification CompEx - National Certificate of Competence issued by JTL. Validity 5 Years



CompEx ExF

Course Overview

The course provides a basic understanding of the requirements of safe working practices within a potentially explosive atmosphere.

Course Content

- Area classification
- Ignition properties
- **ATEX Directives**
- EN / IEC standards
- Ingress protection
- Methods of protection
- Online assessment (closed book)

Target Audience

Personnel looking to obtain an appreciation of the hazards and safe working practices associated with working in potentially explosive atmospheres.

Venue Blackburn Industrial Estate Aberdeen IJK AB21 ORX

Tel: 01224 798635

Course Times 9.00am - 5.00pm **Course Price** Price on application

Duration 1 - Day

Min/Max delegates 4/12

Lunch Included

Dates on application

Special Requirements

None

Certification

Dates

CompEx - National Certificate of Competence issued by JTL. Validity 5 years



STCW High Voltage Training A-III/1 (Operational Level)

Course Overview

This Maritime & Coastguard Agency approved course gives seafarers the essential education and training in high voltage installations to meet the knowledge, understanding and proficiency requirements as set out in STCW 2010 Table A-III/1 for electrical, electronic and control engineering at the operational level.

Course Content

- HSE and Electricity at Work Regulations
- Risk Assessment
- Competency Levels
- Properties of Earth Faults
- Dangers of contact with electricity
- Switching Plans
- Permit to Work Requirements
- HV / LV Distribution Systems and Protection

Target Audience

Suitable for marine engineer officers, electrical or electro-technical officers, engineer surveyors and marine superintendents who require certification in line with the obligations of the 2010 Manila Amendments to the STCW Code.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on application

Aberdeen UK AB21 ORX

Duration Lunch Dates

1 - Day Included Dates on application

Min/Max delegates Entry Requirements Certification

4/12 No pre-requisites required A Certificate of Training will be provided.



STCW High Voltage Training A-III/2 (Management Level)

Course Overview

This Maritime & Coastguard Agency approved course gives seafarers who are responsible for the safe control and management of high voltage (HV) power systems, the essential education and training in HV installations to meet the knowledge, understanding and proficiency requirements as set out in STCW 2010 Table A-III/2 for electrical, electronic and control engineering at the management level.

Course Content

- HSE and Electricity at Work Regulations
- Risk Assessment
- Competency Levels
- Properties of Earth Faults
- Dangers of contact with electricity
- Switching Plans
- Permit to Work Requirements
- HV/LV Distribution Systems and Protection
- HV Breakers and Control Systems
- LV Starters and Control Systems
- Typical Networks
- Earth Point and Neutral Distribution
- Generator Synchronisation
- HV Earthing Provisions
- Practical Switching Assessment

- Testing of HV Systems
- Fault Finding on HV / LV Systems
- Live Working Practices
- Reasons for Protection Systems
- Requirements for Relay Co-ordination/Discrimination
- Faults and Fault Levels
- Protection Components
- Voltage & Current Transformers
- HRC Fuses
- Electro-mechanical Relays
- Electronic & Microprocessor Relays
- Equipment Protection for Generators, Transformers & Motors
- Written Assessments

Target Audience

Suitable for Chief Engineer Officers, Officers, Second Engineers, Engineer Surveyors, Marine Superintendents, serving Marine Electricians and ETO's who require certification in line with the obligations of the 2010 Manila Amendments to the STCW Code.

Course Times Venue **Course Price** Blackburn Industrial Estate 9.00am - 5.00pm Price on application Aberdeen UK AB21 ORX **Duration** Lunch **Dates** 5 - Day Included Dates on application Min/Max delegates **Entry Requirements** Certification 4/8 i. Prior electrical experience A Certificate of Training will in a shipboard environment or, be provided. ii. 12 months sea time as EOOW or, iii. Part of an initial training programme



HV / LV Safe Working Practices Awareness

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an introduction of safe operation techniques for high voltage and low voltage systems.

The course provides examples of mandatory paperwork, legislation and safe isolation procedures.

Course Content

- HSE and Electricity at Work Regulations
- Risk Assessment
- Competency Levels
- Properties of Earth Faults
- Dangers of contact with electricity
- Switching Plans
- Permit to Work Requirements
- HV / LV Distribution Systems and Protection
- Written Assessment

Target Audience

Personnel with electrical, instrument or mechanical background within industry who require a basic understanding of HV /LV safe working practices.

Venue
Blackburn Industrial Estate
Aberdeen
UK
AB21 ORX

Course Price
Price on application

Tel: 01224 798635

Duration 1 - Day

Included

Lunch

Course Times

9.00am - 5.00pm

DatesDates on application

Min/Max delegates 4/8

Special RequirementsNone

CertificationA certificate of competence will be provided.
Validity 5 years



HV / LV Safe Working Practices Guidance

Course Overview

Our competence based course, accredited by City & Guilds, will provide an understanding of safe operation techniques for high voltage and low voltage systems.

Included in the course are examples of mandatory documentation, switching procedures, safe isolation procedures and detailed descriptions of equipment operation.

Course Content

- HSE and Electricity at Work Regulations
- Risk Assessment
- Competency Levels
- Properties of Earth Faults
- Dangers of contact with electricity
- Switching Plans
- Permit to Work Requirements
- HV / LV Distribution Systems and Protection
- HV Breakers and Control Systems
- LV Starters and Control Systems
- Typical Networks
- Earth Point and Neutral Distribution
- Generator Synchronisation
- HV Earthing Provisions
- Testing of HV Systems
- Fault Finding on HV / LV Systems
- Live Working Practices
- Practical Switching Assessment
- Written Assessment

Target Audience

Personnel with electrical, instrument or mechanical background within industry who are involved in the installation, maintenance and testing of HV/LV equipment.

VenueBlackburn Industrial Estate
Aberdeen
UK

AB21 ORX

4/8

Tel: 01224 798635

Course Times

9.00am - 5.00pm

Course Price

Price on application

Duration Lunch Dates

None

3 - Day Included Dates on application

Min/Max delegates Special Requirements Certification

A Certificate of Competence will be provided. Validity 5 Years.

2017 www.epitgroup.com CP12



High Voltage Safe Working Practices – ROV's

Course Overview

This course is designed to provide training on the safe operation techniques for high voltage and low voltage electrical systems associated with Remotely Operated Vehicles (ROV's).

The course provides examples of mandatory paperwork, legislation and safe isolation procedures.

Course Content

- HSE and Electricity at Work Regulations
- Dangers of contact with electricity
- Permit to Work requirements
- HV / LV distribution systems and protection
- Earthing
- Testing, fault-finding & maintenance
- Practical safe isolation exercises
- Written assessment

Target Audience

All personnel involved with the operation of ROV's, electrical, instrument or mechanical personnel, who require an understanding of HV /LV safe working practices.

Venue Blackburn Industrial Estate Aberdeen UK AB21 ORX Tel: 01224 798635	Course Times 9.00am - 5.00pm	Course Price Price on application
Duration 1 - Day	Lunch Included	Dates Dates on application
Min/Max delegates 4/8	Special Requirements None	Certification A certificate of training will be provided. Validity 5 years



HV & LV Electrical Protection

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an understanding of the principles of the operation of power system protection relays.

The course includes an overview of power systems, faults, short circuit calculations (simplified), components of power system protection schemes, the testing and setting procedures required when installing and maintaining protection relays in high & low voltage systems and practical sessions on selected protection relays.

Course Content

- Reasons for Protection Systems
- Requirements for Relay Co-ordination/Discrimination
- Faults and Fault Levels
- Protection Components
- Voltage & Current Transformers
- HRC Fuses
- Electro-mechanical Relays
- Electronic & Microprocessor Relays
- Equipment Protection for Generators, Transformers & Motors
- Practical Exercises
- Written Assessment

Target Audience

Personnel with electrical or instrument background within industry who are involved in HV/LV systems with a need to know the practical aspects of protection relay installation and maintenance.

Venue Blackburn Industrial Estate Aberdeen UK AB21 ORX

Tel: 01224 798635

Duration

2 - Day

Min/Max delegates 4/8

Course Times

9.00am - 5.00pm

Lunch

Included

Special Requirements

None

Course Price

Price on application

Dates

Dates on application

Certification

A certificate of competence will be provided Validity 5 Years



Explosion Protection Awareness

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an introduction to hazardous area concepts for the use of electrical equipment. The course explains the protection methods from manufacture to installation, inspection and maintenance in accordance with the relevant IEC 60079 standards.

Course Content

- Area classification
- Ignition properties
- EN / IEC standards for electrical and instrumentation
- Ingress protection
- Flameproof
- Increased safety
- 'n' types of protection
- Pressurization
- Intrinsic safety
- Hybrid protection
- Written assessment

Target Audience

Personnel with electrical, instrument or mechanical background within industry who require a basic understanding of explosion protection equipment and systems.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on applicationAberdeen

UK AB21 ORX

Tel: 01224 798635

DurationLunchDates1 - DayIncludedDates on application

1 - Day Dates on application

Min/Max delegates Special Requirements Certification

4/12 None A Certificate of Competence will be provided.

Validity 5 years



Explosion Protection Awareness – Dusts

Course Overview

This City & Guilds accredited course is designed to give an understanding in hazardous area dust environments and the use of equipment in them. The course provides information on area classification and explains the equipment protection methods from selection to installation, inspection and maintenance in accordance with the relevant EN & IEC standards.

Course Content

- ATEX Directives
- EN & IEC standards
- Area classification
- Ignition properties
- Ingress protection
- Equipment methods of protection electrical & non-electrical
- Equipment certification & marking
- Inspection & maintenance of equipment
- Written assessment

Target Audience

Personnel within industry who require an understanding of potentially explosive dust environments, the classification of them, and explosion protection equipment and systems that can be used in them.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on applicationAberdeen

AB21 ORX

UK

Tel: 01224 798635

Duration Lunch Dates

1 - Day Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 None A Certificate of Training will be provided.

Validity 5 years



Explosion Protection Refresher

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an update in the IEC 60079 standards for selection, installation and inspection of electrical equipment for use in potentially hazardous areas. The course will provide equipment samples, illustrating high standards of practice.

Course Content

- Area classification
- Ignition properties
- EN / IEC standards for electrical and instrumentation
- Ingress protection
- Flameproof
- Increased safety
- 'n' types of protection
- Pressurization
- Intrinsic safety
- Hybrid protection
- Cable types, glanding, earthing
- Inspections, maintenance for electrical and instrumentation
- Written assessment

Target Audience

Personnel with electrical, instrument or mechanical background within industry who require an update in the current EN / IEC standards.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on application

Aberdeen UK AB21 ORX

Tel: 01224 798635

Duration Lunch Dates

2 - Days Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 None A Certificate of Competence will be provided.

Validity 5 Years



Explosion Protection Guidance

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an understanding in hazardous area concepts for the use of electrical equipment. The course explains the protection methods from manufacture to installation, inspection and maintenance as per the requirements of the CENELEC, CEN and IEC standards for electrical and non-electrical equipment.

Course Content

- Area classification
- Ignition properties
- Definitions and terms
- EN / IEC standards for electrical and instrumentation
- Ingress protection
- Flameproof
- Increased safety
- 'n' types of protection
- Pressurization
- Intrinsic safety
- Hybrid protection
- ATEX certification, documentation, labelling
- Cable types, glanding, earthing
- Inspections, maintenance for electrical and instrumentation
- Additional international standards
- References to NEC 500, NEC 505 zoning
- Written assessment

Target Audience

Personnel with electrical, instrument or mechanical background within industry who require an understanding in the selection of equipment for hazardous areas and an overview of the ATEX Directives.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on applicationAberdeen

Tel: 01224 798635

UK

AB21 ORX

DurationLunchDates3 - DaysIncludedDates on application

Min/Max delegates Special Requirements Certification

4/12 None A Certificate of Competence will be provided.
Validity 5 Years.



Explosion Protection Guidance – Mechanical

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an understanding in hazardous area concepts for the use of non-electrical (mechanical) equipment. The course explains the protection methods from manufacture to installation and inspection, maintenance, repair and overhaul of equipment as per the requirements of the CEN and IEC standards for non-electrical equipment.

Course Content

- ATEX certification, documentation, labelling
- Risk Assessment
- Area classification
- Ignition properties
- EN / IEC standards for non-electrical (mechanical)
- Ingress protection
- Non-Electrical Equipment 'h'
- Flow restriction 'fr'
- Flameproof 'd'
- Constructional safety 'c'
- Control of ignition source 'b'
- Liquid emersion 'k'
- Pressurisation 'p'
- Hybrid protection
- Inspections & maintenance for non-electrical (mechanical)
- Repair & overhaul of equipment
- Written assessment

Target Audience

Personnel with a mechanical background within industry who require an understanding in the selection of equipment for hazardous areas and an overview of the ATEX Directives.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on application

Aberdeen UK AB21 ORX

Tel: 01224 798635

Duration Lunch Dates

2 - Days Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 None A Certificate of Competence will be provided.

Validity 5 Years.



Explosion Protection & ATEX Awareness

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an understanding in hazardous area concepts for the use of electrical equipment. The course explains the protection methods from manufacture to installation, inspection and maintenance as per the requirements of the CENELEC, CEN and IEC standards for electrical and non-electrical equipment.

The compliance requirements for the ATEX Directives and CE Marking are also covered.

Course Content

- Area classification
- Ignition properties
- Definitions and terms
- EN / IEC standards for electrical and instrumentation
- Ingress protection
- Flameproof
- Increased safety
- 'n' types of protection
- Pressurization
- Intrinsic safety systems
- Hybrid protection
- ATEX certification, documentation, labelling
- Cable types, glanding, earthing
- Inspections, maintenance for electrical and instrumentation
- Additional international standards
- References to NEC 500, NEC 505 zoning
- Guidelines in ATEX Directives
- Written assessment

Target Audience

Personnel with electrical, instrument or mechanical background within industry who require an understanding in the selection of equipment for hazardous areas. Suitable for engineers working on projects and pre-planning of inspection programmes to EN / IEC 60079-17 and the implications of DSEAR for maintenance.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on application

UK AB21 ORX

Aberdeen

Tel: 01224 798635

Duration Lunch Dates

4 - Days Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 None A Certificate of Competence will be provided.

Validity 5 Years

2017 www.epitgroup.com CP4A



Explosion Protection & Inspection

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an understanding in hazardous area concepts for the use of electrical equipment. The course explains the protection methods from manufacture to installation, inspection and maintenance as per the requirements of the CENELEC, CEN and IEC standards for electrical and non-electrical equipment.

A practical understanding in the selection of equipment is covered including inspection and maintenance procedures.

Course Content

- Area classification
- Ignition properties
- Definitions and terms
- EN / IEC standards for electrical and instrumentation
- Ingress protection
- Flameproof
- Increased safety
- 'n' types of protection
- Pressurization
- Intrinsic safety
- Hybrid protection
- ATEX certification, documentation, labelling
- Cable types, glanding, earthing
- Inspections, maintenance for electrical and instrumentation
- Additional international standards
- References to NEC 500, NEC 505 zoning
- Practical inspection reporting for electrical and instrumentation
- Written assessment

Target Audience

Personnel with electrical, instrument or mechanical background within industry who require an understanding in the use of equipment for hazardous areas. Also suitable for technicians engaged in the procedures for inspections to EN / IEC 60079-17 and in carrying out effective on-site maintenance.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on application

Aberdeen UK AB21 ORX

Tel: 01224 798635

Duration Lunch Dates

4 - Days Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 PPE A Certificate of Competence will be provided Validity 5 Years.

2017 www.epitgroup.com CP4P



Explosion Protection Installation & Inspection

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an understanding in hazardous area concepts for the use of electrical equipment. The course explains the protection methods from manufacture to installation, inspection and maintenance as per the requirements of the CENELEC, CEN and IEC 60079 standards for electrical and non-electrical equipment.

A practical understanding in the selection of equipment is covered along with the choice and installation of cables and glands.

Course Content

- Area classification
- Ignition properties
- Definitions and terms
- EN / IEC standards for electrical and instrumentation
- Ingress protection
- Flameproof
- Increased safety
- 'n' types of protection
- Pressurization
- Intrinsic safety
- Hybrid protection
- ATEX certification, documentation, labelling
- Cable types, glanding, earthing
- Inspections, maintenance for electrical and instrumentation
- Additional international standards
- References to NEC 500, NEC 505 zoning
- Practical reporting for electrical and instrumentation
- Installation & termination of cables and glands
- Written assessment

Target Audience

Personnel with electrical, instrument or mechanical background within industry who require an understanding in the selection and installation of equipment for hazardous areas. Also suitable for technicians engaged in the procedures for inspections to EN / IEC 60079-17 and in carrying out effective on-site maintenance.

Venue

Blackburn Industrial Estate

Aberdeen UK AB21 ORX

Tel: 01224 798635

Course Times

9.00am - 5.00pm

Course Price

Price on application

Duration

5 - Days

Min/Max delegates

4/12

Lunch

Included

Dates

Dates on application

Special Requirements

PPE

Certification

A Certificate of Competence will be provided. Validity 5 Years



ATEX Directives & CE Marking Awareness

Course Overview

Our competence based course, accredited by City & Guilds, is designed to advise on the current legislative requirements of the ATEX Directives, CE Marking and the supporting documentation for electrical and non-electrical equipment for use in potentially explosive atmospheres.

The course will provide an understanding of the compilation of technical files, certification and labelling of equipment.

Course Content

- Products within scope
- Zones of use, equipment groups, conformity categories
- Designation of notified bodies
- Documents issued by notified body and manufacturer
- EU-type examination and declaration of conformity
- Internal control of production
- Essential health and safety requirements
- Ignition risk assessment
- Applicable harmonised standards
- Structure of the technical files
- CE marking of equipment and other references
- Reference to Quality Assurance
- Written Assessment

Target Audience

Personnel involved in manufacturing, assembly, supply and use of equipment for applications in hazardous areas. Suitable for project engineers, on-site installers and Health & Safety personnel, who require an understanding of the Directives.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on application

Aberdeen UK AB21 ORX

Tel: 01224 798635

Duration Lunch Dates

1 - Day Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 None A Certificate of Competence will be provided.
Validity 5 Years



ATEX Directives & CE Marking Guidance

Course Overview

Our competence based course, accredited by City & Guilds, is designed to advise on the current legislative requirements of the ATEX Directives, CE Marking, and the supporting documentation for electrical and non-electrical equipment for use in potentially explosive atmospheres.

The course will provide a practical understanding in the construction of technical files, as well as providing sample documentation for the certification, labelling of equipment and the conformity assessment procedures.

Course Content

- Products within scope
- Zones of use, equipment groups, and categories
- Designation of notified bodies
- Documents issued by notified body and manufacturer
- EU Type-examination and declaration of conformity
- Internal control of production
- Essential health and safety requirements
- Ignition risk assessment and reporting
- Applicable harmonised standards
- Structure of the technical files Practical exercise
- CE marking of equipment and other references
- Quality Assurance
- Consideration of PED, Machinery, and EMC Directives
- Reference to the relative parts of DSEAR
- Written Assessment

Target Audience

Personnel involved in manufacturing, assembly and supply of equipment; on-site employers who require an understanding of DSEAR for the safety of workers and the use of equipment potentially at risk in hazardous areas.

Suitable for project engineers, installers and Health & Safety personnel, who require meeting with the compliances of the Directives.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on application

Aberdeen UK

AB21 ORX Tel: 01224 798635

Duration Lunch Dates

2 - Day Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 None A Certificate of Competence will be provided.
Validity 5 Years.



Cable Glanding & Installation Practice

Course Overview

Our competence based course, accredited by City & Guilds, is designed to provide instruction in the selection and development of cable glanding and progressing to the assembly and installation of different manufactured types in the workshop.

Course Content

- Construction of low voltage cable types and the requirement for termination in apparatus
- Application of the different cable gland types for apparatus
- Cable gland selection for protection methods Ex d, Ex e, Ex i and Ex nR
- Assembly requirements of cable gland types to maintain the integrity of protection methods
- Carry out practical gland assembly for the protection methods
- Repair of gland assembly faults, where necessary
- Installation and termination of cables to acceptable standards

Target Audience

Personnel with electrical, instrument or mechanical background within industry who require an understanding of selection and practice in assembly of cable glands.

Course Price

Price on application

Venue Course Times
Blackburn Industrial Estate 9.00am - 5.00pm
Aberdeen
UK
AB21 0RX

Tel: 01224 798635

Duration Lunch Dat

2- Day Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 PPE A Certificate of Competence will be provided.

Validity 5 Years.



A.C. Motors

Course Overview

Our competence based course, accredited by City & Guilds, is designed to introduce delegates to the basic principles of A.C. Motors, direct on line and star/delta starting and provides training and assessment for fault finding and practical inspection & testing of equipment.

Course Content

- Basic principles of A.C. Motors
- Star Delta Motor Starting
- Testing requirements of Motors and Control Systems
- Practical "DEAD" testing of motors
- Control systems

Target Audience

Electrical and non-electrical personnel involved in the inspection and testing of electric motors and any associated equipment, e.g. pumps and hydraulic systems etc.

VenueBlackburn Industrial Estate
Aberdeen
UK
AB21 ORX

Tel: 01224 798635

Course Times 9.00am - 5.00pm **Course Price**Price on application

Duration

1 - Day

Lunch Included

Dates

Dates on application

Min/Max delegates

4/10

Special Requirements

None

Certification

A certificate of competence will be provided. Validity 5 Years.



Ex Motor Repair & Overhaul

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an understanding in hazardous area concepts for the repair and overhaul of Ex electric motors. The course explains quality assurance requirements and various protection methods from manufacture to repair, overhaul, inspection and maintenance as per the of the CENELEC and IEC 60079 standards for electrical equipment.

Course Content

- Area classification
- Ignition properties
- Definitions and terms
- EN / IEC & NEC standards for electrical equipment
- Ingress protection & NEMA Codes
- Flameproof
- Increased safety
- 'n' types of protection
- Pressurization
- Certification, documentation & labelling
- Inspections & maintenance for electrical equipment
- Quality assurance requirements
- Appreciation of manufacturers requirements
- Practical Exercises
- Written assessment

Target Audience

Personnel with electrical or mechanical background within industry who require to reach competency and have an understanding in the repair and overhaul of motors for hazardous areas. Also suitable for technicians engaged in the procedures for inspections and managers/supervisors involved with compliance of manufacturers documentation and quality assurance requirements.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on applicationAberdeen

UK AB21 ORX

Duration Lunch Dates

3 - Days Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 PPE A Certificate of Competence will be provided.
Validity 5 Years



Ex Motor Repair & Overhaul - Advanced

Course Overview

Our competence based course, accredited by City & Guilds, is designed to give an in-depth understanding of the repair and overhaul of Ex electric motors for use in potentially explosive atmospheres. The course explains the inspection and repair requirements for different types of motors and the various tests that may need to be conducted to assist with condition monitoring. The course content also includes the legal and quality assurance responsibilities as detailed in the relevant CENELEC and IEC 60079 standards.

Course Content

- Repair methods of Ex d, e & n type motors
- Performance tests—magnetic flux, partial discharge
- Motor load & no-load tests
- Motor Inspection,
 - Mechanical: Ext/int. cooling, coupling, oil/greasing, bearing/housing
 - Electrical: Insulation, winding, PI, PD, phase rotation, auxiliary equipment
- Rewinding & windings treatment
- Rotor & stator types, checks, failures
- Rotor lining out & balancing
- Legal requirements & safe working practices
- Certification, documentation (reports & records) & labelling
- Quality assurance requirements
- Appreciation of manufacturers requirements
- Practical disassembly & Assembly of motors
- Written assessment

Target Audience

Personnel with electrical or mechanical background within industry who require to advance their existing competency and knowledge of the repair and overhaul of motors for use in hazardous areas. Also suitable for engineers/technicians engaged in the procedures for inspections and managers/supervisors involved with compliance of manufacturers documentation and quality assurance requirements.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on application

Aberdeen UK AB21 ORX

Duration Lunch Dates

3 - Days Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 PPE A Certificate of Competence will be provided.
Validity 5 Years



Electricity at Work Regulations 1989

Course Overview

Our competence based course, accredited by City & Guilds, provides an understanding of the Electricity at Work Regulations 1989.

Course Content

- Electrical Systems, work activities and protective equipment
- The strength and capabilities of electrical equipment
- Electrical equipment in adverse or hazardous environments
- Insulation and protection
- Earthing
- Integrity of referenced conductors
- Suitability of electrical connections
- Protection from overload and short circuit currents
- Disconnection and isolation
- Working Live
- Working space, access and lighting
- The concept of competence in the workplace

Target Audience

This course is essential for anyone involved in any form of electrical work including those who are responsible for supervising the electrical work activities of others.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on applicationAberdeen

AB21 ORX

Tel: 01224 798635

UK

Duration Lunch Dates

1 - Day Included Dates on application

Min/Max delegates Special Requirements Certification

4/12 None A certificate of competence will be provided.
Validity 5 Years.



IET Wiring Regulations 18th Edition (BS 7671: 2018)

Course Overview

This City & Guilds three day electrical course will enable you to gain familiarity with the layout, content and application of 18th Edition wiring regulations (BS7671: 2018), each delegate receives their own copy of this manual on attendance (included in course cost).

The course ensures you are up-to-date with the latest industry regulations on wiring and the safe use and operation of electrical equipment and systems. This programme is entirely theory based and is completed by undertaking an online multiple choice examination.

Course Content

- Introduction to BS7671
- Scope, Object and Fundamental Principles
- Definitions
- Assessment of General Characteristics
- Protection for Safety
- Selection and Erection of Equipment
- Inspection and Testing
- Special Installations or Locations
- Appendices

Target Audience

This course is primarily aimed at practicing electricians, electrical contractors and other allied professionals e.g. surveyors, consultants and other trades needing to update and enhance their understanding of IEE Wiring Regulations.

Certification in this course can progress candidates to the Level 3 Award in the Initial Verification and Certification of Electrical Installations (2394) and Level 3 Award in the Periodic Inspection, Testing and Certification of Electrical Installations (2395).

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on application

Aberdeen UK AB21 ORX

Duration Lunch Dates

3 - Day Included Dates on application

Min/Max delegatesSpecial RequirementsCertification4/12NoneCity & Guilds 2382-18



IET Wiring Regulations 18th Edition Update (BS 7671: 2018)

Course Overview

This City & Guilds one day update course will provide you with an overview of the key changes in 18th Edition Wiring Regulations (BS7671: 2018), each delegate receives their own copy of this manual on attendance (included in course cost).

The course ensures you are up-to-date with the latest industry regulations on wiring and the safe use and operation of electrical equipment and systems. This programme is entirely theory based and is completed by undertaking an online multiple choice examination.

Course Content

- Introduction to BS7671
- Overview of 18th Edition manual layout, including;
 - Scope, Object and Fundamental Principles
 - Definitions
 - Assessment of General Characteristics
 - Protection for Safety
 - Selection and Erection of Equipment
 - Inspection and Testing
 - Special Installations or Locations
 - Appendices
- Overview of the key changes from 17th Edition 3rd Amendment to the 18th Edition
- City & Guilds 2382-18 multiple choice exam

Target Audience

This course is aimed at practicing electricians, electrical contractors and other allied professionals e.g. surveyors, consultants and other trades who currently hold a valid 17th Edition Amendment 3: 2015 qualification and require updating to the 18th Edition.

Certification in this course can progress candidates to the Level 3 Award in the Initial Verification and Certification of Electrical Installations (2394) and Level 3 Award in the Periodic Inspection, Testing and Certification of Electrical Installations (2395).

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on applicationAberdeen

UK AB21 0RX

DurationLunchDates1 - DayIncludedDates on application

Min/Max delegatesSpecial RequirementsCertification4/12NoneCity & Guilds 2382-18



Management, Inspection & Testing of Portable Electrical Equipment

Course Overview

This City & Guilds course provides delegates with the theoretical and practical experience in the implementation and management of a formal inspection and testing regime for portable electrical equipment based on the IET Code of Practice for In-service Inspection and Testing of Electrical Equipment, each delegate receives their own copy of this manual on attendance (included in course cost).

The course is designed to equip individuals with the skills required to successfully accomplish the management and testing of portable electrical appliances in the workplace.

On successful completion the delegates will be able to state the requirement for, and complete a portable appliance test on a variety of equipment.

Course Content

- Legislative requirements
- Equipment construction and classification
- Inspection requirements
- Combined inspection and testing
- Management & administration requirements

Target Audience

This course is for anyone who is engaged in the management and/or inspection and testing of portable electrical equipment.

Certification in this course can progress candidates to the Level 3 Award in the Requirements Electrical Installations BS 7671 (2382), Level 3 Award in the Initial Verification and Certification of Electrical Installations (2394) and Level 3 Award in the Periodic Inspection, Testing and Certification of Electrical Installations (2395).

VenueBlackburn Industrial Estate
Aberdeen
UK
AB21 ORX

Course Times 9.00am - 5.00pm Course Price
Price on application

Duration 2 - Day

Lunch Included **Dates**Dates on application

Min/Max delegates 4/12

18 years +

Certification
City & Guilds 2377-22 & 32

2017 www.epitgroup.com CP40

Special Requirements



Shell UK Electrical Safety Rules LV

Course Overview

Designed to give an understanding of safe operation techniques on low voltage systems. The course provides examples of mandatory paperwork, legislation and safe isolation procedures.

Course Content

- HSE and Electricity at Work Regulations
- Electrical Safety Rules EA/082
- LV Switching Operations
- Earthing of LV Electrical Equipment
- Safe Working Practices
- Competency & Assessment of Electrical Personnel (LV)

Target Audience

Electrical, instrument, telecommunications or assigned personnel who require an understanding of Shell's electrical safety rules and procedures and the safe working practices for low voltages.

Venue

Blackburn Industrial Estate Aberdeen UK AB21 ORX

Tel: 01224 798635

Course Times

9.00am - 5.00pm

Course Price

Price on application

Duration

1 - Day

Lunch

Included

Dates

Dates on application

Min/Max delegates

6/12

Special Requirements

None

Certification

A certificate of competence will be provided Validity 5 Years



Shell UK Electrical Safety Rules LV & HV

Course Overview

Designed to give an understanding of safe operation techniques on low and high voltage systems. The course provides examples of mandatory paperwork, legislation and safe isolation procedures.

Course Content

- HSE and Electricity at Work Regulations
- Electrical Safety Rules EA/082
- Control & Issue of Electrical Safety Documents
- HV Systems
- LV & HV Switching Operations
- Earthing of LV & HV Electrical Equipment
- Safe Working Practices
- Incidents & Incident Reporting
- Competency & Assessment of Electrical Personnel (LV & HV)

Target Audience

Electrical or assigned personnel who require an understanding of Shell's electrical safety rules and procedures and the safe working practices for both low and high voltages.

VenueCourse TimesCourse PriceBlackburn Industrial Estate9.00am - 5.00pmPrice on applicationAberdeen

Tel: 01224 798635

UK

AB21 ORX

DurationLunchDates2 - DayIncludedDates on application

Min/Max delegates Special Requirements Certification

6/12 None A certificate of competence will be provided Validity 5 Years



Chrysaor Electrical Codes of Practice LV

Course Overview

Designed to give an understanding of safe operation techniques on low voltage systems. The course provides examples of mandatory paperwork, legislation and safe isolation procedures.

Course Content

- HSE and Electricity at Work Regulations
- Electrical Codes of Practice CHRY-UKO-TAI-PROC-0213
- Safe Working Practices
- LV Switching Operations
- Isolation and Earthing of Electrical Equipment
- Arc Flash
- Competency & Assessment of Electrical Personnel (LV)
- Hazardous Area Work
- Portable Electrical Equipment

Target Audience

Tel: 01224 798635

UK

Electrical, instrument, telecommunications or assigned personnel who require an understanding of Chrysaor's Electrical Codes of Practice and the safe working practices for low voltages.

VenueCourse TimesBlackburn Industrial Estate9.00am - 5.00pmAberdeen

AB21 ORX

Duration Lunch Dates

1 - Day Included Dates on application

Min/Max delegatesSpecial RequirementsCertification6/12NoneA certificate of co

None A certificate of competence will be provided Validity 5 Years

Course Price

Price on application



Chrysaor **Electrical Codes of Practice** LV & HV

Course Overview

Designed to give an understanding of safe operation techniques on low and high voltage systems. The course provides examples of mandatory paperwork, legislation and safe isolation procedures.

Course Content

- **HSE** and Electricity at Work Regulations
- Electrical Codes of Practice CHRY-UKO-TAI-PROC-0213
- **Safe Working Practices**
- **HV Systems**
- LV & HV Switching Operations
- Isolation and Earthing of Electrical Equipment
- Competency & Assessment of Electrical Personnel (LV & HV)
- Hazardous Area Work
- Control & Issue of Electrical Supplementary Certificates
- Making Apparatus Live
- Portable Electrical Equipment
- **Temporary Electrical Supplies**
- Arc Flash

Target Audience

Electrical or assigned personnel who require an understanding of Chrysaor's Electrical Codes of Practice and the safe working practices for both low and high voltages.

Venue **Course Times Course Price** Blackburn Industrial Estate 9.00am - 5.00pm Price on application Aberdeen

IJK AB21 ORX

Tel: 01224 798635

Duration Lunch **Dates**

Included Dates on application 2 - Day

Certification Min/Max delegates **Special Requirements**

A certificate of competence 6/12 None will be provided Validity 5 Years



CNOOC International Electrical Safety Awareness

Course Overview

Designed to give an understanding of CNOOC International's electrical safety requirements The course provides examples of mandatory paperwork, legislation and safe isolation procedures.

Course Content

- HSE and Electricity at Work Regulations
- Electrical Safety Rules ECN-OP-PRP-00127
- Safe Working Practices
- Safe Systems of Work
- Electrical Isolations
- LV & HV Switching
- Arc Flash

Target Audience

Electrical, instrument, telecommunication and appointed personnel who require an understanding of CNOOC International's Electrical Safety Rules and the UK legislative requirements for working with electricity.

Venue	
Blackburn Industrial Estate	
Aberdeen	
UK	
AB21 ORX	

Tel: 01224 798635

Course Times 9.00am - 5.00pm

Course PricePrice on application

Duration Lunch Dates

1 - Day Included Dates on application

Min/Max delegates Special Requirements Certification

6/12 None Certificate of Attendance



SERVICES

CE and UKCA MARKING

In line with the European and UK directives, we offer a comprehensive package of services geared to assist in identifying the regulatory requirements and set out a compliance strategy. Our team of consultants have expertise in the various EC/UK Directives including EMC, PED, Machinery, Low Voltage and ATEX. Building on our comprehensive knowledge of European and UK Standards we support engineers in the design and development of products. We work closely with Notified/Certified Bodies and Test Laboratories offering compliance testing for a wide range of products. EPIT can support the development of product compliance from concept to market. We offer effective consultation ensuring products comply with all European Union and UK regulatory requirements enabling efficient entry into the market.





DSEAR

For attaining compliance with the Dangerous Substances and Explosive Areas Regulations, EPIT offers consultation and verification of hazardous areas. Our team of consultants can advise on solutions for implementation in order to comply with the DSEAR regulations. Services range from surveys, analysis, risk assessment, protection engineering and hazardous area classification. We have competent persons who can perform verification assessments and issue conformity certification for hazardous areas.

HAZARDOUS AREA CLASSIFICATION

We offer hazardous area classification zoning for compliance with DSEAR. Hazardous area classification is integral to the safety and engineering of a plant. By determining the zone classification of certain areas, correctly rated equipment can be selected and effective safety procedures implemented. Our team of qualified engineers can provide consultation and detailed hazardous area classification calculation of process plant involving flammable and toxic materials. EPIT aim to engineer cost effective solutions to hazardous areas by implementing measures to reduce the extent of hazardous zones or to render the area safe. Hazardous areas are documented in the form of a report accompanied by tables, drawings and calculations, as applicable.





PRODUCT ASSESSMENT

EPIT offers notified body product assessment for compliance with CE and UK marking criteria as stipulated in the relevant EC and UK Directives. We have specialist expertise with the conformity of hazardous area equipment in accordance with ATEX, IEC, EAC, CSA, CE & UKCA. Among our services are Unit verification, QA assessment and on site testing. For those products which require conformity testing by a Notified/Certified Body, our engineers can carry out product assessment, at your premises. Our service is particularly geared to assess large plant which does not suit laboratory testing and the testing of unique equipment, of which test samples are not available.