

# THE INTERNATIONAL COMPETENCE IN ENGINEERING - CONSTRUCTION SCHEME

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# INTERNATIONAL COMPETENCE IN ENGINEERING - CONSTRUCTION

# Introduction

This booklet has been developed to provide anyone considering the ECITB International Competence in Engineering - Construction (ICE) scheme with an introduction to the qualifications currently available through the scheme. This booklet contains a copy of the relevant ICE units within the Level 1, 2, 3 and 4 qualifications as well as a summary of the way in which ICE is constructed; what the process is in achieving the qualification; and how it is assessed.

# 1 The ECITB ICE SCHEME

The ECITB ICE scheme measures a range of skills against ECITB Occupational Standards in the engineering - construction industries to validate the technical competence of an applicant. ICE recognises the importance of continuous training and assessment through the ICE renewal process.

The ICE Framework specifies the skills and job knowledge required to work in an Engineering - Construction environment.

The ICE Framework provides users with consistent guidelines under which to work to achieve and maintain the standards and levels of job knowledge and skills required by the engineering - construction industry.

ICE Frameworks are set at Levels 1, 2, 3 and 4.

#### ICE Level 1

Jobs that involve a range of tasks, most of which fall into a set pattern and don't change.

#### ICE Level 2

Jobs that involve a range of varied activities, in a variety of contexts. Some of the activities will be complex, and the person will have some individual responsibility or autonomy. The job may also involve collaboration with others, perhaps through membership of a work group or team.

#### ICE Level 3

Jobs that involve a broad range of activities in a variety of contexts, most of which are complex and non-routine. The person will usually be working with considerable responsibility and autonomy, and may have control or guidance of others.

#### ICE Level 4

Jobs that involve a broad range of complex, technical or professional work activities. The person will be required to perform the tasks in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. The person will often be responsible for the work of others and for allocating resources.

# The jobs covered by the ECITB ICE framework:

#### **ECITB ICE Level 1**



Such frameworks are often bespoke and include;

- Health and Safety for the Rail Industry (Qatar)
- Scaffolding Assistant\*(
- Thermal Insulator Assistant\*

#### **ECITB ICE Level 2**



- Design and Draughting
- Electrical Installation
- Electrical Maintenance
- Electrical Maintenance Technician (UAE)
- Health and Safety for the Rail Industry (Qatar)
- Instrument & Control Maintenance
- Instrument Pipefitting (Small Bore Tubing)
- Mechanical Fitting
- Mechanical Maintenance
- Mechanical Process Technician (UAE)
- Non-Critical Welding\*
- Non Destructive Testing (NDT)
- Pipefitting
- Plating
- Project Control
- Rigging
- Scaffolder (Basic)\*
- Scaffold Inspector (Standard)\*
- Scaffolder (System)\*
- Steel Erecting
- Thermal Insulator\*
- Welding Preparation (Pipe)
- Welding Preparation (Plate)

# **ECITB ICE Level 3**



- Design and Draughting Electrical Installation
- **Electrical Maintenance**
- Instrument & Control Maintenance
- Instrument Pipefitting (Small Bore Tubing)
- Mechanical Fitting
- Mechanical Maintenance Non-Critical Welding\*
- Non Destructive Testing (NDT)
- Pipefitting
- . Plating
- Project Control
- Rigging
- Scaffolder (Advanced)\*
- Scaffold Inspector (Complex)\*
- Thermal Insulator (Advanced)\*
- Steel Erecting
- Welding Preparation (Pipe)
- Welding Preparation (Plate)

# **ECITB ICE Level 4**



- Supervisory Management
- Scaffolding Supervisor\*

<sup>\*-</sup>Vocational Qualifications under development

#### 2 ECITB ICE QUALIFICATIONS PROCESS

To achieve the ECITB ICE qualification candidates must attain the following components:

#### **ECITB ICE Level 1**

- ECITB International Health and Safety Passport (IHSP) Foundation
- Specific ECITB Technical Tests as determined by the Framework

Note, relevant ECITB Technical Training Units are available for candidates to attain skills required to undertake the ECITB Technical Tests

#### **ECITB ICE Level 2**

- ECITB International Health and Safety Passport (IHSP) Foundation
- Specific ECITB Technical Tests as determined by the Framework

Note, relevant ECITB Technical Training Units are available for candidates to attain skills required to undertake the ECITB Technical Tests

Note, the ECITB ICE Level 2 Apprenticeship Framework requires candidates to successfully complete a minimum number of Skill Specific ECITB Technical Tests over and above that which is required for an experienced candidate to attain the same qualification

#### **ECITB ICE Level 3**

- ECITB International Health and Safety Passport (IHSP) Advanced
- Specific ECITB Technical Tests as determined by the Framework

Note, relevant ECITB Technical Training Units are available for candidates to attain skills required to undertake the ECITB Technical Tests

Note, the ECITB ICE Level 3 Apprenticeship Framework requires candidates to successfully complete a minimum number of Skill Specific and Advanced Skill Specific ECITB Technical Tests over and above that which is required for an experienced candidate to attain the same qualification

#### **ECITB ICE Level 4**

- ECITB International Health and Safety Passport (IHSP) Supervisor
- Specific ECITB Technical Tests as determined by the Framework

Note, relevant ECITB Technical Training Units are available for candidates to attain skills required to undertake the ECITB Technical Tests

Note, the ECITB ICE Level 4 Apprenticeship Framework requires candidates to successfully complete a minimum number of Skill Specific and Advanced Skill Specific ECITB Technical Tests over and above that which is required for an experienced candidate to attain the same qualification

# ALL ECITB ICE QUALIFICATIONS ARE VALID FOR THREE YEARS

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# ECITB International Health and Safety Passport (IHSP) Scheme

The aims of the ECITB International Health and Safety Passport (IHSP) scheme are to ensure that all site personnel worldwide have reached a recognised level of Health and Safety knowledge and awareness and to enable them to work on site more safely, reducing the health and safety risk to themselves and others around them.

To ensure individuals reach the required level of Health and Safety knowledge, all delegates on each of the courses MUST successfully complete the necessary training programme, which in all cases includes at least one examination. Successful candidates will then be rewarded by being issued their unique IHSP photographic passport, transferable worldwide.

All cards are valid for three years

#### **ECITB IHSP Foundation**

(One day course with at least one examination, passport is valid for three years)



An introductory course that is often tailored to an individual site and/or company and includes; safe working practices including elementary behavioural safety practice. It is suitable for all members of a workforce.

The course includes:

- Fundamental Safety Considerations
- Hazards, Risk and Risk Control
- Common Workplace Hazards
- · Accidents and Incidents

#### **ECITB IHSP Advanced**

(Two day course with at least two examinations, passport is valid for three years)



A course is for craftsmen and technicians that are called upon to understand and apply safe working practices in their job environment. The content is often localised to reflect the country or region where the workforce will operate. The training is also designed to support the specific site induction that employees will receive on large industrial complexes

The course includes;

- Safe Behaviour at Work
- A Safe Place to Work
- Safe Systems of Work
- Safety Problems and Safe Solutions

## **ECITB IHSP Supervisor**

(One day course with at least two examinations, passport is valid for three years)



A course for those workers who supervise others, it includes the essential knowledge and skills required to apply good health and safety standards and practices within their workforce. The Supervisor Passport will only be issued to people in possession of a valid ECITB International Health & Safety Passport Advanced Course.

The course includes;

- Planning for Health and Safety
- Communicating Effectively
- Improving Health and Safety
- Site Responsibilities for Safety

# 3 ECITB ICE QUALIFICATIONS CRITERIA

To achieve an ECITB ICE qualification, candidates must complete the necessary ECITB Technical Tests within a three year period of the first ECITB Technical Test being awarded.

For security reasons, Candidates MUST apply for an ECITB ICE qualification through an ECITB Approved Training Provider.

Upon completion of the final ECITB Technical Test of an ECITB ICE qualification, candidates should apply for the ECITB ICE qualification via their chosen ECITB Approved Training Provider.

The ECITB ICE qualification will be awarded by the ECITB if the following conditions are met in full;

- Candidate provides evidence to prove identity to an ECITB Approved Training Provider
- . ECITB Approved Training Provider, validates candidates identity and photographs candidate
- Candidate has passed the prerequisite number of ECITB Technical Tests specified by the ECITB ICE qualification within the
   PRECEDING THREE YEARS (with respect to the date that the ICE qualification fee is paid)
- The candidate is in possession of an ECITB International Health and Safety Passport at the appropriate level as determined by the ECITB ICE qualification, that has at least 1 year's validity left on it (with respect to the date that the ICE qualification fee is paid)
- The ECITB ICE qualification registration fee is paid

ALL ECITB ICE QUALIFICATIONS ARE VALID FOR THREE YEARS

# 4 ECITB ICE QUALIFICATIONS RENEWAL PROCESS

Within 12 months of an ECITB ICE qualification expiring, candidates can renew their ECITB ICE qualification through an ECITB Approved Training Provider.

For security reasons candidates MUST apply for an ECITB ICE qualification through an ECITB Approved Training Provider.

Failure to renew within 12 months of an ECITB ICE qualification expiring could result in a candidate having to re-start the complete qualification process

To revalidate an ECITB ICE qualification, candidates must pass an ECITB ICE Qualification Renewal Technical Test and hold a valid ECITB International Health and Safety Passport relevant to the ECITB ICE qualification with at least one year's validity left on it (with respect to the date that the ICE renewal fee is paid).

The revalidated ECITB ICE qualification will be awarded by the ECITB if the following conditions are met in full;

- Candidate provides evidence to prove identity to an ECITB Approved Training Provider
- ECITB Approved Training Provider, validates candidates identity and photographs candidate
- Candidate has passed the prerequisite ECITB ICE Qualification Renewal Technical Test specified by the ECITB ICE
  qualification within <u>TWELVE MONTHS OF THE ECITB ICE QUALIFICATION EXPIRING</u> (with respect to the date that the ICE
  renewal fee is paid)
- The candidate is in possession of an ECITB International Health and Safety Passport at the appropriate level as determined by the ECITB ICE qualification, that has <u>at least 1 year's validity left on it</u> (with respect to the date that the ICE renewal fee is paid)
- The ECITB ICE qualification renewal fee is paid

ALL ECITB ICE QUALIFICATIONS ARE VALID FOR THREE YEARS

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# **ECITB ICE Skill Specific Technical Tests (Level 2)**

# **International Design and Draughting**

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TIDD001 Produce read and extract technical information from engineering and construction

drawings

TIDD002 Produce engineering and construction drawings to specified draughting conventions

using a CAD system

#### **International Electrical Installation**

TIEI 04 Installing Electrical Distribution Systems
TIEI 06 Installing Circuit Protective Devices
TIEI 13 Installing Earthing Equipment

## **International Electrical Maintenance**

TIEM 01 Inspecting and Testing Protective Devices
TIEM 03 Inspecting and Testing Electrical Hand Tools

TIEM 04 Inspecting and Testing Electrical Distribution Circuits

TIEM 08 Maintaining AC Electric Motors
TIEM 09 Maintaining DC Electric Motors

#### **International Instrument and Controls**

TIIC 01 Calibrating and Function-Checking Pressure Measurement Systems

TIIC 03 Installing and Commissioning Flow Measurement Systems

TIIC 12 Isolating and Checking Fluid Powered Systems

#### **International Instrument Pipefitting**

TIIPF 01 Developing Patterns

TIIPF 02 Fabricating & Installing Pipe Supports

TIIPF 06 Pipe Bending

TIIPF 10 Preparing Pipe Ends

# **International Mechanical Fitting**

TIMF 01 Measuring and Inspecting Mechanical Components

TIMF 02 Marking out Engineering Components
TIMF 03 Making and Fitting Mechanical Components

# **International Mechanical Joint Integrity**

TIMJI 01 Dismantling, Assembling and Hand Torquing Flanged Joints
TIMJI 02 Dismantling, Assembling and Hand Torquing Clamp Connectors

## **International Mechanical Maintenance**

TIMM 04 Maintaining Bearings and seals
TIMM 08 Maintaining Belt and Chain Drives
TIMM 09 Maintaining Shafts and Couplings

## **International Non-Critical Welding**

# Manual Metal Arc (MMA) / Shielded Metal Arc Welding (SMAW)

TINCMMA 01 Non-Critical MMA Plate Welding - 1G Butt (Square Edge)

TINCMMA 02 Non-Critical MMA Plate Welding - 1G Single V Butt Weld

TINCMMA 03 Non-Critical MMA Plate Welding - 1F Single-Sided Fillet Weld

TINCMMA 04 Non-Critical MMA Plate Welding - 2G Butt (Square Edge)

TINCMMA 05 Non-Critical MMA Plate Welding - 2G Single V Butt Weld

TINCMMA 06 Non-Critical MMA Plate Welding - 2F Single-Sided Fillet Weld

TINCMMA 07 Non-Critical MMA Pipe Welding - 1G Single V Butt Weld

#### Metal Inert Gas (MIG) / Gas Metal Arc Welding (GMAW)

TINCMIG 01

Non-Critical MIG Plate Welding - 1G Butt (Square Edge)

Non-Critical MIG Plate Welding - 1G Single V Butt Weld

TINCMIG 03

Non-Critical MIG Plate Welding - 1F Single-Sided Fillet Weld

TINCMIG 04

Non-Critical MIG Plate Welding - 2G Butt (Square Edge)

TINCMIG 05

Non-Critical MIG Plate Welding - 2G Single V Butt Weld

TINCMIG 06

Non-Critical MIG Plate Welding - 2F Single-Sided Fillet Weld

TINCMIG 07

Non-Critical MIG Pipe Welding - 1G Single V Butt Weld

#### Tungsten Inert Gas (TIG) / Gas Tungsten Arc Welding (GTAW)

TINCTIG 01

Non-Critical TIG Plate Welding - 1G Butt (Square Edge)

Non-Critical TIG Plate Welding - 1G Single V Butt Weld

TINCTIG 03

Non-Critical TIG Plate Welding - 1F Single-Sided Fillet Weld

TINCTIG 04

Non-Critical TIG Plate Welding - 2G Butt (Square Edge)

Non-Critical TIG Plate Welding - 2G Single V Butt Weld

TINCTIG 06

Non-Critical TIG Plate Welding - 2F Single-Sided Fillet Weld

TINCTIG 07

Non-Critical TIG Pipe Welding - 1G Single V Butt Weld

#### **International Non Destructive Testing**

TINDT 05 Examining Welded Joints Using the Visual Inspection Method

TINDT 06 Determining NDT Requirements

# **International Small Bore Tubing**

TISBT 02 Disassembling and Reinstalling Small Bore Tubing Assemblies

# **International Supporting Engineering - Construction Activities**

TISECA 01 Marking Out to Required Specification
TISECA 02 Interpreting Engineering Drawings

TISECA 03 Shaping Engineering Components Using Hand Tools

TISECA 04 Joining Materials by Tack Welding

# **International Steel Erecting**

TISE 01 Slinging and Lifting Engineering Loads
TISE 02 Rigging & Working with Lifting Equipment

TISE 03 Erecting Steelwork Structures
TISE 04 Erecting Pre-formed Plate

**International Pipefitting** 

TIPF 01 Setting Out Pipework and Marking Out

TIPF 03 Preparing Pipe Ends using Portable Edge Preparation Machines

TIPF 11 Preparing and Assembling Screwed Pipework

**International Plating** 

TIPL 01 Marking out plate, structural steelwork and pipework

TIPL 02 Developing patterns for platework

TIPL 05 Forming Plate by Rolling

**International Rigging** 

TIRIG 01 Moving Engineering Loads by Manual Operation

TIRIG 02 Lifting and Slinging Engineering - Construction Materials Safely

TIRIG 03 Lifting and Cross Hauling Engineering - Construction Materials Safely

**International Welding Preparation (Pipe)** 

TIWPP 01 Preparing & Setting Up MIG Butt Welds in Carbon and low Alloy
TIWPP 02 Preparing & Setting Up MMA Butt Welds in Carbon and Low Alloy
TIWPP 03 Preparing & Setting Up TIG Butt Welds in Carbon Steel Pipe

**International Welding Preparation (Plate)** 

TIWPL 02 Setting Up MIG Butt Welds in Carbon and low Alloy Steel plate

TIWPL 03 Preparing & Setting Up MMA Butt Welds in Carbon and Low Alloy Steel plate

TIWPL 04 Setting Up TIG Butt Welds in Carbon and Low Alloy Steel Plate

# **ECITB ICE Skill Specific Advanced Technical Tests (Level 3)**

# **International Design and Draughting**

TIDD 03 Producing detailed engineering and construction drawings to specified draughting

conventions

TIDD 04 Developing and evaluating engineering and construction design options

TIDD 05 Completing engineering and construction designs

#### International Electrical Installation

TIEI 01	Installing Emergency Lighting
TIEI 02	Installing Transformers
TIEI 03	Installing Alarm Systems

TIEI 05 Installing Battery and UPS Systems
TIEI 07 Installing Generator Switchgear

TIEI 08 Connecting and Testing AC electrical motors
TIEI 09 Connecting and Testing DC electrical motors

TIEI 10 Installing Lighting Equipment

TIEI 11 Installing HVAC Equipment Controls
TIEI 12 Connecting and Testing HV Equipment

# **International Electrical Maintenance**

TIEM 02	Maintaining Transformers
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TIEM 05 Inspecting Battery and UPS Systems
TIEM 06 Maintaining Circuit Protection Devices

TIEM 07 Maintaining Generators

TIEM 10 Inspecting and Testing Lighting Equipment
TIEM 11 Inspecting and Testing HVAC Equipment

TIEM 12 Maintaining HV Equipment

#### **International Instrument and Controls**

TIIC 02	Calibrating and Function-Checking Level Measurement Systems
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TIIC 04 Calibrating and Function-Checking Temperature Measurement Systems

TIIC 05 Installing and Commissioning Fire & Gas Detection Systems
TIIC 06 Maintaining Process System Control Valve Assemblies

TIIC 07 Maintaining Pneumatic Process Controllers

TIIC 08 Reconfiguring Programmable Logic Control Systems

TIIC 09 Identifying and Dealing with Faults in Distributed Control Systems
TIIC 10 Calibrating and Function-Checking Fiscal Metering Systems

TIIC 11 Installing and Commissioning Analysers

TIIC 13 Inspecting Protection Methods for Instruments in Hazardous Areas

# **International Instrument Pipefitting**

TIIPF 03	Fabricating Pipe Branches and Bends
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TIIPF 04 Installing Pipework Systems
TIIPF 05 Installing Steam Tracing

TIIPF 07 Preparing and Assembling Non-Ferrous Pipe
TIIPF 08 Preparing and Assembling Non-Metallic Pipe

Preparing & Testing Pipework Systems

TIIPF 09

# **International Mechanical Fitting**

TIMF 04 Assembling Mechanical Components

TIMF 05 Preparing for Installation

TIMF 06 Positioning Plant and Equipment

TIMF 07 Aligning, Levelling and Setting Plant and Equipment

TIMF 08 Installing Drive Systems

TIMF 09 Repairing Faults and Adjusting Mechanical Plant and Equipment

TIMF 10 Diagnosing Faults and Adjusting Live Mechanical Plant and Equipment

TIMF 11 Preparing and Assembling Small Bore Pipework

# **International Mechanical Joint Integrity**

TIMJI 03 Dismantling, Assembling and Tensioning Bolted Connections (Hydraulic Tensioning)

TIMJI 04 Dismantling, Assembling and Hydraulically Torquing Flanged Joints

TIMJI 05 Dismantling, Assembling and Hydraulically Torquing Clamp Connector Joints

#### International Mechanical Maintenance

TIMM 01 Maintaining Hydraulic Systems
TIMM 02 Maintaining Pneumatic Systems
TIMM 03 Maintaining Compressed Air Systems

TIMM 05 Maintaining Pumps

TIMM 06 Maintaining Geared Mechanisms

TIMM 07 Maintaining Mechanical Actuating Mechanisms

TIMM 10 Maintaining Clutches

TIMM 11 Maintaining Brake Systems

TIMM 12 Maintaining Valves

TIMM 13 Maintaining Diesel Engines
TIMM 14 Maintaining HVAC Systems

TIMM 15 Diagnosing Mechanical Faults in Explosive Atmospheres

## **International Non-Critical Welding**

#### Manual Metal Arc (MMA) / Shielded Metal Arc Welding (SMAW)

TINCMMA 08 Non-Critical MMA Plate Welding - 3G Single V Butt Weld

TINCMMA 09 Non-Critical MMA Plate Welding – 3F Single-Sided Fillet Weld

TINCMMA 10 Non-Critical MMA Pipe Welding – 2G Single V Butt Weld

#### Metal Inert Gas (MIG) / Gas Metal Arc Welding (GMAW)

TINCMIG 08 Non-Critical MIG Plate Welding - 3G Single V Butt Weld

TINCMIG 09 Non-Critical MIG Plate Welding – 3F Single-Sided Fillet Weld

TINCMIG 10 Non-Critical MIG Pipe Welding – 2G Single V Butt Weld

# Tungsten Inert Gas (TIG) / Gas Tungsten Arc Welding (GTAW)

TINCTIG 08 Non-Critical TIG Plate Welding - 3G Butt (Square Edge)

TINCTIG 09 Non-Critical TIG Plate Welding – 3G Single V Butt Weld

TINCTIG 10 Non-Critical TIG Plate Welding – 3F Single-Sided Fillet Weld

TINCTIG 11 Non-Critical TIG Pipe Welding – 2G Single V Butt Weld

#### Combination TIG/GTAW & MMA/SMAW

TINCT/MMA 01 Non-Critical TIG/MMA Pipe Welding - 1G Single V Butt Weld
TINCT/MMA 02 Non-Critical TIG/MMA Pipe Welding - 2G Single V Butt Weld

International Non Destructive	Testing
TINDT 01	Examin
TINDT 02	Evamin

ning Welded Joints Using the Magnetic Particle Method Examining Welded Joints Using the Liquid Penetrant Method TINDT 03 Examining Welded Joints Using the Eddy Current Method TINDT 04 Examining Welded Joints Using the Ultrasonic Method

## **International Pipefitting**

TIPF 02 **Developing Patterns for Pipework** 

TIPF 04 Pipe Bending

TIPF 05 Preparing and Assembling Welded Pipework TIPF 06 Preparing and Assembling Non-metallic Pipework

TIPF 07 Preparing and Bonding GRP Pipework

TIPF 08 Fabricating and Installing Pipework Supports

Installing Pipework Systems TIPF 09

TIPF 10 Preparing and Testing Pipework Systems

**TIPF 12** Preparing and Assembling Small Bore Non-Ferrous Pipework

#### **International Plating**

Setting out platework and structural steelwork TIPL 03 TIPL 04 Making templates for structural steelwork

TIPL 06 Preparing plate edges using portable edge preparation machines

TIPL 07 Assembling platework

#### International Rigging

TIRIG 04 Rigging and Moving Complex Engineering - Construction Materials Safely

TIRIG 05 Rigging, Rotating and Upending Complex Engineering - Construction Materials Safely

TIRIG 06 Lifting, Cross Hauling, and Installing Vessels in Restricted Access Areas

TIRIG 07 Planning a Rigging Operation

# **International Small Bore Tubing**

TISBT 01 Installing and Assembling SBT Assemblies

TISBT 03 Assembling and Installing SBT Assemblies - Coned and Threaded

# **International Welding Preparation (Pipe)**

TIWPP 04 Preparing & Setting Up MMA Butt Welds in Stainless Steel Pipe TIWPP 05 Preparing & Setting Up TIG Butt Welds in Stainless Steel Pipe

TIWPP 06 Preparing & Setting Up MMA Butt Welds with TIG Root in Carbon Low Alloy Steel pipe

TIWPP 07 Preparing & Setting Up MMA Butt Welds with TIG Root in Stainless Steel pipe

TIWPP 08 Preparing & Setting Up TIG Butt Welds in Aluminium Alloy Pipe

TIWPP 09 Preparing & Setting Up TIG Butt Welds in Nickel and Nickel Alloy Pipe

TIWPP 10 Preparing & Setting Up Flux-Cored Butt Welds in Carbon and Low Alloy Steel Pipe

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International Welding Preparation (Plate)		
TIWPL 01	Preparing & Setting Up Flux-Cored Butt Welds in Carbon and Low Alloy Steel plate	
TIWPL 05	Preparing & Setting Up Flux-Cored Butt Butt Welds in Stainless Steel plate	
TIWPL 06	Preparing & Setting Up MIG Butt Welds in Stainless Steel plate	
TIWPL 07	Preparing & Setting Up MMA Butt Welds in Stainless Steel plate	
TIWPL 08	Preparing & Setting Up TIG Butt Welds in Stainless Steel plate	
TIWPL 09	Preparing & Setting Up MIG Butt Welds in Nickel and Nickel Alloy plate	
TIWPL 10	Preparing & Setting Up TIG Butt Welds in Aluminium Alloy plate	
TIWPL 11	Preparing & Setting Up MIG Butt Welds in Aluminium and Aluminium Alloy plate	
TIWPL 12	Preparing & Setting Up TIG Butt Welds in Nickel and Nickel Alloy plate	
TIWPL 13	Preparing & Setting Up MMA Butt Welds in Nickel and Nickel Alloy plate	
TIWPL 14	Preparing & Setting Up MMA Butt Welds with TIG Root in Carbon Low Alloy Steel Plate	
TIWPL 15	Preparing & Setting Up MMA Butt Welds with TIG Root in Nickel and Nickel Alloy plate	

#### Renewal

The ICE renewal process assures a candidate's knowledge, skills and ability are maintained in line with evolving processes and technical requirements.

The renewal process requires each candidate already holding a valid ICE qualification to successfully complete an ECITB ICE Renewal Technical Test every 3 years.

# 6 THE SYSTEM OF ASSESSMENT

The following tables summarise the roles that key members perform in quality assuring the ICE regulated qualifications system.

Who's who	What is their role?
Candidates Individuals seeking validation for their Competence	Show they can perform to the ECITB ICE Technical Training Standards in order to be awarded Certificates of Technical Competence in the ECITB Technical Tests required. Has successfully completed the ECITB IHSP course relevant to the ICE qualification being applied for.  Provides evidence to prove identity at each stage of the process.
Examiners Appointed by an ECITB Approved Training Provider to test a candidate's performance against the Technical Training Standards using the relevant Knowledge and Practical ECITB Technical Tests	<ul> <li>Judge candidates' performance against the ECITB Technical Training Standards</li> <li>Administer the necessary online Knowledge Test</li> <li>Administer the necessary Practical Test</li> <li>Provide candidates with feedback on completion of the tests</li> <li>Complete the necessary documentation ensuring all results are processed accurately and timeously</li> <li>VALIDATES THE IDENTITY OF THE CANDIDATE</li> </ul>
Centre Co-ordinators	<ul> <li>Act as a point of contact for the Approved Provider</li> <li>Ensure accurate records are maintained and submitted as necessary</li> <li>Request certificates from ECITB</li> </ul>
ECITB Approved Training Provider Organisation approved by ECITB to train and test to Technical Training Standards relating to ICE qualification.	<ul> <li>Manage training and testing on a day-to-day basis.</li> <li>Have effective training and testing practices and procedures.</li> <li>Meet ECITB requirements for delivery of ECITB approved training and testing</li> <li>Have sufficient competent Tutors and Examiners with enough time and authority to carry out their roles effectively</li> <li>Responsible for validating identity of candidate</li> <li>Responsible for submitting an ICE application through to the ECITB for assessment</li> </ul>

# Assessment of candidates with particular assessment requirements

Equal Opportunities, Reasonable Adjustments and Special Considerations.

# **Access to Fair Assessment**

The ECITB only uses Approved Training Providers (ATPs) to deliver ECITB Technical Training and ECITB Technical Tests.

Only competent approved Examiners will be used within the ECITB Technical Testing system.

ECITB Technical Test will ONLY be delivered in facilities that are strictly controlled using ECITB Approved Standard Operating Procedures.

The ECITB requires ATPs to demonstrate a clear commitment for access to fair assessment, equal opportunities, reasonable adjustments and special considerations and to operate a Fair Assessment Policy in all matters concerning the assessment of candidates for the award of ECITB Certificates of Achievement and ECITB ICE qualifications.

In any appeal against ATP decisions, the ATP must take account of full current legislation in the area of access to fair assessment and equal opportunities and must ensure that the following issues are controlled and taken into consideration at all times;

- Racial Discrimination
- Disability Discrimination
- Special Educational Needs and Disability.
- Human Rights

The ATP must ensure that relevant staff in the assessment team receives training in the relevant sections of current legislation and that sufficient and appropriate information with regard to the content of this issue is passed to all members of the ATP team.

Arrangements for candidates with particular assessment requirements

# **Principles**

ATPs must ensure that there are no unnecessary barriers to assessment, which prevent candidates from effectively demonstrating their attainment. Arrangements for candidates with particular assessment requirements (special arrangements) must also ensure that such candidates are not given, or do not appear to be given, an unfair advantage. Special arrangements are generally not appropriate where the candidate's particular difficulty directly affects performance in the actual attributes that are the focus of assessment.

ATPs must make special arrangements according to the needs of the individual candidate, reflecting the candidate's usual method of working, the assessment requirements as set out in the specification and any guidelines set down by the regulatory authorities. Any special arrangements must ensure that the validity, reliability and integrity of the assessment are preserved and that certificates accurately reflect candidate attainment.

ATPs are only required to do what is 'reasonable' in terms of giving access. What is reasonable will depend on the individual circumstances, cost implications and the practicality and effectiveness of the adjustment.

There are two ways in which access to fair assessment can be maintained

- 1 Through reasonable adjustments.
- 2 Through special consideration.

#### **Reasonable Adjustments**

A reasonable adjustment is any action that helps to reduce the effect of a disability that places the candidate at a substantial disadvantage in the assessment situation.

Reasonable adjustments must not affect the integrity of what needs to be assessed, but may involve:

- Changing standard assessment arrangements, for example allowing candidates extra time to complete the assessment activity.
- Adapting assessment materials, such as providing materials in Braille.
- Providing access facilitators during assessment, such as a sign language interpreter or a reader.
- Re-organising the assessment room, such as removing visual stimuli for an autistic candidate.

# **Special Consideration**

Special consideration is given following an assessment to candidates who are present for the assessment but may have been disadvantaged by temporary illness, injury or adverse circumstances, which arose at or near the time of assessment.

Special consideration should not give the candidate an unfair advantage neither should its use cause the user of the certificate to be misled regarding a candidate's achievements. The candidate's result must reflect his or her achievement in the assessment and not necessarily his or her potential ability.

ATPs must make provision for special consideration to ensure that candidates who suffer temporary illness, injury or indisposition at the time of assessment are treated fairly. Such assessment should be made available to the candidate as soon as is reasonably practical within the guidelines of access to fair assessment. Where this is not possible, the awarding organisation will consider each individual case for special consideration, identifying the minimum requirements for an award to be made.

