IN-COMM
TRAINING SERVICES

Ofsted
Outstanding
Provider

PROSPECTUS

APPRENTICESHIPS,
CONSULTANCY, UPSKILLING.

OUR CENTRES OF **EXCELLENCE**

IN-COMM TRAINING SERVICES

MARCHES CENTRE OF MANUFACTURING & TECHNOLOGY

WE ARE **OUTSTANDING**

Rated by Ofsted as 'Outstanding', In-Comm is one of the UK's leading training providers, working across more than 10 sectors and with over 450 different companies.

We have developed a simple, but effective employer-led approach to bridging the country's skills gap. This focuses on building strong relationships with companies, listening to their challenges and opportunities and then giving them the opportunity to shape learning opportunities that meet their specific requirements.

In short, our programmes deliver the right type of learner, the right upskilling opportunities and the specialist assistance they need to improve quality, business systems or achieve compliance with new Health and Safety legislation.

Over £7m has been spent in creating world class training academies in Aldridge and, through the Marches Centre of Manufacturing & Technology (MCMT) banner, in Bridgnorth and Shrewsbury.

All three house state-of-the-art equipment, the latest technology, dedicated learning spaces, with all of the apprenticeships and courses delivered by industry-leading trainers and experienced professionals.

If you are thinking of upskilling/developing your workforce of the future or simply looking for a partner to manage all of your training requirements, we can help.

Don't take our word for it, even Ofsted think we are outstanding.

IN-COMM
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THE TRAINING **PROVISION**

In-Comm trains more than 600 apprentices every year at its academies in Aldridge, Bridgnorth and Shrewsbury, providing vocational training opportunities that match the specific needs of the employer.

We currently offer 25 different Trailblazer Standards and Framework Apprenticeships covering every discipline of Engineering and Manufacturing imaginable, including machining, mechatronics, leadership & management, business support and supply chain management.

In response to growing employer demand, the last twelve months have seen us add Metrology, Business Process Leader and Heritage Engineering designed to grow the next generation of engineers who can work on historical cars, boats and planes.

All of the apprenticeships and upskilling courses are delivered by trainers with more than 300 years' collective industrial experience in equipping young people and older workers with the skills and competency they require to be successful and have a positive impact with employers.

Rated 'Outstanding' by Ofsted, we are one of the approved training providers on the Government's Apprenticeship Levy register and are working closely with employers to create some of the trailblazer pathways and to offer them a total managed service offer.

In-Comm Training also has a proven track record of working with young people to identify their potential and match them with the right employers and apprenticeships that will lead to lifelong professionals.

UPSKILLING **COURSES**

Continued learning is vital to the competitiveness of UK industry and we have over 300 courses currently available for your staff. These include:

- Continuous Improvement
- Health & Safety
- Leadership & Management
- Sales & Marketing
- Six Sigma
- Securing Quality Accreditations, such as ISO 9001, ISO 14001, AS9100, NADCAP and TS16949
- Technical Development, such as Fluid Power, Wire Eroding EDM, Electrical and Machining to name just a few

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IN-COMM TRAINING SERVICES

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TECHNICAL ACADEMY

A WORLD CLASS **TECHNICAL ACADEMY**

- In 2018 In-Comm launched its brand new £3m Technical Academy
- In-comm will help bridge the skills gap get the region ready for the next industrial revolution.
- No fewer than 12 manufacturers contributing investment, expertise and input into its creation
- In-Comm Training unveiled the additional 24,000 sq ft training space
- Material testing, material handling and grinding capabilities
- 16-seater Mastercam and CIMCO CAD/Cam studio to help students develop their design for manufacturing skills

We have to give our young people access to the latest equipment so they are learning on technology that will future-proof industry for years to come.

Rebecca Phillips
Managing Director

MARCHES CENTRE OF MANUFACTURING & TECHNOLOGY

INSPIRING ENGINEERS **FOR A CHANGING WORLD**

- Marches Centre of Manufacturing and Technology [MCMT] operate two state-of-the-art manufacturing training facilities in Bridgnorth and Shrewsbury
- MCMT covers more than 40,000 sq ft of dedicated space
- We are inspiring engineers by combining industry-trained assessors with the best equipment, traditional engineering expertise and the latest technology
- More than £5m spent on creating learning environments that will challenge individuals to fulfil their potential
- This includes access to a dedicated CNC Zone, advanced fluid and power controls and the latest robotics and metrology, not to mention dedicated electrical, heritage, vehicle trim and finish sections.

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ENGINEERING & MANUFACTURING TECHNOLOGIES APPRENTICESHIPS

#SHAPINGFUTURES

IN-COMM TRAINING SERVICES

ENGINEERING OPERATIVE STANDARD LEVEL 2

15 MONTH PROGRAMME –
1 day per week off the job training

ROLE PROFILE:

Engineering Operatives are predominantly involved in engineering operations which are key to the success of the Manufacturing and Engineering sector allowing employers to grow their business while developing a work force with the relevant skills and knowledge to enhance the sustain the sector.

The role covers a wide range of common and job specific skills sets that can be transferred across the manufacturing engineering industry sectors during the course of their careers. Dependent on the sector that they are employed in there may be subtle differences in terms of composition and application of the job role specific skills and knowledge they will require, however the core skills and knowledge will be the same regardless of the sector/area they work in.

Engineering Operatives will have clear reporting lines with anything outside their role and responsibility. They will work individually or as part of a team to carry out a range of engineering operations which could include ensuring machines and equipment used are maintained and serviceable, dealing with breakdowns, restoring components and systems to serviceable condition by repair and replacement; operating a variety of machines (CNC or Conventional); assembling and repairing machine and press tools, dies, jigs, fixtures and other tools; fabrication/installation of a wide variety of other sheet fabrications and equipment and; fabrication and assembly of metal parts joining techniques; preparing materials and equipment for engineering processes, providing technical support including communications software, test tools, performance, capacity planning, and e-commerce technology as required.

Engineering Operatives must comply with statutory regulations and organisation safety requirements including any environmental compliance procedures and systems; Identify hazards and hazardous situations; Prepare the work area and equipment; Obtain and follow the appropriate job documentation and work instructions; Extract the necessary data and information from specifications and related documentation; Carryout the engineering activities in line with their job role; Carry quality checks as required; working with minimum supervision either individually or as part of a team and will be responsible for their own actions and for the quality and accuracy and timely delivery of the work they undertake.

Examples of the occupational roles from across the engineering and manufacturing sector that would be covered within this standard are: Servicing and maintenance operative; Machine setter/operative; Mechanical engineering operative; Fabricator; Engineering fitter; Multi-disciplined engineering operative; Materials, processing and finishing operative, Technical Support operative, founding/ casting operative.

Engineering Operatives working within a mechanical manufacturing engineering role will have:

Knowledge of:

- Specific equipment operating parameters
- Mechanical manufacturing techniques
- Specific quality specifications for mechanical manufacturing operations

Skills:

- Plan the mechanical manufacturing operation before they start
- Mount and set the required workholding devices
- Produce individual components, sub-assemblies or completed assemblies using mechanical manufacturing techniques
- Carryout quality checks during and after mechanical manufacturing operations

Engineering Operatives working within an electrical and electronic engineering role will have:

Knowledge of:

- Cable types and where they should be used
- Electrical and electronic assembly and testing techniques
- Specific safe working practices, isolation procedures and safe reinstating of equipment/system that need to be observed

Skills:

- Wire and terminate different types of cabling e.g. single core, multi core, screened, fire resistant, armoured, etc.
- Assemble and test a range of electrical components e.g. component panels, isolator switches, fuses, circuit breakers, contactors, relays, rail mounted terminal blocks, etc.
- Assemble and test a range of electronic components e.g. resistors, capacitors, diodes, transistors, etc.
- Follow appropriate completion activities and restore equipment/system to service after the assembly and testing has been completed

CORE BEHAVIOURS REQUIREMENTS:

Manufacturing and Engineering organisations require their apprentices to have a set of behaviours that will ensure success both in their role and in the overall company objectives. The required behaviours are:

Personal responsibility and resilience – Comply with the health and safety guidance and procedures, be disciplined and have a responsible approach to risk, work diligently regardless of how much they are being supervised, accept responsibility for managing time and workload and stay motivated and committed when facing challenges.

Work effectively in teams – Integrate with the team, support other people, consider implications of their own actions on other people and the business whilst working effectively to get the task completed.

Effective communication and interpersonal skills – An open and honest communicator, communicates clearly using appropriate methods, listen well to others and have a positive and respectful attitude.

Focus on quality and problem solving – Follow instructions and guidance, demonstrate attention to detail, follow a logical approach to problem solving and seek opportunities to improve quality, speed and efficiency.

Continuous personal development – Reflect on skills, knowledge and behaviours and seek opportunities to develop, adapt to different situations, environments or technologies and have a positive attitude to feedback and advice.

ENGINEERING OPERATIVE STANDARD LEVEL 2

CONTINUED...

INDUCTION:

All learners will receive a 5 day induction into their programme at our technical academy covering:

- Induction to In-Comm
- Induction to Qualification
- Diary Keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda
- IOSH Working Safely
- Manual Handling
- Abrasive Wheels

MECHANICAL MANUFACTURING PATHWAY

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their programme will not only complete their Engineering Operative Level 2 Apprenticeship but will also gain qualifications at Level 2 in Engineering Operations. Dependent upon prior qualifications learners may also need to complete functional skills in Maths and English to a minimum of Level 1.

Off the Job Training Subjects Include:

- Engineering Environmental Awareness
- Engineering Techniques
- Engineering Maths & Science Principles
- Engineering Material Processes
- Complying with Statutory Regulations & Organisational Safety Requirements
- Working Efficiently & Effectively in Advanced Manufacturing & Engineering
- Using & Interpreting Engineering Data & Documentation
- Conduct Business Improvement Activities
- Producing Components using Hand Fitting Techniques
- Preparing & Using Lathes for Turning Operations
- Preparing & Using Milling Machines

ELECTRICAL & ELECTRONIC ENGINEERING PATHWAY

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their programme will not only complete their Engineering Operative Level 2 Apprenticeship but will also gain qualifications at Level 2 in Engineering Operations. Dependent upon prior qualifications learners may also need to complete functional skills in Maths and English to a minimum of Level 1.

Off the Job Training Subjects Include:

- Engineering Environmental Awareness
- Engineering Maths & Science Principles
- Electrical & Electronic Principles
- Electrical & Electronic Systems & Devices
- Complying with Statutory Regulations & Organisational Safety Requirements
- Working Efficiently & Effectively in Advanced Manufacturing & Engineering
- Using & Interpreting Engineering Data & Documentation
- Wiring & Testing Electrical Equipment and Circuits
- Assembling & Testing Electronic Circuits
- Maintaining Electronic Equipment & Systems
- General Electrical & electronic Engineering Applications

ASSESSMENT:

To achieve this qualification learners must go through an end point assessment, this consists of Elements. Each assessment method will directly assess the Knowledge, Skills and Behaviours of the Standard. The elements are:

- Mandatory Qualifications – Completion of Level 2 Diploma in Engineering Operations (Competence) & Level 2 Certificate in Engineering Operations (Knowledge)
- Portfolio – a portfolio of evidence comprising of naturally occurring evidence during the on-programme period from the workplace, backed up by relevant company processes and procedures.
- Practical Skills Observation – To assess the apprentices application of skills
- Professional Discussion – To holistically assess Knowledge, Skills & Behaviours across the standard which will be informed by the reflective portfolio

IN-COMM TRAINING SERVICES

LEAN MANUFACTURING OPERATIVE STANDARD LEVEL 2

12 MONTH LEARNING PROGRAMME –
Two week block release to centre with assessor visits to place of work

ROLE PROFILE:

The Manufacturing Industry offers an exciting and varied career both in the UK & abroad providing a broad spectrum of opportunities for people to work in a technically advanced and innovative environment.
Businesses within the sector range from small family run manufacturing operations to large multi-national companies driving the countries' growth & wealth.

The UK's Manufacturing Industry is highly regarded worldwide for its innovation and manufacturing excellence and requires a high degree of skill & knowledge across all levels of their organisations.

A Lean Manufacturing Operative will be expected to carry out their work safely and meet the exacting quality standards demanded in a fast paced and efficient processing environment and develop into a multi-skilled operator through process ownership. A lean manufacturing operative can be required to carry out manufacturing activities on multiple products with different specifications consecutively e.g. automotive manufacturing – Multi models manufacturing results in the manufacturing of different models of vehicle with different specification variants within a high volume environment.

They will be required to prepare, control, contribute to and complete manufacturing operations, and follow manufacturing processes and standard operating procedures (SOPs) whilst adhering to specific safe working policies & procedures. A Lean Manufacturing Operative will be responsible for maintaining Health and Safety requirements at all times e.g. wearing correct Personal Protective Equipment (P.P.E.) correct use of equipment and tooling, safe stopping and resetting of machinery, maintain an organised work area e.g. 5s (Sifting, Sorting, Sweeping, Spick & Span and Sustain) ensuring the safe disposal of waste in line with environmental systems and regulatory requirements (ISO 14001). They will be required to contribute, develop and support improvement in the manufacturing operation using continuous improvement methods, kaizen tools, process visualisation using lean principles and problem solving tools and techniques. They will be responsible for carrying out quality checks throughout the manufacturing operations to ensure quality is built in and that any defects or concerns are highlighted and dealt with in line with relevant quality standards (ISO 9002).

They will work closely with stakeholders and will have clear reporting lines to ensure appropriate escalation e.g. team leader, line leader, process leader, supervisor etc. should problems occur within the process.

Examples of the job titles from across the manufacturing sector that would be covered within this standard are:

- Team Member Production
- Manufacturing Production Operative
- Manufacturing Assembly Operative
- Manufacturing Inspection/Quality Assurance Operative
- Manufacturing Logistics Operative
- Manufacturing Material Handling Operative
- Manufacturing Process/Finishing Operative.

A Lean Manufacturing Operative must have the core requirements below and demonstrate the specialist requirements in ONE job specific role.

CORE KNOWLEDGE:

A Lean Manufacturing Operative will have the following knowledge and understanding of:

- Health & Safety: Relevant statutory, organisational and health and safety regulations relating to lean manufacturing operations and safe practices
- Environmental: Compliance procedures/systems in line with regulatory requirements e.g. ISO 14001 or other relevant environmental standards
- Production: Their individual roles and responsibilities within the organisation and the flexibility required to deliver products to meet customers costs/delivery targets/requirements e.g. Just in time (JIT)
- Lean Manufacturing Operations: Manufacturing standard operation procedures (SOPs) adherence and development of lean processes
- Quality Control: Process equipment monitoring, data collection, error proofing and operating procedures e.g. ISO 9002 or other relevant quality standards
- Problem Solving: The tools and methods of effective problem solving using data, reports and documents to resolve production related issues e.g. A3 report, graphs, matrices and escalate concerns
- Continuous Improvement: How to study and identify ways to improve the safety, quality, cost or process efficiency using lean manufacturing tools e.g. kaizen
- Communication: How to share information using a range of methods within the manufacturing environment e.g. oral, written, electronic, information boards, visual displays
- Work Place Organisation: How to maintain a safe and efficient work site through work place organisation e.g. 5s and process ownership

CORE SKILLS:

A Lean Manufacturing Operative will have the skills and understanding to:

- Health & Safety: Work safely at all times, complying with health and safety legislation, regulations, and other relevant guidelines. Identifying risks within their processes and support/carry out countermeasure activities to improve safe working. Manage tooling, equipment and materials daily in-line with supplier standards e.g. COSHH (Control of Substances Hazardous to Health).
- Environmental: Comply with environmental procedures and systems and contribute to the achievement of specific standards e.g. ISO 14001 or other relevant environmental standards and use the 4R's (Reduce, Re-use, Recycle, Recover) where possible.
- Production: Demonstrate their ability to carry out their role effectively, efficiently and flexibly maintaining lean manufacturing principles to meet customer's demands e.g. JIT
- Lean Manufacturing Operations: Demonstrate their skill and knowledge following SOPs and building their versatility across a number of processes and process areas. Select and use appropriate tools, equipment and materials to carry out the manufacturing operation
- Quality Control: Demonstrate appropriate process documentation control. Accurately completing check sheets, monitoring process and equipment data efficiently and legibly using the correct terminology required to meet the quality standard e.g. ISO 9002

IN-COMM TRAINING SERVICES

LEAN MANUFACTURING OPERATIVE LEVEL 2 STANDARD

CONTINUED...

CORE SKILLS CONTINUED:

A Lean Manufacturing Operative will have the skills and understanding to:

- Problem Solving: Demonstrate their ability to identify and resolve problems within the lean manufacturing environment using effective problem solving tools and techniques. Manage problems that may occur during the manufacturing process within the limits of their responsibility and escalate as appropriate
- Continuous Improvement: Generate ideas and contribute to process improvement activities individually or as part of a team through fact finding and analysis to improve the safety, environment, quality, cost or production process. Identifying and eliminating the 7 wastes (defects, over production, transportation, waiting, inventory, motion and processing)
- Communication: Demonstrate communication skills which include oral, written, electronic (PC), information boards or visual displays to effectively share information
- Work Place Organisation: Maintains and monitors the work site efficiently and effectively at all times using the elements of sifting, sorting, sweeping, sustaining, spick & span (5's) within the lean manufacturing environment

BEHAVIOURS:

A Lean Manufacturing Operative requires the behaviours that will ensure they are:

- Punctual, reliable and takes responsibility for their own actions.
- Show respect for others, having regard for diversity and equality.
- Respond positively to change in the working environment.
- Integrates within the team and supports others.
- Can work independently and effectively in challenging situations.
- Maintains quality of work under pressure.
- An open and honest communicator.
- Listens to other people's opinions.
- A positive and respectful attitude.
- Follows instructions and guidance and demonstrates attention to detail.
- Seeks opportunities to develop and adapt to different situations, environments or technologies.

Specialist job roles:

JOB ROLE 1:

Lean Manufacturing Operatives working within a Production/Assembly role will be able to meet the requirements of two different production/assembly processes or assignments:

Knowledge of:

- The importance of following the specified assembly sequence and procedure at all times
- How to check the quality of the assembly, against the required quality standards and what tools and equipment are used
- The procedure for positioning, aligning and securing component parts during the assembly operations
- Where to obtain the necessary job instructions, operating procedures and assembly specifications that are used, and how to interpret them
- How to Identify and resolve current and potential production/assembly problems within the limits of their responsibility

Skills that will require them to:

- Check components for damage and that they are in a usable condition
- Correctly position, align and secure the components
- Secure the components in position using the specified fastening device/method
- Obtain and follow the correct Job instructions/Standard operating procedures production/assembly specifications in accordance with time constraints and the roles and responsibilities identified for the production/assembly activity
- Produce components which comply with the specification and quality requirements
- Carry out quality checks on component parts and completed assemblies and deal with quality concerns and defects in line with their responsibility

IN-COMM TRAINING SERVICES

LEAN MANUFACTURING OPERATIVE LEVEL 2 STANDARD

CONTINUED...

Specialist job roles:

JOB ROLE 2:

Manufacturing Operatives working within an Inspection/Quality assurance role will have:

Knowledge of:

- The correct methods of handling and storing the samples
- Where to obtain the necessary job instructions, inspection/quality procedures and product specifications that are used, and how to interpret them
- How to identify which samples, products and materials do not meet the quality requirements
- Procedures for the handling and segregation of defect components
- Specific safe working practices and environmental regulations that need to be observed

Skills that will require them to:

- Obtain and follow the correct Job instructions, inspection/quality procedures and product specifications in accordance with time constraints and the roles and responsibilities identified for the inspection/quality assurance activity
- Collect production samples at the required frequency in accordance with inspection specification and operating procedures
- Carry out inspection and testing activities using the specified methods and equipment
- Prepare, handle, transfer and store samples safely and correctly in accordance with quality control procedures
- Accurately interpret the data/results gained from the inspection and testing procedures being used
- Record and report inspection findings to relevant person

Specialist job roles:

JOB ROLE 3:

Manufacturing Operatives working within a Logistics/Material handling role will be required to have:

Knowledge of:

- The procedures and documentation required to allow the transfer of materials to take place
- Where to obtain the necessary job instructions, specification details and specific transfer/handling procedures that are used, and how to interpret them
- The procedures for the movement and transferring of materials to the correct location within given timelines
- What tools and equipment are used for the material movement operations undertaken and how to check that they are in a safe and usable condition
- The lifting and handling procedures, and load bearing capacities of the equipment being used

Skills that will require them to:

- Safely move materials to the correct location using the relevant equipment
- Obtain and follow the correct Job instructions, specification details and specific transfer/handling procedures in accordance with time constraints and the roles and responsibilities identified for the logistic/material handling activity
- Move materials using the appropriate procedures, ensuring the materials are correct, safely loaded and secure.
- Check materials selected to be moved are in line with job requirements
- Carry out quality checks on materials that are to be moved and deal with quality concerns and damage in line with their responsibility
- Return equipment to its correct location on completion of the activities and leave it in a safe and usable condition

LEAN MANUFACTURING OPERATIVE LEVEL 2 STANDARD

CONTINUED...

Specialist job roles:

JOB ROLE 4:

Manufacturing Operatives working within a Production processing/finishing role will have:

Knowledge of:

- What tools and equipment are used for the processing/finishing operations undertaken and how to check that they are in a safe and usable condition
- Where to obtain the necessary job instructions, processing/finishing procedures and equipment operating procedures that are used, and how to interpret them
- Specific safe working practices, processing/finishing procedures and environmental regulations that need to be observed
- The procedure for the recovery or restart of manufacturing due to quality or process concern
- The importance of following the pre-determined sequence of events in the processing/finishing operation and the consequences of not following them

Skills that will require them to:

- Perform one processing/finishing operation method e.g. hand processing, manually operated machine processing, fully automated machine processing, combined processing
- Obtain and follow the correct Job instructions, processing/finishing procedures and equipment operating procedures in accordance with time constraints and the roles and responsibilities identified for the processing/finishing activity
- Perform the processing/finishing operation according to instructions and safe operating procedures
- Monitor and control the processing/finishing operation
- Carry out quality checks on component parts and completed assemblies and deal with quality concerns and defects in line with their responsibility
- Produce processed/finished products which comply with processing specification

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to Qualification
- Working Safely
- Employment Rights & Responsibilities
- Safeguarding
- Diary Keeping & Continuous Professional Development Log
- Equality & Diversity
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their programme will not only complete their Lean Manufacturing Operative Level 2 Apprenticeship but will also gain qualifications at Level 2 Diploma in Manufacturing (Knowledge & Skills). Dependent upon prior qualifications learners may also need to complete functional skills in Maths and English to a minimum of Level 1 and have taken the tests for Level 2.

Off the Job Training Subjects Include:

- Health & Safety within a Manufacturing Environment
- Communicating and Working effectively within a Manufacturing Environment
- Working Relationships and Individual Rights & Responsibilities within a Manufacturing Environment
- Application of Workplace Organisation
- Work Related Problem Solving Techniques

For the On the Job training learners have the following subjects to select from subject to their individual requirements, qualification requirements and correlation to their job role:

- Preparing, Controlling or Concluding Manufacturing Operations
- Transferring or Receiving & Checking Materials for Manufacturing Operations
- Producing Products by Assembly or Processing Operations
- Finishing Operations
- Analysing the Results of Inspection and Confirming Quality of Production
- Carrying Out Inspection and Testing Activities
- Recording & Reporting Inspection and Test Results

Assessment

To achieve this qualification learners must go through an end point assessment, this consists of Elements. Each assessment method will directly assess the Knowledge, Skills and Behaviours of the Standard. The elements are:

- Mandatory Qualification – Completion of Level 2 Diploma in Manufacturing (Knowledge & Skills)
- Portfolio – a portfolio of evidence comprising of naturally occurring evidence during the on-programme period from the workplace, backed up by relevant company processes and procedures.
- Practical Skills Observation – To assess the apprentice's application of skills with a Question & Answer Session to check underpinning Knowledge.
- Professional Discussion – To holistically assess Knowledge, Skills & Behaviours across the standard which will be informed by the reflective portfolio.

IN-COMM TRAINING SERVICES

GENERAL WELDER (ARC PROCESSES) LEVEL 2 – STANDARD

15 MONTH PROGRAMME –
1 Days Per Week in Centre

ROLE PROFILE:

Welding is a way to make high strength joints between two or more parts. General Welders use high electrical energy to form an arc. Manual dexterity is essential in controlling the arc, which is used to melt metals, allowing them to fuse together to form a structurally sound weld. Welding is used extensively and in almost every sector of industry. There is a high demand for skilled General Welders in areas, such as automotive, marine, transport, general fabrication, construction and many more.

General Welders produce items like components for cars, ships; rail vehicles; simple metallic containers; and steelwork for bridges, buildings and gantries. Welding is a safety critical occupation and every welder takes responsibility for the quality and accuracy of their work. General Welders are required to produce joints that satisfy basic quality standards in order to ensure that the finished products function correctly, contributing to the safety of all and the global quality of life.

Skilled, qualified, professionally certified General Welders can work anywhere in the world and provide services in harshest of environments. For these accomplished professionals, the monetary rewards can be significant. There is a highly complex range of welding skills: the different arc welding processes require different levels of manual dexterity, knowledge and skill to avoid making defective welds. There are a wide range of metallic materials that can be welded, each with different properties and behaviours.

GENERAL WELDERS WILL HAVE THE SKILL TO:

Produce good quality welds using two welding process/material type combinations (TIG, MMA, MIG/MAG, FCAW) and (Carbon and Low Alloy steel, High Alloy Ferritic/Martensitic Steel, Austenitic Stainless Steel, Nickel and Nickel Alloys, Aluminium and Aluminium Alloys) in two welding positions (Downhand, Horizontal, Vertical, Overhead)

Attain a qualification in accordance with one of the following standards: ISO 9606 / ASME IX / BS4872 / AWS D1.1, determined by the employer. N.B. These qualifications are regarded as licences to practice in welding

Achieve a quality of work to meet international standards for dimensional and surface inspection (Visual, Magnetic Particle Inspection and Dye Penetrant Inspection)

Position, prepare and check the welding equipment

Receive, handle and maintain consumables

Prepare, check and protect materials and work area ready for welding

Complete and check the finished weld ready for inspection and report into the production control system

Ensure that health and safety requirements are fully accounted for in all the above

GENERAL WELDER (ARC PROCESSES) LEVEL 2 STANDARD

CONTINUED...

GENERAL WELDERS WILL HAVE THE KNOWLEDGE TO:

Be aware of the basic mechanical properties and weldability of welded materials

Understand the common arc welding processes, joint types (fillet, lap, butt, etc.) and positions

Understand the major components of welding equipment and the essential parameters for welding

Understand the terminology, operation and controls for the selected arc welding processes, joint types and welding positions

Identify and understand the causes of typical welding defects and how their occurrence can be reduced, for the materials and welding processes selected

Understand the functions of welding consumables and the requirements for correct storage and handling

Be able to identify and select correct welding consumables for each application

Understand and identify hazards and basic health, safety and quality requirements when welding

Know how to interpret and work to a welding procedure specification

Know the basics of welding quality documents and reporting systems

GENERAL WELDERS WILL DISPLAY THE FOLLOWING BEHAVIOURS:

A questioning attitude, to understand the processes and associated industrial applications. Maintaining competence with a commitment to Continuing Professional Development

Planning and preparation to ensure production and Continuing Professional Development goals are achieved

Intervention, to challenge poor practices and channel feedback to the appropriate authorities to implement change

Reliability and dependability to consistently deliver expectations in production, quality, work ethics and self-development

Accountability, to follow the specified procedures and controls and be personally responsible for their production work and personal development

INDUCTION:

All learners will receive a 5 day induction into their programme at our training centre covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely H&S Qualification
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Introduction to Lean
- Equality & Diversity
- Safeguarding
- Prevent Agenda

TOPICS COVERED:

All learners will complete off the job training for this standard. Dependent upon prior qualifications learners may also need to complete functional skills in English & Maths.

For the off the job training element, it is compulsory that learners attend centre to achieve knowledge, understanding and competence in the following subjects:

- General Theoretical Training covering:
  - Basic Welding Equipment & Processes
  - Making Welded Joints
- Welding Process Specific Theoretical Training
  - M.M.A Welding
  - MIG/MAG/FCAW Welding
- Materials Specific Theoretical Training
  - High Alloy Steel

ASSESSMENT:

To achieve this qualification learners must go through End Point Assessment consisting of:

- Knowledge Tests – The learner will be given a multiple choice test as part of checking their under pinning knowledge for competence elements.
- Portfolio - a portfolio of evidence comprising of naturally occurring evidence during the on-programme period from the workplace, backed up by relevant company processes and procedures.
- Practical Test & Associated Oral Examination – giving the learner the opportunity to demonstrate knowledge, skills and behaviours
- Professional Interview – covering application of knowledge learned, role of the welder in industry and professional behaviours prescribed in the standard.
- Log Book & Diary evidence of Continuous Professional Development

IN-COMM TRAINING SERVICES

ENGINEERING TECHNICIAN LEVEL 3 STANDARD

3 YEAR PROGRAMME –
Full Time Learners completing Foundation Level 2 over 5 days per week for 12 months then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

4 YEAR PROGRAMME –
Part Time Learners completing Foundation Level 2 over 3 days per week for 2 years then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

Engineering Technicians in the Aerospace, Aviation, Automotive, Maritime Defence and wider Advanced Manufacturing and Engineering Sector are predominantly involved in highly skilled, complex work and must, as a minimum be able to:

- Apply safe systems of working
- Make a technical contribution to either the design, development, quality assurance, manufacture, installation, commissioning, decommissioning, operation or maintenance of products, equipment, systems, processes or services
- Apply proven techniques and procedures to solve engineering/manufacturing problems
- Demonstrate effective interpersonal skills in communicating both technical and non-technical information
- Have a commitment to continued professional development

Engineering Technicians take responsibility for the quality and accuracy of the work they undertake within the limits of their personal authority. They also need to be able to demonstrate a core set of behaviours in order to be competent in their job role, complement wider business strategy and development. This will enable them to support their long term career development.

Engineered and manufactured products and systems that Engineering Technicians work on could involve mechanical, electrical, electronic, electromechanical and fluid power components/systems.

KNOWLEDGE:

Understanding the importance of complying with statutory, quality, organisational and health and safety regulations

Understanding of general engineering/manufacturing mathematical and scientific principles, methods, techniques, graphical expressions, symbols formulae and calculations used by engineering technicians

Understanding the structure, properties and characteristics of common materials used in the sector

Understanding the typical problems that may arise within their normal work activities/environment

Understanding approved diagnostic methods and techniques used to help solve engineering/manufacturing problems

Understanding the importance of only using current approved processes, procedures, documentation and the potential implications for the organisation if this is not adhered to

Understanding and interpreting relevant engineering/manufacturing data and documentation in order to complete their job role

Understanding the different roles and functions in the organisation and how they interact

Understanding why it is important for an organisation to continually review their processes and procedures

Obtaining, checking and using the appropriate documentation (such as job instructions, drawings, quality control documentation)

Undertaking the work activity using the correct processes, procedures and equipment

KNOWLEDGE:

Working safely at all times, complying with health, safety and environmental legislation, regulations and organisational requirements planning and where applicable obtaining all the resources required to undertake the work activity

Carrying out the required checks (such as quality, compliance or testing) using the correct procedures, processes and/or equipment

Dealing promptly and effectively with engineering/manufacturing problems within the limits of their responsibility using approved diagnostic methods and techniques and report those which cannot be resolved to the appropriate personnel

Completing any required documentation using the defined recording systems at the appropriate stages of the work activity

Restoring the work area on completion of the activity and where applicable return any resources and consumables to the appropriate location

BEHAVIOURS:

Personal responsibility, resilience and ethics. Comply with health and safety guidance and procedures, be disciplined and have a responsible approach to risk, work diligently at all times, accept responsibility for managing time and workload and stay motivated and committed when facing challenges. Comply with any organisational policies/codes of conduct in relation to ethical compliance

Work effectively in teams. Integrate with the team, support other people, consider implications of their actions on other people and the business

Effective communication and interpersonal skills. Open and honest communicator, communicating clearly using appropriate methods, listening to others and have a positive and respectful attitude

Carrying out the required checks (such as quality, compliance or testing) using the correct procedures, processes and/or equipment

Dealing promptly and effectively with engineering/manufacturing problems within the limits of their responsibility using approved diagnostic methods and techniques and report those which cannot be resolved to the appropriate personnel

Focus on quality and problem solving. Follow instructions and guidance, demonstrates attention to detail, follow a logical approach to problem solving and seek opportunities to improve quality, speed and efficiency

Continuous personal development. Reflect on skills, knowledge and behaviours and seeks opportunities to develop, adapt to different situations, environments or technologies and have a positive attitude to feedback and advice

Pathways that can be seen in more depth over the next few pages that we deliver under this standard are:

- Technical Support Technician
- Product Design & Development Technician
- Mechatronics Maintenance Technician
- Toolmaker and Tool & Die Maintenance Technician
- Machinist – Advanced Manufacturing Engineering Technician

IN-COMM TRAINING SERVICES

MACHINIST – ADVANCED MANUFACTURING ENGINEERING – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

3 YEAR PROGRAMME –
Full Time Learners completing Foundation Level 2 over 5 days per week for 12 months then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

4 YEAR PROGRAMME –
Part Time Learners completing Foundation Level 2 over 3 days per week for 2 years then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

KNOWLEDGE:

Machinists in the Advanced Manufacturing Engineering sector are predominantly involved in highly skilled, complex and precision work, machining components from specialist materials using conventional and/or CNC machine tools such as centre lathes, vertical and horizontal milling machines, horizontal and cylindrical grinding machines, electro discharge machines, single and multi-axis CNC machine tool centres.

They will be expected to be able to be set up, operate and adjust/edit equipment settings as applicable to the machine tool being used. When using CNC equipment they will be expected to be able to produce, prove and/or edit programmes. During and on completion of the machining operations they will be expected to measure and check the components being produced and make adjustments to the equipment/programme to ensure components meet the required specification.

TOPICS COVERED:

All the learners will begin with a 2 week induction covering the principles of the apprenticeship, Induction to Programme and additional courses such as:

- IOSH Working Safely
- Manual Handling
- Abrasive Wheels
- Slinging
- Diary keeping & continuous professional log
- Equality & Diversity
- Prevent Agenda
- Safeguarding
- Employment Rights & Responsibilities
- Introduction to Lean

To begin their journey through to becoming an Engineering Technician all learners start with off the job training covering 3 or 5 days dependent upon whether they are undertaking a full time or part time course. During this time learners will work towards achieving a Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence) and a Diploma in Machining (Foundation Knowledge).

Dependent upon prior qualifications learners may also need to complete functional skills in English & Maths to a minimum Level 2.

TOPICS COVERED ARE:

- Complying with Statutory Regulations & Org Safety Req.
- Working Efficiently & Effectively in Engineering Environment
- Using & Communicating Technical Information
- Conducting Business Improvement Techniques (Covered in Induction)
- Producing Components using Hand Fitting Techniques
- Preparing & Using Lathes for Turning Operations
- Preparing & Using Milling Machines
- General Welding Applications
- Producing CAD Models (drawings) using a CAD system
- Assembling & Testing Fluid Power Systems
- Preparing & Using CNC Machining Centres
- Working in an Engineering Environment
- Engineering Techniques – Advanced Manufacturing Engineering
- Engineering Maths & Science Principles
- Fitting & Assembly Techniques – Advanced Manuf. Engineering
- Business Improvement Techniques
- Principles of Turning & Milling
- Principles of CNC Machining/ Fabrication

MACHINIST – ADVANCED MANUFACTURING ENGINEERING – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

CONTINUED...

Once the foundation element has been completed the apprentices will move onto Development Skills And Knowledge where they will continue with topics within the Diploma in Machining (Development Knowledge) one day per week at the training academy and the Level 3 Diploma in Advanced Manufacturing Engineering (Development Competence) within their place of work with monthly visits across a 30 month period. Both qualifications covering the following:

Diploma in Advanced Manufacturing Engineering – Machinist (Development Competence)
Mandatory Units:

- Complying with Statutory Regulations and Organisational Safety Requirements
- Using & Interpreting Engineering Data & Documentation
- Working Efficiently & Effectively in Advanced Manufacturing & Engineering

Optional units are then available to be selected dependent upon the learners specific job role requirements from units such as (Further units are available):

- Machining Components using Centre Lathes or Milling Machines or Electro-Discharge Machines
- Carrying out CNC Machine Tool Programming
- Loading & Proving CNC Machine Tool Programmes

Diploma in Machining (Development Knowledge)

- Advanced Manufacturing Techniques
- Engineering & Environmental Health & Safety
- Engineering Communications
- Engineering Design Process
- Engineering Inspection & Quality Control
- Engineering Mathematics
- Properties & Applications of Engineering Materials

Assessment
All elements are under Awarding Body accreditations with final end point assessment being conducted by:

- Achievement of all qualifications within the level 2 & 3 elements of the training producing portfolios of evidence assessed against Awarding Body Standards.
- Continuous Professional Development Log & Diary – Learners are to keep a CPD log of what they have learnt and developed across their programme to ensure how learning gained has been applied to their role.
- Employer Occupational Competence Validation Interview reviewing learner portfolio, log book and diary evidence and knowledge whereby a grade of Pass or Fail is given. Professional Engineering Institute (PEI) will quality assure provider's documentation for this.
- The PEI will confirm whether the apprentice has met the criteria for EngTech & Qualifications of Standard.
- Employer does final sign off of the apprenticeship and the PEI applies for apprenticeship certificate

SPECIFIC SPECIALIST KNOWLEDGE:

Understand mathematical techniques, formula and calculation involved in the machining processes such as speeds and feeds, calculating angles/tapers, material removal.

Understand the practical and theoretical uses of the machines used, and their applications.

Understand the work-holding devices, cutting tools, and setting up procedures, in adequate depth to provide a sound basis for carrying out the activities, correcting faults and ensuring the work output is to the required specification.

SPECIFIC SPECIALIST SKILLS

Read and interpret relevant data and documentation used to produce machined components.

Determine the most efficient and effective approach to machine the component using a range of tools, machining processes and techniques.

Select and set up the correct tooling and workholding devices.

Set and adjust the machine operating parameters to produce the work pieces to the required specification. This will involve settings feeds and speeds for roughing and finishing operations.

Select and use a range of measuring and testing equipment to check components are to the required quality and accuracy.

Produce complex and specialist components as a one off test and trial work piece and/or producing components in small or large batches.

Contribute to the business by identifying possible opportunities for improving work practices, processes and/or procedures.

IN-COMM TRAINING SERVICES

MECHATRONICS MAINTENANCE TECHNICIAN – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

3 YEAR PROGRAMME –
Full Time Learners completing Foundation Level 2 over 5 days per week for 12 months then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

4 YEAR PROGRAMME –
Part Time Learners completing Foundation Level 2 over 3 days per week for 2 years then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

ROLE PROFILE:

Mechatronics Maintenance Technicians ensure that plant and equipment perform to the required standard to facilitate production targets regarding Safety, Quality, Delivery and Cost within High Value Manufacturing environments. Typically the work would cover a broad range of activities including; installation, testing, fault finding and the ongoing planned maintenance of complex automated equipment. This requires the application of a complex blend of skills, knowledge and occupational behaviours across the electrical, electronic, mechanical, fluid power and control systems disciplines.

TOPICS COVERED:

All the learners will begin with a 2 week induction covering the principles of the apprenticeship, Induction to Programme and additional courses such as:

- IOSH Working Safely
- Manual Handling
- Abrasive Wheels
- Slinging
- Diary keeping & continuous professional log
- Equality & Diversity
- Prevent Agenda
- Safeguarding
- Employment Rights & Responsibilities
- Introduction to Lean

To begin their journey through to becoming an Engineering Technician all learners start with off the job training covering 3 or 5 days dependent upon whether they are undertaking a full time or part time course. During this time learners will work towards achieving a Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence) and begin their Level 3 Diploma in Advanced Manufacturing Engineering (Development Knowledge) this knowledge element spans the whole of the programme.

Dependent upon prior qualifications learners may also need to complete functional skills in English & Maths to a minimum Level 2.

TOPICS COVERED ARE:

- Complying with Statutory Regulations & Org Safety Req.
- Working Efficiently & Effectively in Engineering Environment
- Using & Communicating Technical Information
- Conducting Business Improvement Techniques (Covered in Induction)
- Producing Components using Hand Fitting Techniques
- Preparing & Using Lathes for Turning Operations
- Preparing & Using Milling Machines
- General Welding Applications
- Producing CAD Models (drawings) using a CAD system
- Assembling & Testing Fluid Power Systems
- Wiring & Testing Electrical Equipment Circuits
- Maintaining Electrical Equipment & Systems
- Health & Safety in the Engineering Workplace
- Communications for Engineering Technicians
- Mathematics for Engineering Technicians
- Mechanical Principles of Engineering Systems
- Engineering Organisational Efficiency & Improvement

At the end of the Foundation Stage learners undertaking this qualification have to complete and pass the criteria for an Award for Foundation Phase Gateway Assessment (Foundation Behaviours) covering a mid-point assessment against the following units for which they have undertaken and will not be allowed to move forward until this has been achieved:

- Producing Components using Hand Fitting Techniques
- Maintaining Electrical Equipment & Systems
- Wiring & Testing Electrical Equipment & Circuits

MECHATRONICS MAINTENANCE TECHNICIAN – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

CONTINUED...

Once the foundation element has been completed the apprentices will move onto Development Skills And Knowledge where they will continue with topics within the Diploma in Advanced Manufacturing Engineering (Development Knowledge) one day per week at the training academy and the Level 3 Diploma in Advanced Manufacturing Engineering – Mechatronics Maintenance (Development Competence) within their place of work with monthly visits across a 30 month period. Both qualifications covering the following:

Diploma in Advanced Manufacturing Engineering – Mechatronics Maintenance (Development Competence)

Mandatory Units:

- Complying with Statutory Regulations and Organisational Safety Requirements
- Using & Interpreting Engineering Data and Documentation
- Working Efficiently & Effectively in Advanced Manufacturing & Engineering
- Handing Over & Confirming Completion of Maintenance Activities
- Carry out Fault Diagnosis on Engineered Systems
- Carrying Out Preventative Planned Maintenance on Engineered Systems
- Maintaining Mechanical Equipment
- Maintaining Electrical Equipment

Optional units are then available to be selected dependent upon the learners specific job role requirements from units such as (Further units are available):

- Maintaining Fluid Power Equipment
- Modifying or Rewiring Electrical Circuits
- Carrying Out Condition Monitoring of Plant & Equipment
- Producing Programs for Industrial Robots

Diploma in Advanced Manufacturing Engineering (Development Knowledge)

- Engineering Project
- Properties & Applications of Engineering Principles
- Further Mechanical Principles of Engineering Systems
- Maintenance of Fluid Power Systems and Components
- Computer Aided Design Techniques
- Engineering Maintenance Procedures & Techniques
- Maintenance of Mechanical Systems
- Three Phase Motors and Drives

Assessment

All elements are under Awarding Body accreditations with final end point assessment being conducted by:

- Achievement of all qualifications within the level 2 & 3 elements of the training producing portfolios of evidence assessed against Awarding Body Standards.
- Continuous Professional Development Log & Diary – Learners are to keep a CPD log of what they have learnt and developed across their programme to ensure how learning gained has been applied to their role.
- Employer Occupational Competence Validation Interview reviewing learner portfolio, log book and diary evidence and knowledge whereby a grade of Pass or Fail is given. Professional Engineering Institute (PEI) will quality assure provider's documentation for this.
- Engineering Technician application and evidence needs to be met for learner to register & apply to gain "EngTech" status
- The PEI will confirm whether the apprentice has met the criteria for EngTech & Qualifications of Standard.
- Employer does final sign off of the apprenticeship and the PEI applies for apprenticeship certificate

SPECIFIC SPECIALIST KNOWLEDGE

Understand mathematical techniques, formula and calculation in a mechatronics maintenance environment and the type of equipment being maintained.

Understand mechanical, electrical, electronic, fluid power and process control principles in a mechatronics maintenance environment.

Understand how equipment being maintained functions and operating parameters in individual components and how they interact.

Understand fault diagnosis methods, techniques and equipment used when maintaining equipment and systems.

Understand condition monitoring methods and equipment used and understand how the information gained supports the planning of maintenance activities.

Understand how to minimise machinery downtime by implementing planned preventative maintenance programmes.

SPECIFIC SPECIALIST SKILLS

Read and interpret relevant data and documentation used to maintain components, equipment and systems.

Carry out condition monitoring of plant and equipment.

Carry out planned maintenance activities on plant and equipment.

Carrying out complex fault diagnosis and repair activities on high technology engineered systems such as:
1. Maintaining Mechanical Equipment
2. Maintaining Fluid & Pneumatic Power Equipment
3. Maintaining Electrical & Electronic Equipment
4. Maintaining Process Control Equipment

Carrying out confirmation testing and subsequent smooth hand over of equipment & plant.

Support the installation, testing and commissioning of equipment (where applicable)

Contribute to the business by identifying possible opportunities for improving working practices process and/or procedures.

IN-COMM TRAINING SERVICES

TECHNICAL SUPPORT TECHNICIAN – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

3 YEAR PROGRAMME –
Full Time Learners completing Foundation Level 2 over 5 days per week for 12 months then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

4 YEAR PROGRAMME –
Part Time Learners completing Foundation Level 2 over 3 days per week for 2 years then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

ROLE PROFILE:

Technical Support Technicians work as part of a team to provide technical support and expertise for all areas of the Engineering and Manufacturing function, including communications software, test, analysis tools, measurement, off line programming, process control, performance and continuous improvement solutions, capacity planning, production scheduling/planning, product technical applications and capability, technical sales and marketing support, product development and innovation, engineering drawing, purchasing and/or supply of goods and services for engineering activities, quality control, inspection and e-commerce technologies as required.
The requirements are designed to stretch the individual and enhance their progression. They will be able to work with minimum supervision, taking responsibility for the quality, accuracy and timely delivery of the work they undertake. They will be proactive in finding solutions to problems and identifying areas for improving the business.

TOPICS COVERED:

All the learners will begin with a 2 week induction covering the principles of the apprenticeship, Induction to Programme and additional courses such as:

- IOSH Working Safely
- Manual Handling
- Abrasive Wheels
- Slinging
- Diary keeping & continuous professional log
- Equality & Diversity
- Prevent Agenda
- Safeguarding
- Employment Rights & Responsibilities
- Introduction to Lean

To begin their journey through to becoming an Engineering Technician all learners start with off the job training covering 3 or 5 days dependent upon whether they are undertaking a full time or part time course. During this time learners will work towards achieving a Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence) and begin their Level 3 Diploma in Advanced Manufacturing Engineering (Development Knowledge) this knowledge element spans the whole of the programme.

Dependent upon prior qualifications learners may also need to complete functional skills in English & Maths to a minimum Level 2.

TOPICS COVERED ARE:

- Complying with Statutory Regulations & Org Safety Req.
- Working Efficiently & Effectively in Engineering Environment
- Using & Communicating Technical Information
- Conducting Business Improvement Techniques (Covered in Induction)
- Producing Components using Hand Fitting Techniques
- Preparing & Using Lathes for Turning Operations
- Preparing & Using Milling Machines
- General Welding Applications
- Producing CAD Models (drawings) using a CAD system
- Assembling & Testing Fluid Power Systems
- Health & Safety in the Engineering Workplace
- Communications for Engineering Technicians
- Mathematics for Engineering Technicians
- Mechanical Principles of Engineering Systems
- Engineering Organisational Efficiency & Improvement

TECHNICAL SUPPORT TECHNICIAN – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

CONTINUED...

Once the foundation element has been completed the apprentices will move onto Development Skills And Knowledge where they will continue with topics within the Diploma in Advanced Manufacturing Engineering (Development Knowledge) one day per week at the training academy and the Level 3 Diploma in Advanced Manufacturing Engineering – Technical Support (Development Competence) within their place of work with monthly visits across a 30 month period. Both qualifications covering the following:

Diploma in Advanced Manufacturing Engineering – Technical Support (Development Competence)
Mandatory Units:

- Complying with Statutory Regulations and Organisational Safety Requirements
- Using & Interpreting Engineering Data & Documentation
- Working Efficiently & Effectively in Advanced Manufacturing & Engineering

Optional units are then available to be selected dependent upon the learners specific job role requirements from units such as (Further units are available):

- Producing Mechanical Engineering Drawings using Computer Aided Techniques
- Inspecting Components using Co-ordinate Measuring Machines (CMM)
- Inspecting & Testing Products
- Loading & Proving Computer Control Programs
- Producing Off-line programs for CNC machines
- Planning or Monitoring Engineering Activities

Diploma in Advanced Manufacturing Engineering (Development Knowledge)
Mandatory Units:

- Engineering Project
- Properties & Applications of Engineering Principles
- Further Mechanical Principles of Engineering Systems
- Maintenance of Fluid Power Systems and Components
- Computer Aided Design Techniques
- Engineering Maintenance Procedures & Techniques
- Maintenance of Mechanical Systems

Assessment
All elements are under Awarding Body accreditations with final end point assessment being conducted by:

- Achievement of all qualifications within the level 2 & 3 elements of the training producing portfolios of evidence assessed against Awarding Body Standards.
- Continuous Professional Development Log & Diary – Learners are to keep a CPD log of what they have learnt and developed across their programme to ensure how learning gained has been applied to their role.
- Employer Occupational Competence Validation Interview reviewing learner portfolio, log book and diary evidence and knowledge whereby a grade of Pass or Fail is given. Professional Engineering Institute (PEI) will quality assure provider's documentation for this.
- The PEI will confirm whether the apprentice has met the criteria for EngTech & Qualifications of Standard.
- Employer does final sign off of the apprenticeship and the PEI applies for apprenticeship certificate

SPECIFIC SPECIALIST KNOWLEDGE

Understand mathematical techniques, formula and calculation in a technical support environment.

Understand the methods and techniques used to evaluate technical data and documentation.

Understand how to identify that the data and documentation being used is current and up to date.

Understand the procedure to be used for making changes to issued documentation.

Understand where and how to sourse other areas of technical expertise/information to help solve technical issues.

Understand the requirements of the customer (internal/external) and support using the appropriate tools, equipment and processes.

SPECIFIC SPECIALIST SKILLS

Produce technical documentation that contains all the relevant and necessary data and information required for the technical support activity being carried out.

Present technical documentation in the required format.

Ensure that codes, symbols and other references used in the technical documentation follows agreed UK/International Conventions.

Save and store technical documentation in the correct format, location in accordance with organisational and/or customer requirements.

Develop effective business and/or customer relationships.

Provide technical advice and guidance to others.

Contribute to the business by identifying possible opportunities for improving working practices, processes and/or procedures.

Plus One of the Following:

1. Produce engineering/manufacturing production plans
2. Obtain resources for engineering/manufacturing activities
3. Obtain and control materials used in engineering/ manufacturing environments
4. Implement quality control/assurance systems and procedures in an engineering/manufacturing environment.
5. Provide technical support services on products or services to internal and/or external customers
6. Produce documentation to supply or procure goods or services
7. Produce offline programs for computer numerical controlled systems.
8. Produce programs for scanning/digitalizing or co-ordinate measuring machines
9. Produce programs for logic control systems.
10. Produce programs for industrial robot applications
11. Produce engineering software tools/programs for analysis, quality, configuration management, safety assessments, system security applications
12. Produce engineering drawings/models using computer aided design techniques (such as mechanical, electrical, fabrication, fluid power, integrated systems or services)

IN-COMM TRAINING SERVICES

TOOLMAKER AND DIE MAINTENANCE TECHNICIAN – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

3 YEAR PROGRAMME –
Full Time Learners completing Foundation Level 2 over 5 days per week for 12 months then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

4 YEAR PROGRAMME –
Part Time Learners completing Foundation Level 2 over 3 days per week for 2 years then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

ROLE PROFILE:

Toolmakers and Tool & Die Maintenance Technicians are predominantly involved in the highly skilled, complex and specialist detailed work of manufacturing and maintaining the engineering tooling used to produce components, products and assemblies. These products, assemblies and systems affect all of our daily lives, whether it be for travel such as cars, planes, boats and rail energy, defence, food, clothing, packaging and health including medical equipment, devices and implants such as joint replacements. This requires the application of a broad range of activities including the interpretation of engineering drawings and technical instructions and the use of hand, machine and automated computer controlled machine tools and measuring equipment. Technicians must comply with applicable legislation and organisational safety requirements and be expected to work both individually and as part of a manufacturing team, working with minimum supervision, taking responsibility for the quality and accuracy of the work they undertake. They will be proactive in finding solutions to problems and identifying ways to improve the business. They will be expected to test and adjust the systems they have built or maintained ensuring tooling, jigs, fixtures and assemblies meet the required specification. This requires the application of a broad range of skills, knowledge and occupational behaviours across a range of engineering disciplines.

TOPICS COVERED:

All the learners will begin with a 2 week induction covering the principles of the apprenticeship, Induction to Programme and additional courses such as:

- IOSH Working Safely
- Manual Handling
- Abrasive Wheels
- Slinging
- Diary keeping & continuous professional log
- Equality & Diversity
- Prevent Agenda
- Safeguarding
- Employment Rights & Responsibilities
- Introduction to Lean

To begin their journey through to becoming an Engineering Technician all learners start with off the job training covering 3 or 5 days per week dependent upon whether they are undertaking a full time or part time course. During this time learners will work towards achieving a Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence) and begin their Level 3 Diploma in Advanced Manufacturing Engineering (Development Knowledge) this knowledge element spans the whole of the programme.

Dependent upon prior qualifications learners may also need to complete functional skills in English & Maths to a minimum Level 2.

TOPICS COVERED ARE:

- Complying with Statutory Regulations & Org Safety Req.
- Working Efficiently & Effectively in Engineering Environment
- Using & Communicating Technical Information
- Conducting Business Improvement Techniques (Covered in Induction)
- Producing Components using Hand Fitting Techniques
- Preparing & Using Lathes for Turning Operations
- Preparing & Using Milling Machines
- General Welding Applications
- Producing CAD Models (drawings) using a CAD system
- Assembling & Testing Fluid Power Systems
- Preparing & Using CNC Machining Centres
- Health & Safety in the Engineering Workplace
- Communications for Engineering Technicians
- Mathematics for Engineering Technicians
- Mechanical Principles of Engineering Systems
- Engineering Organisational Efficiency & Improvement

TOOLMAKER AND DIE MAINTENANCE TECHNICIAN – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

CONTINUED...

Once the foundation element has been completed the apprentices will move onto Development Skills And Knowledge where they will continue with topics within the Diploma in Advanced Manufacturing Engineering (Development Knowledge) one day per week at the training academy and the Level 3 Diploma in Advanced Manufacturing Engineering – Tool Maker and Tool & Die Maintenance (Development Competence) within their place of work with monthly visits across a 30 month period. Both qualifications covering the following:

Diploma in Advanced Manufacturing Engineering – Tool Maker and Tool & Die Maintenance (Development Competence)

Mandatory Units:

- Complying with Statutory Regulations and Organisational Safety Requirements
- Using & Interpreting Engineering Data & Documentation
- Working Efficiently & Effectively in Advanced Manufacturing & Engineering

Optional units are then available to be selected dependent upon the learners specific job role requirements from units such as (Further units are available):

- Assembling; Press Tools or Injection Mould Tools or Blow Mould Tools or Vacuum Forming Tools or Dies
- Preparing & Setting Power Presses
- Trying Out & Proving
- Setting a Range of Machines to Produce Tool Room Components
- Carrying Out Planned Maintenance

Diploma in Advanced Manufacturing Engineering (Development Knowledge)

- Engineering Project
- Properties & Applications of Engineering Principles
- Further Mechanical Principles of Engineering Systems
- Maintenance of Fluid Power Systems and Components
- Computer Aided Design Techniques
- Engineering Maintenance Procedures & Techniques
- Maintenance of Mechanical Systems

Assessment

All elements are under Awarding Body accreditations with final end point assessment being conducted by:

- Achievement of all qualifications within the level 2 & 3 elements of the training producing portfolios of evidence assessed against Awarding Body Standards.
- Employer Occupational Competence Validation Interview reviewing learner portfolio, log book and diary evidence and knowledge whereby a grade of Pass or Fail is given. Professional Engineering Institute (PEI) will quality assure provider's documentation for this.
- The PEI will confirm whether the apprentice has met the criteria for EngTech & Qualifications of Standard.
- Employer does final sign off of the apprenticeship and the PEI applies for apprenticeship certificate
- Continuous Professional Development Log & Diary – Learners are to keep a CPD log of what they have learnt and developed across their programme to ensure how learning gained has been applied to their role.

SPECIFIC SPECIALIST KNOWLEDGE

Understand mathematical techniques, formula and calculation in a toolmaking environment.

Understand structure, properties and characteristics of common materials used for the manufacture and repair of tooling, moulds, dies, jigs and fixtures.

Understand the safe operation, correct selection and the application of a range of hand tools used for toolmaking and die maintenance, including grinders, drills, stones etc.

Understand the safe operation and operating principles of a range of complex and often state-of-the-art workshop machinery (such as CNC lathes, milling, grinding and erosion machining centres, drilling and welding equipment).

Understand how to set up and operate the machinery/equipment efficiently and effectively.

Understand the principles of how the relevant tools, dies, jigs and fixtures being manufactured/maintained function, the operating sequences, the purpose of the individual components/systems and how they interact.

Understand the application of pneumatics, hydraulics, electrical and electronic systems as applied to various moulding, injection, pressing and similar associated machinery.

SPECIFIC SPECIALIST SKILLS

Read and interpret relevant data and documentation used to produce and/or maintain tool and die components, assemblies and systems.

Apply methods and techniques to produce, assemble, disassemble repair and/or maintain tools, dies, jigs and fixtures as applicable to the employer requirements.

Manufacture components (such as tooling, dies, jigs and fixtures).

Undertake testing to confirm correct operation, and of the effectiveness of repairs and maintenance activities carried out.

Undertake equipment/asset care and/or preventative planned maintenance processes and procedures.

Carrying out complex fault diagnosis and repair activities covering the following technologies as applicable to tool, die, jig and fixture environment:

1. Maintaining Mechanical Equipment
2. Maintaining Fluid & Pneumatic Power Equipment
3. Maintaining Electrical & Electronic Equipment
4. Maintaining Process Control Equipment

Contribute to the business by identifying possible opportunities for improving working practices, processes and/or procedures.

IN-COMM TRAINING SERVICES

PRODUCT DESIGN & DEVELOPMENT TECHNICIAN – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

3 YEAR PROGRAMME –
Full Time Learners completing Foundation Level 2 over 5 days per week for 12 months then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

4 YEAR PROGRAMME –
Part Time Learners completing Foundation Level 2 over 3 days per week for 2 years then a further 1 day per week Attendance at Academy with Monthly Assessor visits to company.

ROLE PROFILE:

Product Design & Development Technicians primarily work on all stages of product creation and modification. They support activities ranging from early concept feasibility, design and development stages right through to final preparation for launch and customers. This includes working in concept studios, rapid prototyping, assembly, testing, validating and analysing performance. Typically they work closely with engineers in bringing new concepts to life or supporting redesigns of existing products.

TOPICS COVERED:

All the learners will begin with a 2 week induction covering the principles of the apprenticeship, Induction to Programme and additional courses such as:

- IOSH Working Safely
- Manual Handling
- Abrasive Wheels
- Slinging
- Diary keeping & continuous professional log
- Equality & Diversity
- Prevent Agenda
- Safeguarding
- Employment Rights & Responsibilities
- Introduction to Lean

To begin their journey through to becoming an Engineering Technician all learners start with off the job training covering 3 or 5 days dependent upon whether they are undertaking a full time or part time course. During this time learners will work towards achieving a Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence) and begin their Level 3 Diploma in Advanced Manufacturing Engineering (Development Knowledge) this knowledge element spans the whole of the programme.

Dependent upon prior qualifications learners may also need to complete functional skills in English & Maths to a minimum Level 2.

TOPICS COVERED ARE:

For the Foundation Skills and Technical Knowledge apprentices will be required to achieve a Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence) along with the Level 2 Award for Foundation Phase Gateway Assessment and begin their learning journey on the Level 3 Diploma in Advanced Manufacturing Engineering (Development Knowledge) covering the following topics:

- Complying with Statutory Regulations & Org Safety Req.
- Working Efficiently & Effectively in Engineering Environment
- Using & Communicating Technical Information
- Conducting Business Improvement Techniques (Covered in Induction)
- Producing Components using Hand Fitting Techniques
- Preparing & Using Lathes for Turning Operations
- Preparing & Using Milling Machines
- General Welding Applications
- Producing CAD Models (drawings) using a CAD system
- Assembling & Testing Fluid Power Systems
- Wiring & Testing Electrical Equipment Circuits
- Maintaining Electrical Equipment & Systems
- Health & Safety in the Engineering Workplace
- Communications for Engineering Technicians
- Mathematics for Engineering Technicians
- Mechanical Principles of Engineering Systems
- Engineering Organisational Efficiency & Improvement

PRODUCT DESIGN & DEVELOPMENT TECHNICIAN – ENGINEERING TECHNICIAN LEVEL 3 STANDARD

CONTINUED...

At the end of the Foundation Stage learners undertaking this qualification have to complete and pass the criteria for an Award for Foundation Phase Gateway Assessment (Foundation Behaviours) covering a mid-point assessment against the following units for which they have undertaken and will not be allowed to move forward until this has been achieved:

- Producing Components using Hand Fitting Techniques
- Maintaining Electrical Equipment & Systems
- Wiring & Testing Electrical Equipment & Circuits

Once the foundation element has been completed the apprentices will move onto Development Skills And Knowledge where they will continue with topics within the Diploma in Advanced Manufacturing Engineering (Development Knowledge) one day per week at the training academy and the Level 3 Diploma in Advanced Manufacturing Engineering – Product Design & Development (Development Competence) within their place of work with monthly visits across a 30 month period. Both qualifications covering the following:

Diploma in Advanced Manufacturing Engineering – Product Design & Development (Development Competence)

Mandatory Units:

- Complying with Statutory Regulations and Organisational Safety Requirements
- Using & Interpreting Engineering Data & Documentation
- Working Efficiently & Effectively in Advanced Manufacturing & Engineering

Optional units are then available to be selected dependent upon the learners specific job role requirements from units such as (Further units are available):

- Carrying Out Condition Monitoring of Plant & Equipment
- Producing Engineering Drawings/Models using 3D Computer Aided Techniques
- Inspecting Mechanical Products
- Producing Off-line Programs for CNC Machines
- Obtaining & Controlling Materials for Engineering Activities

Diploma in Advanced Manufacturing Engineering (Development Knowledge)

- Engineering Project
- Properties & Applications of Engineering Principles
- Further Mechanical Principles of Engineering Systems
- Maintenance of Fluid Power Systems and Components
- Computer Aided Design Techniques
- Engineering Maintenance Procedures & Techniques
- Maintenance of Mechanical Systems
- Three Phase Motors and Drives

Assessment

All elements are under Awarding Body accreditations with final end point assessment being conducted by:

- Achievement of all qualifications within the level 2 & 3 elements of the training producing portfolios of evidence assessed against Awarding Body Standards.
- Continuous Professional Development Log & Diary – Learners are to keep a CPD log of what they have learnt and developed across their programme to ensure how learning gained has been applied to their role.
- Employer Occupational Competence Validation Interview reviewing learner portfolio, log book and diary evidence and knowledge whereby a grade of Pass or Fail is given. Professional Engineering Institute (PEI) will quality assure provider's documentation for this.
- Engineering Technician application and evidence needs to be met for learner to register & apply to gain "EngTech" status
- The PEI will confirm whether the apprentice has met the criteria for EngTech & Qualifications of Standard.
- Employer does final sign off of the apprenticeship and the PEI applies for apprenticeship certificate

SPECIFIC SPECIALIST KNOWLEDGE

Understand mathematical techniques, formula and calculation in a technical support environment.
Understand material applications and methods of testing (destructive and non-destructive).
Understand Computer Aided Design (CAD) methods and applications.
Understand material joining applications and systems.
Understand mechanical, electrical, electronic and process control systems.
Understand measurement, monitoring, testing and diagnostic methods and techniques.

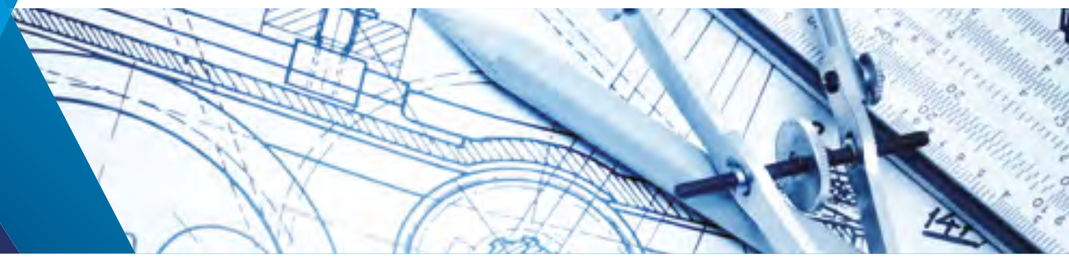
SPECIFIC SPECIALIST SKILLS

Read and interpret relevant data and documentation used in the design and development of components, equipment and systems.
Produce components and prototypes using a wide range of hand fitting techniques.
Produce assemblies and rigs using a range of materials and techniques.
Use mechanical, electrical and electronic testing devices and equipment.
Prepare and use lathes, milling machines, as well as other general or specialist high technology equipment such as 3D printing/additive manufacturing techniques.
Apply mechanical principles and joining techniques to develop products, devices and equipment.
Apply electrical and electronic principles to develop product devices and equipment.
Identify, diagnose and rectify design problems through the whole creation process including design studio, workshops, test environments or under laboratory conditions.
Contribute to the business by identifying possible opportunities for improving working practices, processes and/or procedures.

IN-COMM TRAINING SERVICES

METROLOGY TECHNICIAN LEVEL 3 STANDARD

36 MONTH PROGRAMME –
Block off the Job Training Delivery and Monthly Assessor visits to company.



JOB ROLES MAY INCLUDE:

All Technicians associated with Measurement Research; Instrument & Equipment Use, Calibration, Test, Inspection & Type approval; Measurement Application in field, Laboratory or Manufacturing; and Quality and Process Support.

ROLE PROFILE:

Metrology is the science of measurement and includes all theoretical and practical aspects of measurement. Measurement underpins the UK economy and international trade. Each year in the UK over £600 billion worth of goods and utilities are sold based on the measurement of their quantity and quality. Metrology takes place across a wide range of industries as diverse as advanced manufacturing, aerospace, automotive, construction, energy, environment, pharma and healthcare and space and within all sizes of organisation. Important measurement activities can range from measuring galaxies to graphene, molecules, chemical pollutants, hip joints, aircraft, industrial emissions, etc.

This important work is carried out by skilled Metrology Technicians who understand core measurement principles and practices and whose role is to interpret and apply these whilst carrying out measurement activities in whichever industry they work. They are also able to identify measurement needs and plan and perform measurement tasks using tools, equipment, instrumentation and software programs. Metrology is vital to improve the quality and throughput of goods and utilities, which in turn is essential to increasing productivity and customer satisfaction.

Metrology Technicians must comply with statutory regulations and health and safety requirements. They will be able to carry out work with minimal supervision, take responsibility for the quality and accuracy of the work they undertake, and will have a high level of attention to detail. The successful apprentice will become a valuable measurement specialist, within their organisation, significantly contributing to the future of the Metrology industry and the UK economy.

INDUCTION:

If a learner is progressing onto this programme with us from a previous qualification then induction will be completed on a one to one basis within their place of work but if the learner is embarking on the Level 3 as a first time entrant then they will receive a 5 day induction into their programme at our training centre covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely H&S Qualification
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Introduction to Lean
- Manual Handling
- Equality & Diversity
- Safeguarding
- Prevent Agenda

TOPICS COVERED:

All learners will complete both on and off the job training elements for this Standard and at the end of their programme will gain a Metrology Technician Level 3 Apprenticeship. Dependent upon prior qualifications learners may also need to complete functional skills in Maths and English to a minimum of Level 2.

- Metrologists Health & Safety
- Fundamentals of Uncertainty and calibration
- Physics principles for metrologists
- Principles of electrical measurement
- Linear measurement
- Angular Measurement
- Optical
- Mass and Weight
- Torque
- Pressure
- Vacuum
- Flow
- Temperature & Humidity principles
- Advanced Principles of electrical measurement
- Electrical Measurement Standards
- Frequency and Waveform
- Microwave

KNOWLEDGE – THE UNDERSTANDING OF:

The principles of metrology and their application within industry, law, business, science and society, including; measurement units, capability, traceability and uncertainty

Safe working practices and legislation, regulation, industry and organisational policies, procedures and requirements relating to health and safety

The commercial environment in which the organisation operates, the national and international regulations and standards, industry and organisational procedures and requirements relating to metrology codes of conduct and the importance of their application

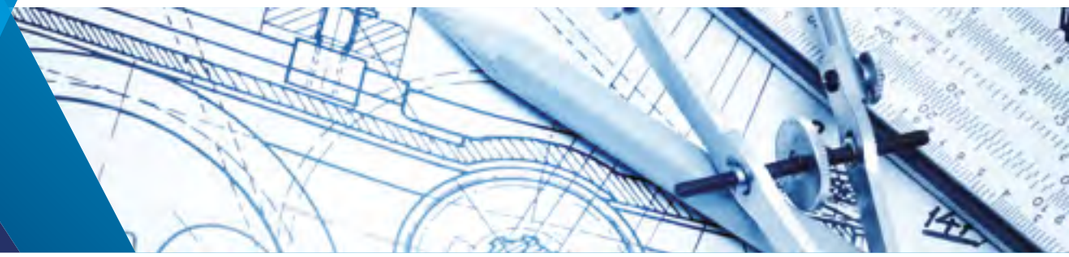
Quality requirements, assurance, verification, inspection, accreditation, audit systems and processes, why these are important and their role in Metrology

The measuring environment, the potential sources of uncertainty, the impact on data collection, analysis, interpretation and result

The appropriate mathematical techniques including; statistics, process control methodologies, measurement systems analysis, data analysis, trend analysis, algebraic expressions, formulae and calculations required to perform measurement task

METROLOGY TECHNICIAN LEVEL 3 STANDARD

CONTINUED...



SKILLS – THE ABILITY TO:

Identify measurement needs and make informed decisions about the measurement process and timescales required, including selection of; tools, equipment, instrumentation and software programs

Access and interpret information and documentation to support the measurement process including; data, manuals, specifications, catalogues, calibration certificates and computer-generated information

Prepare the work environment and perform tests and checks on measurement tools, equipment, instrumentation and software programs and determine suitability for use

Take action when non-conforming tools, equipment, instrumentation, materials and software programs have been identified

Plan and perform measurement tasks to ensure verifiable results, using measurement tools, equipment, instrumentation and software programs, following specified procedures and methodologies

Retrieve, analyse, interpret, validate and record measurement results and data in line with specification

Contribute to the production of records, reports and other measurement documentation

Communicate relevant and specific information through various channels to meet customer requirements

Comply with statutory regulations, national and international standards, industry and organisational procedures and requirements relating to codes of conduct when carrying out measurement tasks

Comply with relevant Health and Safety legislation, regulation, standards, industry and organisational policies and procedures and requirements relating to safe working practice

Comply with policies and procedures relating to the preparation, storage, standards, control and handling of samples, tools, equipment, instrumentation and software programs

BEHAVIOURS:

Focus on quality and maintain concentration with a high level of attention to detail and accuracy

Take an analytical approach to solving problems through systematic monitoring and checking of information to meet industry standard

Be self-motivated and inquisitive, being confident to speak up and challenge when appropriate

Be committed to learning and continuous improvement

Work with and respect others by working flexibly and collaboratively, maintaining effective professional relationships with clear organisational and personal benefits and showing commitment to equality and diversity

Act professionally, ethically and conscientiously by adhering to relevant legislation, regulation, standards, organisational procedures and demonstrate accountability and reliability

Plan and manage time effectively and prioritise workloads to meet deadlines and customer requirements

Be commercially aware and recognise the relevance of efficiency and the need for change to processes and procedures to meet business and customer requirements

ASSESSMENT:

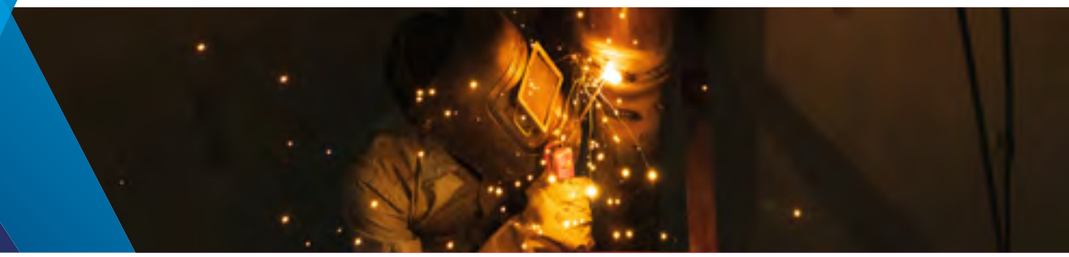
To achieve this qualification learners must go through an End Point Assessment, this consists of four elements. Each assessment method will directly assess the Knowledge, Skills and Behaviours of the standard. The elements are:

- Knowledge Test – The learner will be given a multiple choice test comprising of 50 questions with four answer choices per question with 90 minutes to complete.
- Portfolio - Although the portfolio is not directly assessed for end point assessment, it is used indicate that the learner is ready for end point assessment.
- Practical Observation – A 2.5 hour observation of the apprentice in the workplace giving the learner the opportunity to demonstrate knowledge, skills and behaviours.
- A Competency Based Interview is held between the learner and the Independent End Point Assessment Organisation. The discussion explores the period of learning and development and will assess technical knowledge as well as evidence of the apprentice's skills and behaviours.

IN-COMM TRAINING SERVICES

PLATE WELDER STANDARD LEVEL 3

24 MONTH PROGRAMME –
1 day per week in centre with assessor visits to company



ROLE PROFILE:

The broad purpose of the occupation is to manually weld plate and structural components to high standards of quality. This will involve fabrication, construction or repair of fabricated plate assemblies, extrusions and structural components (e.g. Channel, H-Beams, I-Beams etc.) often used to fabricate larger components and assemblies. Plate welders will weld to internationally recognised quality standards using more than one manual arc welding process from Tungsten Inert Gas (TIG), Plasma Arc Welding (PAW), Manual Metal Arc (MMA), Metal Inert Gas (MIG)/Metal Active Gas (MAG) and Flux Cored Arc Welding (FCAW) on more than one material group from Carbon Steel, Low Alloy Steel, High Alloy Ferritic/Martensitic Steel, Austenitic Stainless Steel, Nickel & Nickel Alloys, Aluminium & Aluminium alloys, Titanium & Titanium Alloys, Copper & Copper Alloys. For example, a Plate Welder might use Manual Metal Arc (MMA) and Flux Cored Arc Welding (FCAW) to join both Carbon Steel and Low Alloy Steel materials.

The occupation requires production of welds in plate and structural components covering three plate welding positions which must include Vertical (either upward or downward progression) and Overhead, and the three main joint configurations (Single or Double Sided Butt, Single or Double Sided T-Butt & Fillet). Each welding process requiring significantly different welding equipment, assemblies, controls, skills and techniques, and represents an individual production process. Each material type requires specific controls and techniques to achieve a satisfactory weld. Plate welding contributes to the UK economy through the fabrication, construction and upgrade of major infrastructure projects, defence assets and exported goods. Plate welders are employed by the supply chain organisations or the direct owner/operator.

In their daily work, an employee in this occupation interacts with a wide range of people and organisations including Platers, Metal Fabricators, Erectors, Riggers, Stores Operatives, Supervisors, Engineers, Inspectors, Non-Destructive Technicians and Quality personnel. Plate welders may need to work shifts and flexible work patterns. They can work in organisations ranging from multi-national organisations to very small businesses. They work in a range of environments across the world including Fabrication Shops, Assembly Yards, Construction/Building Sites, Factories and Operational Facilities requiring maintenance & upgrade. This occupation may involve working at height, and beside or over water. Plate welders' work will be regularly assessed to ensure continued quality of welding and overall integrity of the component being welded, as specified in the applicable component design code. This could include visual inspection, non-destructive testing and destructive testing of production test pieces.

An employee in this occupation will be responsible for the safety, quality and accuracy of their own work whilst ensuring it conforms to a relevant plate welding specification. They work autonomously, or on occasion as part of a wider team, reporting to a workplace supervisor.

OCCUPATIONAL DUTIES:

DUTY 1	Plan and prepare for the welding of plate, structural components before commencing work
DUTY 2	Check materials conform to the specified grades, dimensions and thicknesses.
DUTY 3	Inspect weld preparations, surface conditions and cleanliness
DUTY 4	Assemble and position plate and structural components to be welded, including attachment of bracings, strong-backs, alignment aids, run-on and run-off tabs and backing materials (e.g. ceramic, metallic etc.).
DUTY 5	Assemble equipment to be used in the preparation and welding of plate and structural components and check its performance and condition, including any component heating and monitoring equipment.
DUTY 6	Adjust and maintain the equipment to be used during the welding of plate and structural components.
DUTY 7	Interpret technical specifications & drawings to establish detailed welding process controls, consumable selection, and dimensional limitations imposed to control distortion.
DUTY 8	Make the joints to specified dimensional accuracy using appropriate welding techniques.
DUTY 9	Identifying areas for improving the production process where possible through the monitoring of performance
DUTY 10	Monitor associated parameters throughout the welding of plate and structural components (e.g. Preheat, Interpass Temperature, Heat Input).
DUTY 11	Remove material using manual powered and non-powered hand tools, before and during welding to remove defects within the preparation and weld deposit.
DUTY 12	Visually inspect alignment and distortion of component and apply techniques to ensure compliance with specification.
DUTY 13	Visually inspect completed weld and component geometry
DUTY 14	Remove and dress bracings, strong-backs, run-on/run-off tabs and alignment aids, and dress finished external weld surfaces using manual powered and non-powered hand tools
DUTY 15	Restore the work area and equipment to a safe and reliable condition on completion of welding including the remediation and recycling of bracings, strong-backs and alignment aids.
DUTY 16	Monitor the use of consumables and adjust quantities issued, and return unused consumables for re-conditioning, re-use or disposal.
DUTY 17	Complete production documentation and reporting at the appropriate stages of the work activity

IN-COMM TRAINING SERVICES

PLATE WELDER STANDARD LEVEL 3

CONTINUED...

KNOWLEDGE:

K1: Dimensional and mechanical properties (strength, toughness, thermal expansion etc.) of materials to be welded.

K2: Fundamentals of welding metallurgy (weld solidification and Heat Affected Zone) and how this can affect the weldability of materials and final joint integrity.

K3: Common manual arc welding processes and the relative merits for a given application, including Manual Metal Arc (MMA),Metal Inert Gas (MIG), Metal Active Gas (MAG), Flux Cored Arc Welding (FCAW), Tungsten Inert Gas (TIG), Plasma Arc Welding (PAW)

K4: Common joint types associated with welding plate and structural components (Fillet, Butt, T-Butt, Corner/Lap; Single-Sided, Double-Sided, Metallic Backed, Ceramic Backed).

K5: Welding positions and progressions associated with plate and structural components and their international designations including Flat; Horizontal-Vertical; Horizontal; Vertical (upward and downward progressions); Overhead.

K6: The major components of welding equipment, ancillary equipment, cabling and their assembly, including Power Source, Wire Feed System, TIG & PAW Arc Initiation Systems, interconnecting communications cables, torches, tongs, gas equipment etc.

K7: Set, modify and monitor welding controls (e.g. Current, Arc Voltage, Wire Feed Speed, Gas Flow Rates, Polarity) and secondary controls (e.g. Heat Input, Interpass Temperature).

K8: Welding Procedure Specification requirements, contents, and information derived to establish specific production information

K9: The relative merits, applications and limitations of material preparation methods and manual material removal processes including powered and non-powered tools.

K10: Performance success factors in production, inspection reporting, productivity including time and duration, dimensional, Non-De structive Examination, defect rates etc.

K11: Causes and detection of typical welding defects and how their occurrence can be reduced.

K12: Types and functions of welding consumables, fluxing systems and the requirement for correct identification, storage, conditioning, handling, recycling and disposal.

K13: Requirements for correct storage, handling and segregation of materials and tooling to prevent cross contamination.

K14: Organisational quality documentation, reporting systems, procedures and their role within the overall quality process

K15: Continuous improvement processes, performance review and how this is undertaken within their organisation.

K16: The importance of only using approved processes, procedures, documentation and the potential implications for the organisation if this is not followed.

K17: Non-destructive testing reports and radiographs to identify particular defect types and the associated improvements to process and technique needed to prevent recurrence.

K18: Risks and mitigation measures associated with welding and the working environment, and the organisational risk management processes.

K19: The importance of complying with statutory, quality, organisational and health, safety and environmental regulations.

K20: Typical problems that may arise within their normal work activities/environment.

SKILLS:

S1: Work safely at all times, comply with health, safety and environmental legislation, regulations and organisational requirements.

S2: Can obtain, check and use appropriate documentation (such as job instructions, drawings, quality control documentation).

S3: Plan and prepare welding activities before commencing the work.

S4: Obtain, position and assemble welding equipment and associated safety protection needed for activity.

S5: Prepare, check and protect materials and work areas ready for welding.

S6: Inspect assembly to be welded and undertake remedial work to comply with specification, or implement quality steps if rejected.

S7: Receive, inspect condition and maintain consumables.

S8: Set, test and monitor key welding parameters as detailed within the Welding Procedure Specification.

S9: Deal promptly and effectively with problems within the limits of their responsibility using approved diagnostic methods and techniques and report those which cannot be resolved to the appropriate personnel.

S10: Use manual processes and equipment to remove material (powered and non-powered).

IN-COMM TRAINING SERVICES

PLATE WELDER STANDARD LEVEL 3

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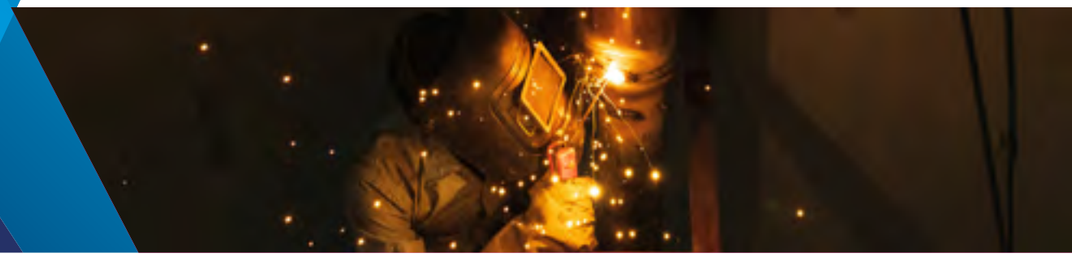


SKILLS CONTINUED:

S11: Achieve a quality of work to meet international standards e.g. ISO5817, ISO9606, ASME IX, AWS D1.1 for dimensional, surface inspection (e.g. Visual, Magnetic Particle, Dye Penetrant) and volumetric inspection (e.g. Radiography, Ultrasonic inspection).

S12: Complete progressive and final checks on the weld prior to release for formal inspection and report into the production control system at the appropriate stages of the work activity.

S13: Restore the work area on completion of the activity and where applicable return any resources and consumables to the appropriate location.

S14: Produce welds in plate and/or structural components using two welding processes from TIG, PAW, MMA, MIG/MAG, FCAW.

S15: Produce welds in plate and/or structural components using two materials from Carbon Steel, Low Alloy Steel, High Alloy Ferritic/Martensitic Steel, Austenitic Stainless Steel, Nickel & Nickel Alloys, Aluminium & Aluminium alloys, Titanium & Titanium Alloys, Copper & Copper Alloys.

S16: Produce welds in plate and/or structural components covering three plate welding positions which must include Vertical (either upward or downward progression) and overhead.

S17: Produce plate welds in 3 main joint configurations (Single or Double Sided Butt, Single or Double Sided T-Butt & Fillet)

BEHAVIOURS:

B1: Takes responsibility for decision-making, without autonomy and within the guidelines of the work instruction, for their workplace, the application of welding processes, and for their productivity.

B2: Enquires and seeks guidance, in order to understand the processes and associated industrial applications.

B3: Committed to maintaining competence through Continuing Professional Development planning, preparation and reflection to ensure safety, quality and production and ensuring Continuing Professional Development goals are achieved.

B4: Intervene and challenge poor practices and have confidence to channel feedback to the appropriate authorities to implement change.

B5: Consistently and reliably delivers in accordance with expectations in safety, production, quality, ethics and self-development.

B6: Encourages and supports the development of others and completes point of work risk assessments.

B7: Follows the specified procedures and controls and be personally responsible and accountable for their production work and personal development.

B8: Reflects on current and past performance and provide information and recommendations for continuous improvements in efficiency and effectiveness of working practices, and training and development requirements.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete off the job training for this standard. Dependent upon prior qualifications learners may also need to complete Functional Skills in English and Maths at Level 2.

For the off the job training element, it is compulsory that learners attend centre to achieve knowledge, understanding and competence in the following subjects:

- General & Welding Specific Health & Safety
- Dimensional & Mechanical Properties of Materials
- Welding Procedures, Parameters & Symbols
- Testing & Inspection
- Welding Defects
- MIG, MAG and FCAW processes
- MMA Processes
- TIG-TAG and PAW Processes

ASSESSMENT

To achieve this qualification learners must go through End Point Assessment consisting of:

- Knowledge Test – The learner will be given a multiple choice test as part of checking their underpinning knowledge for competence elements.
- Portfolio – a portfolio of evidence comprising of naturally occurring evidence during the on-programme period from the workplace, backed up by relevant company processes and procedures.
- Practical Test & Associated Oral Examination – giving the learner the opportunity to demonstrate knowledge, skills and behaviours
- Professional Discussion – covering the application of knowledge learned, role of the welder in industry and professional behaviours prescribed in the standard
- Log book & diary of Continuous Professional Development

IN-COMM TRAINING SERVICES

INSTALLATION & MAINTENANCE ELECTRICIAN LEVEL 3 STANDARD

3 YEAR PROGRAMME –
2 days per week in centre

ROLE PROFILE:

Electricians install, maintain and repair electrical systems in industrial, commercial and domestic environments. Electricians might work in both indoor and outdoor settings. Electrical equipment and systems may include switchboards, motors, cables, fuses, thermal relays, fault current protection switches, heating, lighting, air conditioning and metering equipment as well as crime and fire alarm systems and renewable energy technologies. They are able to work on their own proficiently and work without immediate supervision in the most efficient and economical manner. They may contribute to the design of electrical systems. They are able to set out jobs from drawings and specifications and requisition the necessary installation materials. Electrical safety is an important area of Electricians' work. On completion of their work the electrical systems must be safe to use. They must adhere to safe working practices without endangering themselves or others. Installation Electricians work on the installation, testing, commissioning and maintenance of low voltage (less than 1000v) electrical and electronic devices and appliances. Maintenance Electricians work on the maintenance of electrical and electronic installations including automated production systems. Duties include the supervision of the equipment, its maintenance and necessary repairs.

Electricians will use engineering knowledge and understanding to apply their technical and practical skills. They will contribute to the design, development, manufacture, construction, commissioning, operation or maintenance of products, equipment, processes, systems or services.

Electricians must:

- Understand and apply the principles, practices and legislation for the termination and connection of conductors, cables and cords in electrical systems
- Understand and apply the practices and procedures for the preparation and installation of wiring systems and electro technical equipment in buildings, structures and the environment
- Understand and apply the principles, practices and legislation for the inspection, testing, commissioning and certification of electro technical systems and equipment in buildings, structures and the environment
- Understand and apply the principles, practices and legislation for diagnosing and correcting electrical faults in electro technical systems and equipment in buildings, structures and the environment
- Understand and apply the electrical principles associated with the design, building, installation and maintenance of electrical equipment and systems
- Oversee and organise the work environment
- Installation Electricians must understand and apply the principles of planning and selection for the installation of electro technical equipment and systems in buildings, structures and the environment.
- Maintenance Electricians must understand and apply the practices and procedures for planning and preparing to maintain electro technical systems and equipment.

INSTALLATION & MAINTENANCE ELECTRICIAN LEVEL 3 STANDARD

CONTINUED...

INDUCTION:

All learners will receive a 5 day induction into their programme at our technical academy covering:

- Induction to In-Comm
- Induction to Qualification
- Diary Keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda
- IOSH Working Safely
- Manual Handling
- Abrasive Wheels

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard. Dependent upon prior qualifications learners may also need to complete functional skills in Maths and English to a minimum of Level 2.

- Understand & Apply Health, Safety & Environmental Considerations
- Electrical Scientific principles and Technologies
- Understand Design & Installation Practices and Procedures
- Understand how to plan and oversee Electrical Work Activities
- Organise and Oversee the Electrical Work Environment
- Understand Terminations and Connections of Conductors
- Terminate and Connect Conductors
- Understand Inspection, Testing and Commissioning
- Inspect, Test and Commission Electrical Systems
- Understand & Apply Fault Diagnosis & Rectification
- Understand the Requirements for Electrical Installations BS 7671:2008 2015
- Apply Design and Installation Practices and Procedures
- Apply Practices and Procedures for Maintenance

BEHAVIOURS ELECTRICIANS WILL BE EXPECTED TO:

Use oral, written and electronic methods for the communication of technical and other information
Work effectively with colleagues, other trades, clients, suppliers and the public
Undertake work in a way that contributes to sustainable development
Maintain and enhance competence in own area
Work reliably and effectively without close supervision
Accept responsibility for the work of themselves and others
Accept allocate and supervise technical and other tasks

BEHAVIOURS ELECTRICIANS WILL BE EXPECTED TO:

Understand & Apply Health, Safety & Environmental Considerations
Electrical Scientific principles and Technologies
Understand Design & Installation Practices and Procedures
Understand how to plan and oversee Electrical Work Activities
Organise and Oversee the Electrical Work Environment
Understand Terminations and Connections of Conductors
Understand Inspection, Testing and Commissioning
Terminate and Connect Conductors
Inspect, Test and Commission Electrical Systems
Understand & Apply Fault Diagnosis & Rectification
Understand the Requirements for Electrical Installations BS 7671:2008 2015
Apply Design and Installation Practices and Procedures
Apply Practices and Procedures for Maintenance

ASSESSMENT:

To achieve this qualification learners must go through an end point assessment, this consists of Elements. Each assessment method will directly assess the Knowledge, Skills and Behaviours of the Standard. The elements are:

- Mandatory Qualifications – Completion of Level 3 Electro Technical Qualification in either Installation or Maintenance
- Portfolio – a portfolio of evidence comprising of naturally occurring evidence during the on-programme period from the workplace, backed up by relevant company processes and procedures.
- Log Book & Diary Evidence of Continuous Professional Development
- Practical Skills Assessment – AM2 assessment is a robust, timed practical and theory assessment, in sections requiring candidates to perform a set of common tasks and procedures that a full scope electrical operative might face when working in a commercial or industrial premises

ENGINEERING MANUFACTURING TECHNICIAN STANDARD – LEVEL 4

24 MONTH PROGRAMME –
1 day per week off the job HNC Training
Monthly Assessor Visits to Company
Block session Academy Attendance for Project Work

ROLE PROFILE:

This occupation is found in large and small engineering and manufacturing organisations providing products and services throughout a wide range of sectors, such as Automotive, Aerospace/Airworthiness, Chemical Processing, Land Systems, Marine, Maritime Defence, Materials Manufacturers and their respective supply chains. Research indicates that the sector needs to recruit approximately 124,000 engineers and technicians every year.

The broad purpose of the occupation is to provide specialist technical support for engineers, so that organisations can develop, produce or test new/existing products, processes, or procedures to meet a customer specification in terms of quality, cost and delivery, as efficiently and effectively as possible. Engineering Manufacturing Technicians gather information and data from a range of sources and analyse the information/data. They will make decisions, solve problems and produce and/or update technical documentation, reports or specifications covering areas such as quality, reliability, production schedules/targets, costing or other technical documentation that informs others, either internally or externally what needs to be done such as how a product must be designed, manufactured, tested, modified, maintained, stored, transported, commissioned or decommissioned.

In their daily work, an employee in this occupation interacts with their line manager to confirm departmental programmes of work and to agree individual responsibilities. This in turn will align to an overarching organisational resource and delivery plan. Engineering Manufacturing Technicians can be office based, manufacturing/plant based or more commonly combination of both, working with engineering and/or manufacturing teams at an operational level such as with production team leaders and/or management level working with specialist quality or design engineers. As well as liaising with internal colleagues, they may also be responsible for working directly with customers and/or suppliers or with representatives from appropriate regulatory bodies. Typically this would involve interaction with auditors to demonstrate compliance to specific organisational or regulatory requirements (such as Civil Aviation Authority).Their time will be spent between working in an office environment and working in the manufacturing environment or visiting customers or suppliers as and when required.

An employee in this occupation will be responsible for the quality, safety and delivery of the manufactured product or service, ensuring it is delivered to the customer on time at the agreed cost. They will typically report to an engineering or manufacturing manager as part of a cross functional team, the size of this team and responsibilities will vary depending on the size of the employer. Although working within defined quality processes and procedures, they are responsible for the delivery, quality and accuracy of the work they complete. They have the autonomy to use judgement when undertaking the occupational duties and applying their technical knowledge, skills and behaviours in a wide range of contexts and environments. They use a range of tools and techniques to support decision making and solve problems that are often complex and non-routine. They also have a responsibility to identify and contribute to making improvements such as business processes, procedures, ways and methods of working.

OCCUPATIONAL DUTIES:

DUTY 1	Ensure the safe and efficient performance of every production task in compliance with company procedures, approved engineering data and local Health and Safety requirements. Ensure Safe Systems of Work and risk assessments (assisting as necessary in the completion of risk assessments) are adhered to for engineering or manufacturing activities.
DUTY 2	Prepare product and process documentation by collecting, analysing, and summarising information and trends.

OCCUPATIONAL DUTIES:

DUTY 3	Manage internal and/or Supplier Quality Notifications, and liaison with the required stakeholders for resolution.
DUTY 4	Liaise with internal and external customers to implement programme initiatives, such as the application of lean analysis methods, processes and tools.
DUTY 5	Carry out new product introduction and/or existing product modifications within engineering and/or manufacturing by contributing to activities such as facilitation of quality activities (including any testing and/or commissioning requirements), supplier approvals, gate reviews.
DUTY 6	Deliver financial planning or costing analysis such as:- estimation of costs for manufacture, supplying drawings or specification for quotations, obtaining manufacture quotes, calculating costs associated with quality problem or machine downtime.
DUTY 7	Develop new technology initiatives by contributing to activities such as, justifying capital investment equipment/system upgrades from purchase through to installation and commissioning.
DUTY 8	Produce and maintain reports measuring Key Performance Indicators for data management activities.
DUTY 9	Ensure processes and current methods of engineering and manufacturing are as efficient and cost effective, such as:- utilising time and motion analysis, line balancing and flow to achieve the required level of production output.
DUTY 10	Liaise with appropriate internal and external stakeholders at all levels to ensure that engineering and manufacturing operations are completed in line with the agreed time scales. Examples of stakeholders could include production managers, production operatives, auditors, suppliers, customers.
DUTY 11	Ensure work process and outcomes comply with any local, national and or international regulatory or compliance requirements. Such as :- maintain compliance to Aerospace Regulatory bodies (CAA, EASA,MAA) as well as the wider regulations (such as Anti Bribery and Corruption, Export Control).
DUTY 12	Resolve identified engineering and/or manufacturing problems such as:- contributing to the route cause analysis exercise applying appropriate levels of containment and corrective action.
DUTY 13	Produce engineering and/or manufacturing documentation (such as:- Build Manuals, Standard Operating Instructions/ processes, Bill of Materials) to aid and ensure consistent, compliant and cost effective manufacturing processes.
DUTY 14	Review engineering or manufacturing methods to determine the most effective and economical method whilst meeting drawing/specification requirements

ENGINEERING MANUFACTURING TECHNICIAN STANDARD – LEVEL 4

CONTINUED...

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their programme will not only complete their Level 4 Apprenticeship as an Engineering Manufacturing Technician but will also gain a Level 4 HNC in Engineering. Dependent upon prior qualifications learners may also need to complete Functional Skills in English and Maths at Level 2. Due to the high level of Mathematics within this programme learners will be required to undertake an assessment to determine their needs within Mathematics, if the assessment shows that the learner needs to upskill their knowledge & understanding in mathematics a bridging course will be a compulsory prerequisite before embarking onto the programme. For the Mathematics bridging course, it is compulsory that learners identified attend centre to achieve knowledge, understanding and competence in the following subjects:

- Algebra
  - Significant figures and decimal places
  - Scientific notation
  - Indices
  - Order of operation “BIDMAS”
  - Transposition
  - Linear equations
  - Simultaneous equations
  - Quadratics
  - Conversion between logarithmic and exponential form
  - Laws of logarithms
- Trigonometry
  - Trigonometric ratios “SOHCAHTOA”
  - Sine rule
  - Cosine rule
  - Wave form theory
- Calculus
  - Differentiation and Integration of algebraic terms
  - Differentiation/ Integration of standard functions (logarithmic, trigonometric etc)

The assessment for the Bridging Course is via strategic tests placed throughout the course and a 60% minimum grade is required to progress onto the HNC.

For the Level 4 HNC in Engineering, it is compulsory that learners attend centre to achieve knowledge, understanding and competence in the following subjects:

- Engineering Design
- Engineering Maths
- Engineering Science
- Managing a Professional Project
- Materials Properties & Testing
- Computer Aided Design & Manufacture
- Quality & Process Improvement
- Electro, Pneumatic and Hydraulic Systems

KNOWLEDGE:

K1: Problem solving tools/techniques. Such as practical problem solving (PPS), root cause analysis (RCA) and process failure mode effects analysis (PFMEA).

K2: Effective communication techniques including listening, questioning and support of others.

K3: Use, benefits and applications of lean methods and tools used in manufacturing and engineering (such as Kaizen, Six Sigma and 8 wastes).

K4: How Industry 4.0 will impact organisations, including the integration of automation, digital systems and manufacturing engineering systems.

K5: Quality management systems used such as ISO9001, AS9100, ISO 14001 and TS16949, its purpose and internal governance arrangements to ensure compliance.

K6: Different manufacturing methods used, their applications, such as machining, joining, forming, assembling, shaping, processing, printing, moulding, extruding and casting)

K7: Principles of quality control and quality assurance in a manufacturing and engineering environment.

K8: Team integration techniques, including conflict resolution and managing difficult conversations (team working)

K9: Core engineering principles such as mathematics, science, mechanical and electrical/electronic applications relevant to manufacturing and engineering activity undertaken

K10: Importance for individuals to use and follow the organisations approved Standard Operating Procedures (SOP’s) and documentation recording systems and the potential implications on safety, quality and delivery if they are not adhered to.

K11: Statutory and organisation health and safety policies, procedures and regulations that must be adhered to in a manufacturing and engineering environment including the risk assessment process, procedures and documentation used within the work area.

K12: Project management techniques, such as Strengths, Weaknesses, Opportunities, Threats (SWOT), stakeholder matrices, risk mapping, radar chart and summary risk profiles.

K13: How human factors (organisational, environment and job factors) can influence and impact individual characteristics, performance and behaviours in the workplace.

K14: Engineering and manufacturing related documentation used such as job cards / build records, 2D & 3D drawing/models, Bill of Materials (BOM), Cost Analysis Reports, Compliance Report, Standard Operating Instructions (SOI’s), Standard Process Instructions (POI’s), Engineering Query Notifications (EQN’s) and Drawing Query Notifications (DQN’s).

K15: Prioritisation of workload/time management techniques to ensure that personal and team objectives are achieved effectively.

K16: Engineering and manufacturing data collection systems used, their format and content.

K17: How organisations manage and monitor internal and or supplier performance to ensure that cost, quality, delivery and sustainability objectives are being delivered.

IN-COMM TRAINING SERVICES

ENGINEERING MANUFACTURING TECHNICIAN STANDARD – LEVEL 4

CONTINUED...

KNOWLEDGE CONTINUED:

K18: Use and applications of common metallic and non – metallic materials used in manufacturing and engineering.

K19: Different production methods used and their applications such as single, batch, flow and mass.

K20: Different methods, tools and frequency used to check quality in manufacturing and engineering including measurements such as (dimensions, weight, signal, temperature, time,) and testing (such as non-destructive and destructive).

K21: Departmental process used to create, record and review financial data and information.

K22: The different applications and limitations of computer based software system/packages used such as Computer Aided Design (CAD), Data Analytics and Databases

K23: The impact of sustainability and environmental efficiency and how such matters influence manufacturing decisions.

SKILLS:

S1: Read and extract relevant engineering and manufacturing related data and information (such as workplans/project plans, schedules, drawings, specifications, production data, quality reports, costing data, statistical information) drawing accurate conclusions and making informed decisions.

S2: Use project management tools, such as Strengths, Weaknesses, Opportunities, Threats (SWOT), stakeholder matrices, risk mapping, radar chart and summary risk profiles

S3: Use problem solving tools such as Root Cause Analysis (RCA) Process Failure Modes Effects Analysis (PFMEA), Fishbone, Practical Problem Solving (PPS) and Advanced Product Quality Planning (APQP).

S4: Analyse and interpret data and information in order to generate manufacturing engineering documentation such as Parts Per Million (PPM) quality adherence, cost analysis and test data.

S5: Communicate using the appropriate method for the audience such as, formal and informal presentations, written reports, verbal, electronic, social media and incorporating relevant and appropriate data and/or metrics.

S6: Use the approved process and quality compliance procedure to create or amend engineering and/or manufacturing documentation.

S7: Use lean tools and techniques, such as Six Sigma, 8 Wastes, Workplace organisation such as 5S's (sort, set in order, shine, standardise and sustain), Kaizen and Poka-Yoke (Error proofing).

S8: Apply documentation control processes and procedures such as format, location, access, authorisation.

S9: Use financial planning, recording and review processes and documentation such as departmental budgets, estimating, cost control, cost forecasting, and investment appraisal.

S10: Use computer based software system/packages such as Computer Aided Design (CAD), Data Analytics and Databases.

BEHAVIOURS:

B1: Champions the importance of adherence to the organisation's Environmental, Health and Safety management systems:- actively displays and promotes a safety first culture within the organisation.

B2: Operates in a systematic, proactive and transparent way.

B3: Actively promotes the case for the adoption of emerging and advanced engineering and manufacturing technologies to optimise performance.

B4: Takes full responsibility for own professional development, seeking opportunities to enhance knowledge, skills and experience. Keeping abreast of developments in engineering processes manufacturing and emerging technologies.

B5: Complies with statutory and organisational health & safety regulations and policies at all times. Accepts responsibility for their workload with a responsible approach to risk. Demonstrates a high level of motivation and resilience when facing challenge.

B6: Creates and maintains positive, professional, trusting and ethical working relationships with their team and the wider range of internal, external and connected stakeholders.

B7: Acts professionally with a positive and respectful attitude.

ASSESSMENT:

To achieve this qualification learners must go through End Point Assessment consisting of:

- Assignments – The learner will be given a series of assignments as part of the HNC programme designed to check their underpinning knowledge for competence elements.
- Portfolio of Evidence – a portfolio of evidence comprising of naturally occurring evidence during the on-programme period from the workplace, backed up by relevant company processes and procedures along with project work undertaken as part of their daily tasks.
- Observation – undertaken by an independent assessor looking at the learner completing work tasks in their normal place of work with questioning against the Knowledge, Skills and Behaviours
- Professional Discussion – which is designed to do two things: firstly, to further explore the apprentice's knowledge relevant to his/her role and, secondly, to assess if the apprentice's occupational behaviours meet the requirements specified in the Apprenticeship Standard whilst reviewing the portfolio of evidence
- Log book & diary of Continuous Professional Development

IN-COMM TRAINING SERVICES

BUSINESS PROCESS LEADER LEVEL 4 STANDARD

24 MONTH PROGRAMME –
One day Per Week in Centre
Monthly assessor visits to company

ROLE PROFILE:

Process Leaders are found in organisations with high volume manufacturing or advanced manufacturing processes in which large volumes of products are made in assembly, moulding, metal processing, chemical processing, pharmaceutical, textiles, food and drink, or similar processes.

They are also found in organisations with engineering operations or low volume manufacturing processes in which lower volumes of products are made in a bespoke or workshop type environment. The core knowledge, skills and behaviours of this apprenticeship will be developed and demonstrated in a specific manufacturing context and are broadly transferable to other manufacturing sectors.

The broad purpose of this occupation is to undertake and direct production activities and operations and deliver against core production Key Performance Indicators (KPIs). Process Leaders effectively lead and manage large teams as well as providing technical/specialist input and direction to their own team and to others. Process Leader are responsible for determining and managing budgets and resources. They use core production KPIs as the basis of the continuous improvement cycle and undertake and manage quality resolutions. Process leaders manage health, safety and environment within their area of responsibility, ensuring staff are compliant with all requirements and driving improvements and use project management tools to plan, organise and manage resources, monitor progress, identify risks and mitigation. They develop, build and motivate team members as well as manage performance and industrial relations.

As well as providing clear direction and leadership to their own team and others, Process Leaders build and maintain strong relationships across different disciplines, to ensure that the activities of functions such as HR, Purchasing, Planning, Finance focus on core production KPIs. Effective communication is a core responsibility of the Process Leader role, whether this be communication corporate vision and strategy or using data and information to create compelling presentations and drive management decisions.

In their daily work, an employee in this occupation interacts with:

- Team leaders and their wider team
- Quality Managers
- Health and Safety Managers
- HR Managers
- Finance Managers
- Quality Improvement Manager
- Operational Directors
- Directors
- Managing Director/CEO

Process Leaders act autonomously as part of a wider production team and are responsible for the delivery of core production KPIs, people, budgets, equipment, materials, supplies, health, safety, environment and risk.

OCCUPATIONAL DUTIES:

DUTY 1	Work autonomously as part of a wider production team to undertake and direct production activities, plant operations, maintenance and performance against KPIs. Provide technical/specialist input and direction to own team and to others
DUTY 2	Manage resources effectively to ensure the efficient running of their department in line with organisational procedures and budgets
DUTY 3	Use KPIs as the basis of the continuous improvement cycle for quality, cost and volume, using lean, operational excellence and production improvement techniques
DUTY 4	Undertake and manage quality resolutions as well as volume problem resolution
DUTY 5	Manage health, safety and environment within their area of responsibility, ensuring staff are compliant with all requirements and driving improvements
DUTY 6	Use project management tools to plan, organise and manage resources, monitor progress, identify risks and mitigation
DUTY 7	Develop, build and motivate team members as manage performance and industrial relations to achieve production, quality and cost targets
DUTY 8	Provide clear direction and leadership to own team and others, giving open and honest feedback
DUTY 9	Build and maintain strong relationships across different disciplines, to ensure that the activities of functions such as HR, Purchasing, Planning, Finance focus on core production KPI
DUTY 10	Lead the communication of corporate vision and strategy to own team. Use data/information to create compelling presentations and drive management decisions

IN-COMM TRAINING SERVICES

BUSINESS PROCESS LEADER LEVEL 4 STANDARD

CONTINUED...

BUSINESS PROCESS LEADERS WILL HAVE THE KNOWLEDGE TO:

Principles of production/manufacturing techniques including: material handling systems, maintenance, production planning/scheduling, ergonomics, work place study, plant organisation, decommissioning, Statistical Process Control, process types such as flow and batch, product/raw material principles

How to identify and procure sufficient, suitable resources (e.g. finance, staff, equipment, supplies) including use of management tools such as the Internet of Things (IoT) and Industry 4.0

Budgeting, forecasting and control of direct and indirect costs, fixed and variable costs including actual, accrued and committed costs

Lean operational and quality improvement practices such as workplace organisation, visual management, waste reduction and shop floor problem solving

Delivery of quality management and assurance systems

Problem definition: Cost of Poor Quality, problem analysis models such as Is/Is Not

Safe and professional working practices including health, safety, environment and legislative requirements relevant to the sector, the organisation and own role

Production procedures and regulations to meet legislative/organisational requirements

Planning and project management principles, problem solving, relationship building and leading through KPIs

Employment law, employee rights and responsibilities, organisation staff management policies/procedures for e.g. recruitment, performance, development, discipline, grievance, equality/diversity, industrial relations

Theories of performance management and their use and organisations tools and policies for managing teams

The theory of managing, motivating and developing people

The purpose of organisational vision and goals and how these apply to teams

Awareness of the differing strengths team members have and how these can be effectively applied in the workplace

Approaches to colleague, stakeholder/ supplier relationship management including collaboration, negotiation, influencing, managing conflict, and networking [K15]

How to communicate and cascade information effectively at all levels and to a diverse audience

How to identify the information required for decision making, how it should be gathered and reported

How to develop and present a case to management when requesting change including single page reporting

BUSINESS PROCESS LEADERS WILL HAVE THE SKILLS TO:

Undertake and direct production activities and operations

Propose, undertake, manage and coordinate changes to the product, production operations, processes and equipment, to improve productivity, efficiency and quality

Solve problems - predict and prevent failures through the analysis of data and information

Manage resources effectively to ensure their availability and the efficient running of department in line with organisational procedures

Deliver cost achievements against budget targets

Plan resources to support variations in production schedules

Use KPIs as the basis of the continuous improvement cycle for quality, cost and volume achievement using lean operational and product improvement techniques

Undertake and manage quality resolutions as well as volume problem resolution

Manage health, safety and the environment within area of responsibility, ensuring staff are compliant with all requirements and driving improvements

Conduct workplace risk assessments, manage near-miss or similar processes, conduct investigations as necessary

Use project management tools to plan, organise and manage resources, to monitor progress, identify risks and mitigation

Recruit the right people into the right job

Develop, build and motivate teams by identifying strengths and enabling training and development within the workplace

Recognise excellence, effectively manage performance, discipline, attendance, grievance

Manage industrial relations and equality and diversity

Support development through coaching and mentoring

Leading and communicating the management of change Provide clear direction and leadership, giving open and honest feedback. Apply and adapt own leadership style to different production situations and people

Delegate and enable delivery though others

Build and maintain strong relationships across different disciplines. Negotiate and influence. Manages conflict

Identify and share good practice, work collaboratively

Utilise specialist advice and support to deliver plans

Communicate effectively (verbal, non-verbal, written, digital) in manner relevant to the target audience

Chair meetings and present (formally and informally) using a range of media. Listen actively, challenge, give feedback

Analyse data/information to compellingly and succinctly present information to drive management decisions

BUSINESS PROCESS LEADER LEVEL 4 STANDARD

CONTINUED...

BUSINESS PROCESS LEADERS WILL DISPLAY THE FOLLOWING BEHAVIOURS:

Decision Making: Makes decisions based on personal initiative, technical knowledge, analysis and understanding of the different interests of stakeholders. Accepts responsibility for decisions and recognises limit to own authority

Agile: Flexible and adaptable to the needs of the organisation. Is creative, innovative and enterprising when seeking solutions to business needs. Positive and open to new ways of working, responds well to feedback and change

Inclusive: Open, approachable, authentic, and able to build trust with others. Promotes a respectful culture embracing diversity and inclusion. Seeks and provides feedback to manage continuous development of self, team and processes

Responsibility, Accountability and Resilience: Drive to achieve in all aspects of work. Demonstrates resilience and accountability. Determination when managing difficult situations. Seeks new opportunities

Professionalism: Sets an example, and is fair, consistent and impartial. Open and honest. Operates within organisational values. Promote and instil the values of the organisation to all colleagues

Problem solver: Identifies issues quickly, enjoys solving complex problems and applies appropriate solutions. Has a strong desire to push to ensure the root cause of any problem is found and solutions identified which prevent recurrence

INDUCTION:

If a learner is progressing onto this programme with us from a previous qualification then induction will be completed on a one to one basis within their place of work but if the learner is embarking on the Level 4 as a first time entrant then they will receive a 3 day induction into their programme at our technical academy covering:

- Induction to In-Comm
- Induction to the qualification
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their programme will not only complete their Business Process Leader Level 4 Apprenticeship but will also gain a Higher National in Manufacturing Operations Level 4. Dependent upon prior qualifications learners may also need to complete functional skills in Maths and English to a minimum of Level 2.

Off the Job Training Subjects Include:

- Manufacturing Processes
- Manufacturing Planning & Scheduling Principles
- Statistical Process Control
- Manufacturing Operations Mathematics
- Creating & Managing Projects in Manufacturing Operations
- Managing a Professional Engineering Project
- Introduction to Professional Engineering Management
- Business Improvement Techniques

ASSESSMENT

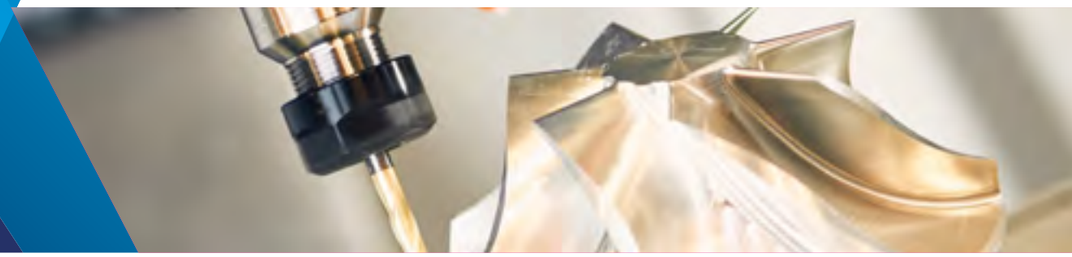
To achieve this qualification learners must go through an end point assessment, this consists of Elements. Each assessment method will directly assess the Knowledge, Skills and Behaviours of the Standard. The elements are:

- Portfolio – a portfolio of evidence comprising of naturally occurring evidence during the on-programme period from the workplace, backed up by relevant company processes and procedures.
- Workplace Observation and Question & Answer Session
- Project, Presentation & Question & Answer Session
- Professional Discussion

IN-COMM TRAINING SERVICES

TOOL PROCESS DESIGN ENGINEER LEVEL 6 STANDARD

24 MONTH PROGRAMME –
The qualification will be delivered via block days off the job training at Centre & Monthly visits to company over 28 months



ROLE PROFILE:

This occupation is found in the advanced manufacturing sheet metal/presswork supply chain of automotive and aerospace. The broad purpose of the occupation includes the design of a unique tooling process pathway that enables components to be mass produced in the most economically viable way. The process pathway often includes a sequential series of steps using uniquely designed press tooling procedures such as blanking, drawing, piercing and forming in order to make the completed component.

The tool process design engineer has to determine from the volume of required components whether to design manually operated or automatic (progression) press tooling. In some designs the components being produced could also be part of an assembly created from different additional sheet metal pressings that have to be welded together.

Examples of a tool process design is the manufacture of complex automotive and aerospace sub-assemblies such as aeroplane and car seat chassis, vehicle doors and bumper beam assemblies that undergo several process steps. Working with clients on unique components that create commercial advantage to the original equipment manufacturer (OEM), and through a process of critical analysis, interpretation and evaluation of complex information a unique innovated tool process pathway is created.

In their daily work, an employee in this occupation interacts with managing directors, technical/production directors, senior managers in finance and purchasing, management/technical specialists from customers together with technical specialists from suppliers, the production team and operatives on the shop floor. A tool process design engineer will typically spend their time working between the design office, board room and the factory floor.

An employee in this occupation will be responsible for designing a unique economically viable high-volume process tooling pathway, capable of mass production while meeting customer specification and achieving consistently high tolerances and quality standards. A tool process design engineer will work both autonomously or as part of a team, depending on the project, company size, and will exercise considerable judgement on projects with a high-level personal decision making and influence.

Depending on the size of the organisation a tool process design engineer would typically report to the production or managing director of the company and will have significant leadership and project management responsibility together with budget accountability.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their programme will complete their Level 6 Apprenticeship as a Tool Process Design Engineer as well as achieving an EAL Level 6 qualification in Tool Design, a qualification which is bespoke to In-Comm and has been developed specifically for this apprenticeship. Dependent upon prior qualifications learners may also need to complete Functional Skills in English and Maths at Level 2.

As part of the programme it is compulsory that learners attend centre to achieve knowledge, understanding and competence in the following subjects:

- Computer Aided Design & Manufacture
- Simulation
- Materials Properties & Testing
- Project Management
- Teams & Leadership
- Business & Financial Planning
- Customer Data Analysis
- Advanced Lean Manufacturing Techniques
- Business Improvement Techniques
- Quality & Process Improvement
- Customer Relationship Management
- Calculations, Costings & Layout Analysis
- Managing a Professional Project

Should an employer so wish there is an opportunity for the learner to undertake extra modules to allow them to gain the Level 4 HNC in Engineering which would be subject to extra commercial costs. The extra modules would then cover:

- Engineering Maths
- Engineering Science
- Electro, Pneumatic and Hydraulic Systems

OCCUPATIONAL DUTIES:

DUTY 1	Design new unique tooling in line with a developing process route. Using computer aided engineering technology to ensure the full potential of the manufacturing equipment is best utilised against a background of competing existing production demands also applying and promoting Environmental, Health and Safety (EHS) requirements to the process.
DUTY 2	Undertake complex forming simulation trials where the new component is “formed” from a series of process steps.
DUTY 3	Use bespoke computer aided design (CAD) equipment to create the design of the unique press tools associated equipment necessary to produce the component.
DUTY 4	Interpret customer data in order to develop a tool process route that meets the quality & quantity of parts needed by the client.
DUTY 5	Consider manufacturing feasibility issues and offer counter proposals back to the customer offering safety performance to the component including component handling issues (sharp edges and component lifting weight).

TOOL PROCESS DESIGN ENGINEER LEVEL 6 STANDARD

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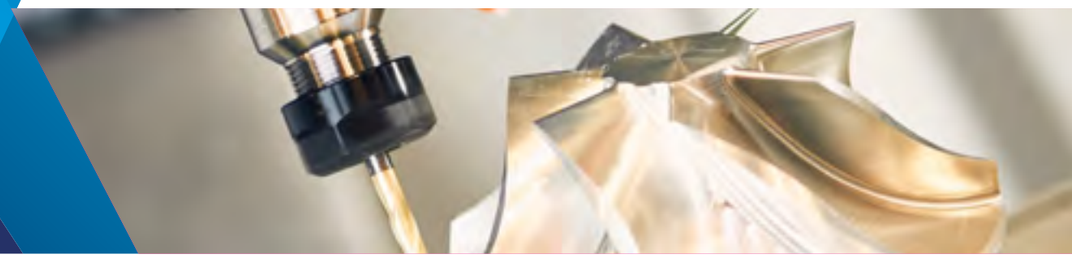

OCCUPATIONAL DUTIES:

DUTY 6	Develop the tool design brief to meet customer requirements in relation to cost quality and delivery including health and safety (H&S) considerations such as tool handling features.
DUTY 7	Design and developing the process brief, while being an implementer of best practice in safety management.
DUTY 8	Applies the companies' quality standards to create a tool pathway design as specified by the customer in line with internal H&S standards and the customer's needs.
DUTY 9	Interact with the design office, factory floor, suppliers and customers to confirm design parameter.
DUTY 10	Use appropriate planning techniques necessary to meet design, technical and budgetary requirements.
DUTY 11	Provide technical updates and progress reports to the Managing or Production Director and client using Advanced Product Quality Planning (APQP) Technique reporting.
DUTY 12	Controls expenditure and works within specified budgetary constraints, liaise with the finance team and ensure the appropriate level of financial impact on the company.

KNOWLEDGE

K1: Strategic tool design including the principles and practices of toolmaking machine capability and the limitations of new press tools

K2: How to design a new tooling process for volume production without inhibiting existing production demand using leadership and management techniques

K3: Planning and forecasting outcomes of new tooling processes including those where there is limited definition tooling processes

K4: Applies business improvement processes and techniques, innovative ways of working and failure proofing techniques (for example Poke Yoke) to deliver a feasible and economically viable process

K5: Collaborative working including relationship management with clients, stakeholders and the supply chain by utilising negotiation, influencing and mutual problem solving techniques.

K6: The scientific, technical, engineering and mathematical principals involved in creating the optimal manufacturing process design, including geometric dimensioning and tolerances allowing conceptualisation and refinement of the design and theoretical fixture behaviour

K7: Advanced lean manufacturing techniques including programme management, failure mode analysis, problem solving, advanced quality planning and single minute exchange of dies (SMED)

K8: Properties of materials including the metallurgical properties of various metals, for example, mild steel stainless steel and predicting the effect on the material during the tooling process

K9: Business planning including project management, planning, forecasting, risk analysis, financial planning, commercial impact and contractual obligations, together with supply chain management, logistics and resource constraints

K10: Team formation and leadership including motivation, coaching and human resource development, preventing dysfunctional working using techniques such as emotional intelligence, conflict resolution and change management

K11: High volume sheet metal forming and cutting techniques in a continuous production environment taking into consideration industry requirements and regulations.

SKILLS

S1: Design and trial volume press tooling processes including blanking, piercing, forming, draw forming, press tool components selection, ganged setup, progression tooling, transfer tooling, clamping, material selection and heat treatment

S2: Create new tooling solutions using specialist software programmes to produce 3 dimensional (3D) models

S3: Critically analyse, interpret and evaluate complex information and ideas to create the new tooling solution, using bespoke software programmes to create 3D models such as car seat chassis assemblies

S4: Design and develop gap gauges, acceptance gauges including co-ordinate measuring machine (CMM) dimensional checking and 3D laser scanning for analysis and problem resolution

S5: Undertake advanced forming simulation using computer aided equipment (CAE)

S6: Confirm feasibility and estimate the cost of volume component production including, gross material cost, labour costs, machine cost overheads, machine utilisation capacity (Takt time) capital expenditure and consumables and contribute to overall budget management.

S7: Design tooling solution to meet customer requirements including external specifications set by clients and original equipment manufacturers (OEMs) while fulfilling ethical and sustainability requirements.

S8: Lead and manage a team to implement new tool process projects from their inception into full production, for example by using planning, organising team control and motivational techniques. Build on the ideas of others to improve outcomes.

TOOL PROCESS DESIGN ENGINEER LEVEL 6 STANDARD

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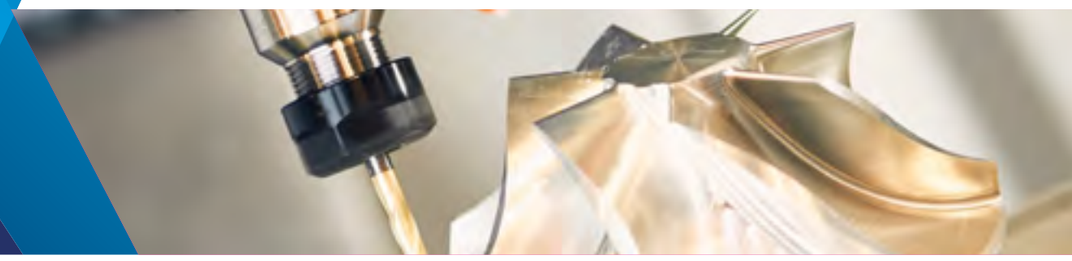

SKILLS

S9: Communication and influencing techniques by choosing appropriate communication methods for the audience, ensuring understanding and delivering effective presentations and reports.

S10: Provide timely succinct written reports that explains complex technical issues and potential consequences using language and phrases appropriate to the audience's knowledge and understanding.

BEHAVIOURS

B1: Strong work ethic with a positive attitude, motivated by engineering and business values for example: motivated by externally set challenges, accountable and persistent in completing tasks.

B2: Professionalism - dependable, ethical, responsible and reliable while consistently setting demanding personal targets

B3: Team player, works effectively within a team and supports others when required. In doing so, applies these behaviours in a respectful and professional manner

B4: Self-analytical, overcomes problems through a process of reflection and review and by undertaking continuous professional development (CPD) in order to use new technological advances in the sector

B5: Commits to the beliefs, goals and standards of their own employer and to the wider industry and its professional standards

B6: Problem solving identifies issues quickly, enjoys solving complex problems at the root cause and applying appropriate solutions

B7: Quality focus that promotes continuous improvement and consistently applies logic to the design process

B8: Resourceful and adjusts to different conditions and technologies through market research quickly while continuing to meet the tool process design criteria

B9: Demonstrates a safety mind-set and promotes Health and Safety leadership to others at all times. This occupation sits within an industry with extensive and rigorous Power Press Regulation (PUWER) requiring a disciplined and responsible approach to manage, mitigate and avoid risk

B10: Provide timely succinct written reports that explains complex technical issues and potential consequences using language and phrases appropriate to the audience's knowledge and understanding.

ASSESSMENT

To achieve this qualification learners must go through an End Point Assessment consisting of 4 elements:

- Portfolio – Throughout the programme the learner will build a portfolio of evidence towards the topics of delivery that hits the knowledge, skills and behaviours within the apprenticeship standard. Practical observations and/or evaluation by the employer to be included, such as acknowledgement of a skill shown or evidencing. The portfolio will also be used to frame discussion at interviewwhere knowledge, skills and behaviours are demonstrated.
- A work based project with report looking at the design oof a unique tooling process that enables components to be mass produced in the most economically, viable way, followed on with a presentation and questioning. The presentation will last approximately 30 minutes with a further 30 minutes for Q&A session.
- A competency based interview and professional discussion is held between the learner and Independent End Point Assessment Organisation. The interview assesses understanding of the portfolio o validate competence shown by the learner. Discussions take place covering a structured series of questions to assess the apprentice's knowledge to ensure all aspects are given coverage.
- Continuous professional development log – Learners are to keep a CPD log of what they have learnt and developed across their programme.

IN-COMM
TRAINING SERVICES

LEADERSHIP & MANAGEMENT COURSES

#SHAPINGFUTURES

IN-COMM TRAINING SERVICES

TEAM LEADER / SUPERVISOR LEVEL 3 STANDARD

18 MONTH PROGRAMME –
Block release delivery at centre

1 day a week over 8 weeks workshop

Roles/Occupations may include: Supervisor, Team Leader, Project Officer, Shift Supervisor, Foreperson and Shift Manager.

ROLE PROFILE:

A team leader/supervisor is a first line management role, with operational/project responsibilities or responsibility for managing a team to deliver a clearly defined outcome. They provide direction, instructions and guidance to ensure the achievement of set goals. Working in the private, public or third sector and in all sizes of organisation, specific responsibilities will vary, but the knowledge, skills and behaviours needed will be the same whatever the role. Key responsibilities are likely to include supporting, managing and developing team members, managing projects, planning and monitoring workloads and resources, delivering operational plans, resolving problems, and building relationships internally and externally.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their learning journey will complete a Level 3 Apprenticeship as a Team Leader / supervisor. Dependent upon prior qualifications learners may also need to complete functional skills in English and Maths at Level 2.

For the off the job training element, during the first three month's of their programme the learner is required to attend our training academy to undertake an eight day intensive course covering training on the following subjects in order to ensure they gain knowledge, understanding and competence to further enhance their Knowledge, Skills and Behaviours working within team leading:

- Solving Problems & Making Decisions
- Understanding Innovation & Change
- Understanding Leadership
- Understand how to Motivate to Improve
- Understand Stress Management
- Manage Work Based Projects
- Planning & Allocating Work
- Understanding Training & Coaching in the Workplace

Throughout their programme further enhancement to knowledge, Skills and Behaviour will be introduced through modules covering:

- Leading People
- Managing People
- Building Relationships
- Communication
- Problem Solving & Decision Making
- Operational Management
- Project Management
- Finance
- Self-Awareness
- Management of Self

As well as building a portfolio of evidence to demonstrate competence the learner is required to undertake a work based project which culminates as part of their End Point Assessment in a presentation to give an overview of what they have achieved. When the learner is coming to the point of EPA they will attend one of our Presentation Skills courses at the academy in order to enhance their presenting capability and give them confidence in imparting all of the information they need to within their assessment.

REQUIREMENTS: KNOWLEDGE, SKILLS AND BEHAVIOURS

Interpersonal excellence – Managing people and developing relationships	
Knowledge:	What is required (through formal learning and applied according to business environment)
Leading People	Understand different leadership styles and the benefits of coaching to support people and improve performance. Understand organisational cultures, equality, diversity and inclusion.
Managing People	Understand people and team management models, including team dynamics and motivation techniques. Understand HR systems and legal requirements, and performance management techniques including setting goals and objectives, conducting appraisals, reviewing performance, absence management, providing constructive feedback, and recognising achievement and good behaviour.
Building Relationships	Understand approaches to customer and stakeholder relationship management, including emotional intelligence and managing conflict. Know how to facilitate cross team working to support delivery of organisational objectives.
Communication	Understand different forms of communication and their application. Know how to chair meetings, hold challenging conversations, provide constructive feedback and understand how to raise concerns.
Organisational Performance - Delivering Results	
Operational Management	Understand how organisational strategy is developed. Know how to implement operational/team plans and manage resources and approaches to managing change within the team. Understand data management, and the use of different technologies in business.
Project Management	Understand the project lifecycle and roles. Know how to deliver a project including: managing resources, identifying risks and issues, using relevant project management tools.
Finance	Understand organisational governance and compliance, and how to deliver Value for Money. Know how to monitor budgets to ensure efficiencies and that costs do not overrun.

TEAM LEADER / SUPERVISOR LEVEL 3 STANDARD

CONTINUED...

REQUIREMENTS: KNOWLEDGE, SKILLS AND BEHAVIOURS

Personal Effectiveness – Managing Self	
Knowledge:	What is required (through formal learning and applied according to business environment)
Awareness of Self	Know how to be self-aware and understand unconscious bias and inclusivity. Understand learning styles, feedback mechanisms and how to use emotional intelligence.
Management of Self	Understand time management techniques and tools, and how to prioritise activities and approaches to planning.
Decision Making	Understand problem solving and decision making techniques, and how to analyse data to support decision making.

REQUIREMENTS: KNOWLEDGE, SKILLS AND BEHAVIOURS

Interpersonal Excellence – Managing People and Developing Relationships	
Knowledge:	What is required (acquired and demonstrated through continuous professional development)
Leading People	Able to communicate organisation strategy and team purpose, and adapt style to suit the audience. Support the development of the team and people through coaching, role modelling values and behaviours, and managing change effectively.
Managing People	Able to build a high-performing team by supporting and developing individuals, and motivating them to achieve. Able to set operational and personal goals and objectives and monitor progress, providing clear guidance and feedback.
Building Relationships	Building trust with and across the team, using effective negotiation and influencing skills, and managing any conflicts. Able to input to discussions and provide feedback (to team and more widely), and identify and share good practice across teams. Building relationships with customers and managing these effectively.
Communication	Able to communicate effectively (verbal, written, digital), chair meetings and present to team and management. Use of active listening and provision of constructive feedback.
Organisational Performance - Delivering Results	
Operational Management	Able to communicate organisational strategy and deliver against operational plans, translating goals into deliverable actions for the team, and monitoring outcomes. Able to adapt to change, identifying challenges and solutions. Ability to organise, prioritise and allocate work, and effectively use resources. Able to collate and analyse data, and create reports.
Project Management	Able to organise, manage resources and risk, and monitor progress to deliver against the project plan. Ability to use relevant project management tools, and take corrective action to ensure successful project delivery.
Finance	Applying organisational governance and compliance requirements to ensure effective budget controls.

Personal Effectiveness – Managing Self	
Awareness of Self	Able to reflect on own performance, seek feedback, understand why things happen, and make timely changes by applying learning from feedback received.
Management of Self	Able to create an effective personal development plan, and use time management techniques to manage workload and pressure.
Decision Making	Use of effective problem solving techniques to make decisions relating to delivery using information from the team and others, and able to escalate issues when required.
Behaviours:	What is required (developed and exhibited in the workplace)
Takes Responsibility	Drive to achieve in all aspects of work. Demonstrates resilience and accountability. Determination when managing difficult situations.
Inclusive	Open, approachable, authentic, and able to build trust with others. Seeks views of others.
Agile	Flexible to the needs of the organisation. Is creative, innovative and enterprising when seeking solutions to business needs. Positive and adaptable, responds well to feedback and need for change.
Professionalism	Sets an example, and is fair, consistent and impartial. Open and honest. Operates within organisational values.

ASSESSMENT:

- Portfolio – Throughout the programme the learner will build a portfolio of evidence towards the topics of delivery that hits the knowledge, skills and behaviours within the apprenticeship standard. Practical observations and/or evaluation by the employer to be included, such as acknowledgement of a skill shown or evidencing. The portfolio is assessed through Internal and External Quality Assurance for achievement of the Level 2 Diploma in Team Leading by the awarding body.
- Workshop Attendance – The learner must attend each knowledge workshop to gain the level of underpinning knowledge required to pass the knowledge test.
- Knowledge Test – The learner undertakes workbooks covering each topic of the knowledge delivery to ensure that they understand each area of competence.

OPERATIONS / DEPARTMENTAL MANAGER LEVEL 5 STANDARD

24 MONTH PROGRAMME –
Block release delivery at centre

1 day a week over 10 weeks workshop

ROLE PROFILE:

An operations/departmental manager is someone who manages teams and/or projects, and achieving operational or departmental goals and objectives, as part of the delivery of the organisation's strategy. They are accountable to a more senior manager or business owner. Working in the private, public or third sector and in all sizes of organisation, specific responsibilities and job titles will vary, but the knowledge, skills and behaviours needed will be the same. Key responsibilities may include creating and delivering operational plans, managing projects, leading and managing teams, managing change, financial and resource management, talent management, coaching and mentoring.

Roles may include: Operations Manager, Regional Manager, Divisional Manager, Department Manager and specialist managers.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their learning journey will complete a Level 3 Apprenticeship as a Team Leader / supervisor. Dependent upon prior qualifications learners may also need to complete functional skills in English and Maths at Level 2.

For the off the job training element, during the first three month's of their programme the learner is required to attend our training academy to undertake an ten day intensive course covering training on the following subjects in order to ensure they gain knowledge, understanding and competence to further enhance their Knowledge, Skills and Behaviours working within management:

- Making a Financial Case
- Managing Projects in an Organisation
- Making Professional Presentations
- Partnership Working
- Preparing to Apply Lean Production & Improvement Methodologies to the Workplace
- Managing Risks in the Workplace
- Managing Meetings
- Managing & Implementing Change in the Workplace
- Budgetary Planning & Control
- Solving Problems by Making Effective Decisions in the Workplace

Throughout their programme further enhancement to knowledge, Skills and Behaviour will be introduced through modules covering:

- Leading People
- Managing People
- Building Relationships
- Communication
- Operational Management
- Project Management
- Finance
- Self-Awareness
- Management of Self
- Problem Solving & Making Decisions

REQUIREMENTS: KNOWLEDGE, SKILLS AND BEHAVIOURS

Organisational Performance – Delivering Results	
Knowledge:	What is required (through formal learning and applied according to business environment)
Operational Management	Understand operational management approaches and models, including creating plans to deliver objectives and setting KPIs. Understand business development tools (eg SWOT), and approaches to continuous improvement. Understand operational business planning techniques, including how to manage resources, development of sales and marketing plans, setting targets and monitoring performance. Knowledge of management systems, processes and contingency planning. Understand how to initiate and manage change by identifying barriers and know how to overcome them. Understand data security and management, and the effective use of technology in an organisation.
Project Management	Know how to set up and manage a project using relevant tools and techniques, and understand process management. Understand approaches to risk management.
Finance	Understand business finance: how to manage budgets, and financial forecasting.
Interpersonal excellence – Managing People and Developing Relationships	
Leading People	Understand different leadership styles, how to lead multiple and remote teams and manage team leaders. Know how to motivate and improve performance, supporting people using coaching and mentoring approaches. Understand organisational cultures and diversity and their impact on leading and managing change. Know how to delegate effectively.
Managing People	Know how to manage multiple teams, and develop high performing teams. Understand performance management techniques, talent management models and how to recruit and develop people, providing clear guidance and feedback.
Building Relationships	Understand approaches to partner, stakeholder and supplier relationship management including negotiation, influencing, and effective networking. Knowledge of collaborative working techniques to enable delivery through others and how to share best practice. Know how to manage conflict at all levels.
Decision Making	Understand interpersonal skills and different forms of communication and techniques (verbal, written, non-verbal, digital) and how to apply them appropriately.)
Personal Effectiveness – Managing Self	
Awareness of Self	Understand own impact and emotional intelligence. Understand different learning and behaviour styles.
Management of Self	Understand time management techniques and tools, and how to prioritise activities and the use of different approaches to planning, including managing multiple tasks.
Decision Making	Understand problem solving and decision making techniques, including data analysis. Understand organisational values and ethics and their impact on decision making.

IN-COMM TRAINING SERVICES

OPERATIONS / DEPARTMENTAL MANAGER LEVEL 5 STANDARD

CONTINUED...

REQUIREMENTS: KNOWLEDGE, SKILLS AND BEHAVIOURS	
Interpersonal excellence – Managing People and Developing Relationships	
Knowledge:	What is required (acquired and demonstrated through continuous professional development)
Operational Management	Able to input into strategic planning and create plans in line with organisational objectives. Support, manage and communicate change by identifying barriers and overcoming them. Demonstrate commercial awareness, and able to identify and shape new opportunities. Creation and delivery of operational plans, including setting KPIs, monitoring performance against plans. Producing reports, providing management information based on the collation, analysis and interpretation of data.
Project Management	Plan, organise and manage resources to deliver required outcomes. Monitor progress, and identify risk and their mitigation. Able to use relevant project management tools.
Finance	Able to monitor budgets and provide reports, and consider financial implications of decisions and adjust approach/recommendations accordingly.
Interpersonal excellence – Managing People and Developing Relationships	
Leading People	Able to communicate organisational vision and goals and how these apply to teams. Support development through coaching and mentoring, and enable and support high performance working. Able to support the management of change within the organisation.
Managing People	Able to manage talent and performance. Develop, build and motivate teams by identifying their strengths and enabling development within the workplace. Able to delegate and enable delivery though others.
Building Relationships	Able to build trust, and use effective negotiation and influencing skills and manage conflict. Able to identify and share good practice, and work collaboratively with others both inside and outside of the organisation. Use of specialist advice and support to deliver against plans.
Decision Making	Able to communicate effectively (verbal, non-verbal, written, digital) and be flexible in communication style. Able to chair meetings and present using a range of media. Use of active listening, and able to challenge and give constructive feedback.
Personal Effectiveness – Managing Self	
Awareness of Self	Able to reflect on own performance, working style and its impact on others.
Management of Self	Able to create a personal development plan. Use of time management and prioritisation techniques.
Decision Making	Able to undertake critical analysis and evaluation to support decision making Use of effective problem solving techniques.

REQUIREMENTS: KNOWLEDGE, SKILLS AND BEHAVIOURS	
Interpersonal excellence – Managing People and Developing Relationships	
Knowledge:	What is required (developed and exhibited in the workplace)
Takes Responsibility	Drive to achieve in all aspects of work. Demonstrates resilience and accountability. Determination when managing difficult situations. Seeks new opportunities.
Inclusive	Open, approachable, authentic, and able to build trust with others. Seeks the views of others and values diversity.
Agile	Flexible to the needs of the organisation. Is creative, innovative and enterprising when seeking solutions to business needs. Positive and adaptable, responding well to feedback and need for change. Open to new ways of working.
Professionalism	Sets an example, and is fair, consistent and impartial. Open and honest. Operates within organisational values.

ASSESSMENT

To achieve this qualification learners must go through an End Point Assessment, this consists of five elements. Each assessment method will directly assess the Knowledge, Skills and Behaviours of the standard. The elements are:

- Knowledge Test – The learner will be given a series of different scenarios and situations, with a series of questions requiring responses which will demonstrate the apprentices knowledge.
- Portfolio – Throughout the programme the learner will build a portfolio of evidence towards the topics of delivery that hits the knowledge, skills and behaviours within the apprenticeship standard. Practical observations and/or evaluation by the employer to be included, such as acknowledgement of a skill shown or evidencing. The portfolio will also be used to frame discussion at interview, where knowledge, skills and behaviours are demonstrated. In-Comm has incorporated the registration to the Level 3 Diploma in Management so the portfolio will be assessed by an awarding body to gain this qualification.
- A Competency Based Interview is held between the learner and the Independent End Point Assessment Organisation. The interview assesses understanding of the portfolio to validate competence shown by the learner. Discussions take place covering a structured series of questions to assess the apprentice's knowledge to ensure all aspects are given coverage.
- Project & Presentation – The learner delivers a presentation on a project that they have completed (developed through the off the job sessions). The presentation lasts approximately 15 minutes, with a further 15 minutes for a Q&A session. There will then be a professional discussion relating to all of the CPD activity undertaken during their qualification to reflect on outcome and how learning has been applied to their job role.
- Continuous Professional Development Log & Discussion – Learners are to keep a CPD log of what they have learnt and developed across their programme culminating in a professional discussion with the EPAO to ensure how learning gained has been applied to their job role.

IN-COMM
TRAINING SERVICES

BUSINESS SUPPORT APPRENTICESHIPS

#SHAPINGFUTURES

IN-COMM TRAINING SERVICES

SUPPLY CHAIN WAREHOUSE OPERATIVE LEVEL 2 STANDARD

12 MONTH LEARNING PROGRAMME –
2 week block release delivery

ROLE PROFILE:

Warehouse Operatives work in a variety of warehouse environments. Work activities include taking deliveries, checking for damaged/missing items, storing goods, moving stock by various methods, picking/packing orders, loading goods for dispatch, maintaining stock records and documentation, and cleaning. They are required to safely use a range of equipment, machinery and vehicles, as relevant to their role and setting. This could include mechanical racking systems, materials handling equipment (MHE) or fork lift trucks. Warehouse Operatives communicate with a wide range of people and customers. They have a passion to meet customers' expectations by providing a quality service that encourages repeat business. Individuals in this role are highly competent in using industry-recognised systems and associated services (eg Traffic/Warehouse Management Systems) and will be able to work under pressure to tight deadlines.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Value

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their programme will complete a Level 2 Apprenticeship in Supply Chain Warehouse Operative. Dependent upon prior qualifications learners may also need to complete functional skills in English and Maths at Level 2.

For the off the job training element, during the first three months of their programme the learner is required to attend our training academy to undertake a two week intensive course covering training on the following subjects in order to ensure they gain knowledge, understanding and competence to further enhance their Knowledge, Skills and Behaviours working within the logistics industry:

- Health & Safety in the Warehousing Sector
- Manual Handling
- Control of Substances Hazardous to Health
- Working at Heights
- Overview of the Logistics Industry Structure
- Warehousing & Logistics Legislation
- Waste & the Environment in Logistics
- Workplace Environment
- Communication Skills
- Working effectively in Teams
- Personal Development
- Movement of People & Materials
- Order Picking
- Stock Control
- Receiving Goods

Throughout their programme further enhancement to Knowledge, Skills and Behaviour will be introduced through modules covering:

- Contribute to Effective Working Relationships
- Contribute to the Maintenance of H&S and Security in the workplace
- Receiving Loads and Dispatching Goods
- Placing Goods in Storage
- Assemble Orders for Dispatch
- Maintain the safety and quality of goods
- Maintain hygiene standards in handling and storing goods
- Operate specialised plant and machinery to performance requirements (Lifting & Transferring)
- Environmental Management
- Working in Accordance with Warehouse Systems, Processes & IT
- Awareness of Supply Chain Industry & Own Organisation

CORE KNOWLEDGE – ALL WAREHOUSE OPERATIVES WILL HAVE A GOOD UNDERSTANDING OF:

Safe driving and/or operating techniques to standard and as trained, relating to MHE (e.g. Counterbalance/Reach Trucks, Powered Pallet Trucks, Ride on Pallet Trucks, Order Pickers, Narrow Aisle Pickers, Mobile Elevated Work Platforms, Forklift Trucks) as relevant to their role and setting; adherence to safe practice when working at heights.

Steps to take to minimise the effect their work (and the wider industry) has on the environment; the need to maintain a high level of housekeeping and manage waste effectively; using packing materials efficiently to reduce waste and costs; the consequences of not using or disposing of these correctly.

Safe use of equipment and machinery (such as MHE, vehicle and delivery systems); where to find instructions/guidance; consequences of incorrect use.

Use of warehouse systems and processes relating to packaging, moving and receiving stock (eg Load Container Lists) within a warehouse environment to facilitate the safe handling of goods and an effective and efficient service to internal/external customers.

Basic IT applications and other relevant technology and systems, including warehousing management, data capture, radio and barcoding systems to ensure the safe and efficient processing of goods.

Relevant regulation and legislation (including international where relevant to role) governing the supply chain industry, their subsector and role in particular; consequences of not adhering to legal guidelines.

Effective communication with customers that store goods with the company/colleagues (including those working remotely, third party carriers, agencies and other organisations) in line with situation and organisational style/culture.

Structure of the industry; methods and modes of transport; roles available within the sector in general and in relation to their own career aspirations.

The importance of delivering excellent customer service to customers and colleagues, including identifying needs and responding appropriately in line with situation and organisational style/culture.

SUPPLY CHAIN WAREHOUSE OPERATIVE LEVEL 2 STANDARD

CONTINUED...

CORE KNOWLEDGE – ALL WAREHOUSE OPERATIVES WILL HAVE A GOOD UNDERSTANDING OF:

Vision, objectives and brand of the organisation; the importance of organisation reputation and what can affect it; how their own performance can contribute to organisational success and support or impact on others.

Proposed and actual changes to systems, processes and technology used in the industry, particularly relating to own role; how to keep up to date with any changes in the systems, processes and technology that affect their role.

How their role can affect their health and the need to maintain a level of fitness appropriate to the needs of their role.

SKILLS:

Operate and handle equipment safely and efficiently as required for their role, such as Forklift Trucks, High Reach Trucks, Powered Pallet Trucks or Man Up Trucks; manoeuvre vehicles in restricted spaces; safely use and position vehicle fitted equipment such as mirror requirements.

Comply with appropriate rules, regulations and processes for safely and efficiently moving, handling, packing and unpacking different items, both manually and using relevant equipment (such as MHE, vehicle and delivery systems); understand consequences of incorrect use.

Work individually and as part of a team to safely move and handle objects; maintain a high level of housekeeping and manage waste effectively; know where to find instructions or guidance; check for damaged or missing items as appropriate; take responsibility for maintaining health, safety and security of people at all times.

Safely and efficiently load and unload items into and from vehicles, buildings, containers, lift vans, crates and/or boxes; use appropriate MHE or machinery where necessary; ensure items are safely and efficiently packed, assembled and/or disassembled as appropriate.

Select, prepare and use packaging materials appropriate to the job efficiently and in a way which reduces waste, costs and environmental impact; taking into consideration the item(s) to be moved, and their current and final destinations.

Use correct equipment and procedures to record receiving or stowing goods; produce relevant paperwork or labelling processes.

Promote the values of the organisation; communicate effectively with customers and colleagues to identify and meet their needs.

Work effectively in a warehousing team, including when under pressure, and to agreed deadlines; adapt to change in line with internal and external customer needs or circumstances.

Use IT applications and other relevant technology and systems, including warehousing management, data capture, radio and barcoding systems, to ensure the safe and efficient processing of goods.

BEHAVIOURS - WHAT IS REQUIRED (DEVELOPED AND EXHIBITED IN THE WORKPLACE)

Demonstrate integrity, credibility, honesty, positivity and personal drive in every aspect of their role; demonstrate a belief in the services that the organisation offers.

Take ownership for own performance and training, including demonstrating a keen interest in the industry; proactively drive own ongoing learning and development, and make recommendations for improvement where relevant.

Show personal commitment to minimising the effect of work activities on the environment.

Adapt to and embrace the use of relevant technology, systems and equipment; use it responsibly and take an interest in new developments that could support the organisation.

ASSESSMENT:

To achieve this qualification learners must go through an End Point Assessment consisting of 3 elements:

- Portfolio of Evidence
  Although the portfolio is not directly assessed for end point assessment, it is used to indicate that the learner is ready for end point assessment. In-Comm has however incorporated the registration to the Level 2 Certificate in Warehousing & Storage so the portfolio will be assessed by an awarding body to gain this qualification.
- Knowledge and behaviours test, externally set and marked by the EPAO and will consist of structured short answer and scenario based questions held under exam conditions.
- Practical assessment – the independent assessor will observe the learner undertaking everyday tasks and will use an observation checklist and mark scheme to ensure all elements have been assessed.

IN-COMM TRAINING SERVICES

BUSINESS ADMINISTRATOR LEVEL 3 STANDARD

15 MONTH PROGRAMME –
2 week block release to centre with assessor visits to place of work

ROLE PROFILE:

Business administrators have a highly transferable set of knowledge, skills and behaviours that can be applied in all sectors. This includes small and large businesses alike; from the public sector, private sector and charitable sector. The role may involve working independently or as part of a team and will involve developing, implementing, maintaining and improving administrative services. Business administrators develop key skills and behaviours to support their own progression towards management responsibilities. The responsibilities of the role are to support and engage with different parts of the organisation and interact with internal or external customers. With a focus on adding value, the role of business administrator contributes to the efficiency of an organisation, through support of functional areas, working across teams and resolving issues as requested. The flexibility and responsiveness required allows the apprentice to develop a wide range of skills. The business administrator is expected to deliver their responsibilities efficiently and with integrity – showing a positive attitude. The role involves demonstrating strong communication skills (both written and verbal) and adopting a proactive approach to developing skills.

The business administrator is also expected to show initiative, managing priorities and own time, problem-solving skills, decision-making and the potential for people management responsibilities through mentoring or coaching others.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their learning journey will complete a Level 3 Apprenticeship in Business Administration. Dependent upon prior qualifications learners may also need to complete functional skills in English and Maths at Level 2.

For the off the job training element, during the first three months of their programme the learner is required to attend our training academy to undertake a two week intensive course covering training on the following subjects in order to ensure they gain knowledge, understanding and competence to further enhance their Knowledge, Skills and Behaviours working within Administration:

- Microsoft Word
- Microsoft Excel
- Microsoft PowerPoint
- Developing yourself as an Effective Team Member
- Understanding Effective Team Working
- Problem Solving
- Principles of Social Media
- Decision Making
- Understanding Change in the Workplace
- Planning & Monitoring Work
- Induction & Coaching in the Workplace

BUSINESS ADMINISTRATOR LEVEL 3 STANDARD

CONTINUED...

Throughout their programme further enhancement to Knowledge, Skills and Behaviour will be introduced through modules covering:

- Principles of Administrative Support
- Understanding Employer Organisation
- Communication Skills
- Telephone Techniques
- Time Management
- Basic Finance
- Writing for Business
- Satisfying Customer Requirements
- Using Resources Effectively and Efficiently in the Workplace

As well as building a portfolio of evidence to demonstrate competence the learner is required to undertake a work based project which culminates as part of their End Point Assessment in a presentation to give an overview of what they have achieved. When the learner is coming to the point of EPA they will attend one of our Presentation Skills courses at the academy in order to enhance their presenting capability and give them confidence in imparting all of the information they need to within their assessment.

ASSESSMENT

To achieve this qualification learners must go through an End Point Assessment, this consists of four elements. Each assessment method will directly assess the Knowledge, Skills and Behaviours of the standard. The elements are:

- Knowledge Test – The learner undertakes a multi-choice on-line test that lasts approximately 60 minutes and includes 50 equally weighted multi-choice questions with four possible answers each.
- Portfolio – Throughout the programme the learner will build a portfolio of evidence towards the topics of delivery that hits the knowledge, skills and behaviours within the apprenticeship standard. Practical observations and/or evaluation by the employer to be included, such as acknowledgement of a skill shown or evidencing. Although the portfolio is not directly assessed for end point assessment, it is used to frame discussion at interview, where knowledge, skills and behaviours are demonstrated. In-Comm has however incorporated the registration to the Level 3 Diploma in Business Administration so the portfolio will be assessed by an awarding body to gain this qualification.
- A Portfolio-based interview lasting 30-45 minutes is then held between the learner and the Independent End Point Assessment Organisation. The interview assesses understanding of the portfolio to validate competence shown by the learner. Discussions take place covering self-reflection by the learner of performance, demonstrating knowledge and how appropriate skills and behaviours have been applied. Learner's judgement and understanding is tested for explanation of appropriate examples.
- Project Presentation – The learner delivers a presentation on a project that they have completed (developed through the off the job sessions). The presentation lasts approximately 15 minutes, with a further 15 minutes for a Q&A session.

SKILLS	WHAT IS REQUIRED (ADVANCING KEY SKILLS TO SUPPORT PROGRESSION TO MANAGEMENT)
IT	Skilled in the use of multiple IT packages and systems relevant to the organisation in order to: write letters or emails, create proposals, perform financial processes, record and analyse data. Examples include MS Office or equivalent packages. Able to choose the most appropriate IT solution to suit the business problem. Able to update and review databases, record information and produce data analysis where required.
Record and document production	Produces accurate records and documents including: emails, letters, files, payments, reports and proposals. Makes recommendations for improvements and present solutions to management. Drafts correspondence, writes reports and able to review others' work. Maintains records and files, handles confidential information in compliance with the organisation's procedures. Coaches others in the processes required to complete these tasks.
Decision making	Exercises proactivity and good judgement. Makes effective decisions based on sound reasoning and is able to deal with challenges in a mature way. Seeks advice of more experienced team members when appropriate.
Interpersonal skills	Builds and maintains positive relationships within their own team and across the organisation. Demonstrates ability to influence and challenge appropriately. Becomes a role model to peers and team members, developing coaching skills as they gain area knowledge.
Communication	Demonstrates good communication skills, whether face-to-face, on the telephone, in writing or on digital platforms. Uses the most appropriate channels to communicate effectively. Demonstrates agility and confidence in communications, carrying authority appropriately. Understands and applies social media solutions appropriately. Answers questions from inside and outside of the organisation, representing the organisation or department.
Quality	Completes tasks to a high standard. Demonstrates the necessary level of expertise required to complete tasks and applies themself to continuously improve their work. Is able to review processes autonomously and make suggestions for improvements. Shares administrative best-practice across the organisation e.g. coaches others to perform tasks correctly. Applies problem-solving skills to resolve challenging or complex complaints and is a key point of contact for addressing issues.
Planning and organisation	Takes responsibility for initiating and completing tasks, manages priorities and time in order to successfully meet deadlines. Positively manages the expectations of colleagues at all levels and sets a positive example for others in the workplace. Makes suggestions for improvements to working practice, showing understanding of implications beyond the immediate environment (e.g. impact on clients, suppliers, other parts of the organisation). Manages resources e.g. equipment or facilities. Organises meetings and events, takes minutes during meetings and creates action logs as appropriate. Takes responsibility for logistics e.g. travel and accommodation.
Project management	Uses relevant project management principles and tools to scope, plan, monitor and report. Plans required resources to successfully deliver projects. Undertakes and leads projects as and when required.

IN-COMM TRAINING SERVICES

BUSINESS ADMINISTRATOR LEVEL 3 STANDARD

CONTINUED...

KNOWLEDGE	WHAT IS REQUIRED (IN-DEPTH KNOWLEDGE OF ORGANISATION AND WIDER BUSINESS ENVIRONMENT)
The Organisation	Understands organisational purpose, activities, aims, values, vision for the future, resources and the way that the political/economic environment affects the organisation.
Value of Their Skills	Knows organisational structure and demonstrates understanding of how their work benefits the organisation. Knows how they fit within their team and recognises how their skills can help them to progress their career.
Stakeholders	Has a practical knowledge of managing stakeholders and their differing relationships to an organisation. This includes internal and external customers, clients and/or suppliers. Liaises with internal/external customers, suppliers or stakeholders from inside or outside the UK. Engages and fosters relationships with suppliers and partner organisations.
Relevant Regulation	Understands laws and regulations that apply to their role including data protection, health & safety, compliance etc. Supports the company in applying the regulations.
Policies	Understands the organisation's internal policies and key business policies relating to sector.
Business Fundamentals	Understands the applicability of business principles such as managing change, business finances and project management.
Processes	Understands the organisation's processes, e.g. making payments or processing customer data. Is able to review processes autonomously and make suggestions for improvements. Applying a solutions-based approach to improve business processes and helping define procedures. Understands how to administer billing, process invoices and purchase orders.
External Environment Factors	Understands relevant external factors (e.g. market forces, policy & regulatory changes, supply chain etc. and the wider business impact). Where necessary understands the international/global market in which the employing organisation is placed.

BEHAVIOURS	WHAT IS REQUIRED (ROLE-MODEL BEHAVIOURS AND POSITIVE CONTRIBUTION TO CULTURE).
Professionalism	Behaves in a professional way. This includes: personal presentation, respect, respecting and encouraging diversity to cater for wider audiences, punctuality and attitude to colleagues, customers and key stakeholders. Adheres to the organisation's code of conduct for professional use of social media. Acts as a role model, contributing to team cohesion and productivity – representing the positive aspects of team culture and respectfully challenging inappropriate prevailing cultures.
Personal Qualities	Shows exemplary qualities that are valued including integrity, reliability, self-motivation, being pro-active and a positive attitude. Motivates others where responsibility is shared.
Managing Performance	Takes responsibility for their own work, accepts feedback in a positive way, uses initiative and shows resilience. Also takes responsibility for their own development, knows when to ask questions to complete a task and informs their line manager when a task is complete. Performs thorough self-assessments of their work and complies with the organisation's procedures.
Adaptability	Is able to accept and deal with changing priorities related to both their own work and to the organisation.
Responsibility	Demonstrates taking responsibility for team performance and quality of projects delivered. Takes a clear interest in seeing that projects are successfully completed and customer requests handled appropriately. Takes initiative to develop own and others' skills and behaviours.

CUSTOMER SERVICE SPECIALISTS STANDARD LEVEL 3

15 MONTH PROGRAMME –
2 week block release delivery

ROLE PROFILE:

The main purpose of a customer service specialist is to be a 'professional' for direct customer support within all sectors and organisation types. You are an advocate of Customer Service who acts as a referral point for dealing with more complex or technical customer requests, complaints, and queries. You are often an escalation point for complicated or ongoing customer problems. As an expert in your organisation's products and/or services, you share knowledge with your wider team and colleagues. You gather and analyse data and customer information that influences change and improvements in service. Utilising both organisational and generic IT systems to carry out your role with an awareness of other digital technologies. This could be in many types of environment including contact centres, retail, webchat, service industry or any customer service point.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete off the job training for this standard through a variety of different methods. Dependent upon prior qualifications learners may also need to complete Functional Skills in English and Maths at Level 1 and have taken the test for Level 2 prior to completion of their apprenticeship.

For the off the job training element, it is compulsory that undertake the training to achieve knowledge, understanding and competence in the following subjects:

- Business and Business Focussed Service Delivery
- Customer Journey
- Providing a Positive Customer Experience
- Knowing your customers and their needs
- Working with your customers / Customer Insight
- Customer Service Culture
- Environmental Awareness
- Customer Service Performance
- Service Improvement
- Behaviours
- Communication
- Equality & Diversity
- Managing Conflict
- Self Awareness and Personal Development
- Team Working

BUSINESS KNOWLEDGE AND UNDERSTANDING:

Understand what continuous improvement means in a service environment and how your recommendations for change impact your organisation.

- Understand the impact your service provision has on the wider organisation and the value it adds
- Understand your organisation's current business strategy in relation to customers and make recommendations for its future
- Understand the principles and benefits of being able to think about the future when taking action or making service related decisions
- Understand a range of leadership styles and apply them successfully in a customer service environment

Customer Journey knowledge

- Understand and critically evaluate the possible journeys of your customers, including challenges and the end-to-end experience
- Understand the reasons why customer issues and complex situations sometimes need referral or escalation for specialist attention
- Understand the underpinning business processes that support you in bringing about the best outcome for customers and your organisation
- Understand commercial factors and authority limits for delivering the required customer experience

Knowing your customers and their needs/ Customer Insight

- Know your internal and external customers and how their behaviour may require different approaches from you
- Understand how to analyse, use and present a range of information to provide customer insight
- Understand what drives loyalty, retention and satisfaction and how they impact on your organisation
- Understand different customer types and the role of emotions in bringing about a successful outcome
- Understand how customer expectations can differ between cultures, ages and social profiles

Customer service culture and environment awareness

- Keep current, knowledge and understanding of regulatory considerations, drivers and impacts in relation to how you deliver for customers
- Understand your business environment and culture and the position of customer service within it
- Understand your organisation structure and what role each department needs to play in delivering Customer Service and what the consequences are should things go wrong
- Understand how to find and use industry best practice to enhance your own knowledge

CUSTOMER SERVICE SPECIALISTS STANDARD LEVEL 3

CONTINUED...

SKILLS:

Business-focused service delivery

- Demonstrate a continuous improvement and future focussed approach to customer service delivery including decision making and providing recommendations or advice
- Resolve complex issues by being able to choose from and successfully apply a wide range of approaches
- Find solutions that meet your organisations needs as well as the customer requirements

Providing a positive customer experience

- Through advanced questioning, listening and summarising negotiate mutually beneficial outcomes
- Manage challenging and complicated situations within your level of authority and make recommendations to enable and deliver change to service or strategy
- Use clear explanations, provide options and solutions to influence and help customers make choices and agree next steps
- Explore and interpret the customer experience to inform and influence achieving a positive result for customer satisfaction
- Demonstrate a cost conscious mind-set when meeting customer and the business needs
- Identifying where highs and lows of the customer journey produce a range of emotions in the customer
- Use written and verbal communication to simplify and provide complex information in a way that supports positive customer outcome in the relevant format

Working with your customers / customer insights

- Proactively gather customer feedback, through a variety of methods. Critically analyse, and evaluate the meaning, implication and facts and act upon it
- Analyse your customer types, to identify or anticipate their potential needs and expectations when providing your service

Customer service performance

- Maintain a positive relationship even when you are unable to deliver the customer's expected outcome
- When managing referrals or escalations take into account historical interactions and challenges to determine next steps

Service improvement

- Analyse the end to end service experience, seeking input from others where required, supporting development of solutions
- Make recommendations based on your findings to enable improvement
- Make recommendations and implement where possible, changes in line with new and relevant legislation, regulations and industry best practice

BEHAVIOURS / ATTITUDE:

Develop self

- Proactively keep your service, industry and best practice knowledge and skills up-to-date
- Consider personal goals related to service and take action towards achieving them

Ownership/ Responsibility

- Personally commit to and take ownership for actions to resolve customer issues to the satisfaction of the customer and your organisation
- Exercises proactivity and creativity when identifying solutions to customer and organisational issues
- Make realistic promises and deliver on them

Team working

- Work effectively and collaboratively with colleagues at all levels to achieve results.
- Recognise colleagues as internal customers
- Share knowledge and experience with others to support colleague development

Equality

- Adopt a positive and enthusiastic attitude being open minded and able to tailor your service to each customer
- Be adaptable and flexible to your customer needs whilst continuing to work within the agreed customer service environment

Presentation

- Demonstrate brand advocacy, values and belief when dealing with customer requests to build trust, credibility and satisfaction
- Ensure your personal presentation, in all forms of communication, reflects positively on your organisation's brand

ASSESSMENT:

To achieve this qualification learners must go through an End Point Assessment, each assessment method will directly assess the Knowledge, Skills an dBehaviours of the standard. These elements are:

- Practical Observation with Q&A – Observation by an independent assessors undertaking a range of day to day workplace activities with questioning to clarify knowledge, skills and behaviours against the standard.
- Work based Project & Interview – a written report on a project carried out covering a high level challenge faced within the business with an interview covering competency based questioning across the project.
- Portfolio – Throughout the programme the learner will build a portfolio of evidence towards the topics of delivery that hits the knowledge, skills and behaviours within the apprenticeship standard. Practical observations and/or evaluation by the employer to be included, such as acknowledgement of a skill shown or evidencing. Although the portfolio is not directly assessed for end point assessment, it is used to frame discussion at interview, where knowledge, skills and behaviours are demonstrated. In-Comm has however incorporated the registration to the Level 3 Diploma in Business Administration so the portfolio will be assessed by an awarding body to gain this qualification.
- Professional Discussion – supported by the portfolio of evidence collated throughout the learning journey to demonstrate the learner is working to the levels required through all knowledge, skills and behaviours

IN-COMM
TRAINING SERVICES

BUSINESS IMPROVEMENT TECHNIQUES COURSES

#SHAPINGFUTURES

IN-COMM TRAINING SERVICES

IMPROVEMENT TECHNICIAN LEVEL 3 – STANDARD

15 MONTH PROGRAMME –
Block off the job training and assessor visits to company

ROLE PROFILE:

Improvement Technicians are responsible for delivery and coaching of improvement activity within an area of responsibility, often associated with Lean and Six Sigma methodologies. They can be found across all industry sectors and functions including automotive, banking, engineering, food products, IT, property, retail, telecoms etc. Typically, Technicians work as a member of an operational team to resolve problems - preventing re-occurrence, engaging others in issues affecting them and to support the improvement of performance. Typical activities include:

- Engaging team members in the identification of improvement opportunities and relevant countermeasures and controls
- Initiating and facilitating improvement activities through to confirmed resolution
- Providing local expertise in business improvement methods and basic tools to team

There are a variety of job titles associated with the occupation, these include, but are not limited to: Business Improvement Co-ordinator, Continuous Improvement Executive, Process Technician, Operational Excellence/Lean Engineer, Lean Six Sigma Yellow belt and Quality Control Analyst.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their learning journey will complete a Level 3 Apprenticeship as an Improvement Technician. Dependent upon prior qualifications learners may also need to complete functional skills in English and Maths at Level 2.

For the off the job training element, during the first four month's of their programme the learner is required to attend our training academy to undertake a twelve day intensive course covering training on the following subjects in order to ensure they gain knowledge, understanding and competence to further enhance their Knowledge, Skills and Behaviours working within business improvement:

- Compliance
- Team Management & Leadership
- Lean Principles & Methods
- Six Sigma Principles & Methods
- Root Cause Analysis & Action Planning
- Change Management
- Project Management
- Project Definition & Scope
- Basic Statistics & Measures
- Process Mapping
- Process Capability & Performance
- Sustainability & Control

Throughout their programme further enhancement to Knowledge, Skills and Behaviour will be delivered from individuals requiring to undertake a work place improvement project putting into practise the theory delivered across Business Improvement Techniques along with building a portfolio of evidence to demonstrate competence the learner is required to undertake a work based project which culminates as part of their End Point Assessment in a presentation to give an overview of what they have achieved.

IMPROVEMENT TECHNICIANS HAVE THE KNOWLEDGE OF:

Compliance: Legislative and customer compliance requirements including health and safety.

Team formation & leadership: Improvement team roles and responsibilities in a change environment.

Self-development: Different sources for knowledge development

Project management: Project charter, Gantt chart, reporting documentation, Red Amber Green (RAG) status, communication (verbal and non-verbal channels) and implementation plans

Change management: Roles of the manager and leader within change. Influencing, reinforcement and coaching principles

Principles & methods: Six Sigma principles per ISO13053 (International Organisation for Standardisation), interim containment actions, Lean principles

Project selection & scope: Selection matrix, scoping tree

Problem definition: Exploratory data analysis, data collection planning, problem and goal statements

Process mapping & analysis: Supplier Input Process Output Customer (SIPOC), process mapping, value and waste analysis, performance metrics - discrete data

Data acquisition for analysis: Data stratification, sampling theory, data types, variation types and sources, data collection tools, operational definition and principles of measurement error

Basic statistics & measures: Control charts - discrete data

Process capability & performance: Capability analysis - continuous data

Root cause analysis: Histograms

Experimentation: Active analysis versus one factor at a time, Plan Do Check Act

Identification & prioritisation: Brainstorming, selection criteria

Sustainability & control: Process

IMPROVEMENT TECHNICIAN LEVEL 3 – STANDARD

CONTINUED...

IMPROVEMENT TECHNICIANS HAVE THE FOLLOWING SKILLS:

Compliance: Work in accordance with organisational controls and statutory regulations

Communication: Share improvement progress through appropriate reporting

Project management: Plan, manage and implement improvement activities. Identify and support management of risks. Develop the business case for improvement activity and implementation

Change management: Engage through communications. Reinforce – positively and negatively. Effectively coach peers

Principles and methods: Use a structured method and appropriate improvement tools engaging with subject matter experts to deliver business benefits

Project selection and Scoping: Identify and scope improvement projects and establish clear measurable objectives

Problem definition: Develop a problem/opportunity statement supported by validated data

Voice of the customer: Apply techniques to identify customers, their requirements and translate these to metrics

Process mapping & analysis: Apply process mapping tools to visualise processes, analyse process performance establishing key insights for performance improvement

Lean tools: Apply techniques such as identification and removal of 8 wastes, 5S (Sort, Shine, Set, Standardise, Sustain), standard work, kaizen, visual displays and controls, error proofing, preventative maintenance

Data acquisition for analysis: Develop data collection plan and validated measurement processes to understand performance

Basic statistics & measures: Establish patterns and trends in data over time using tally, pie, run/trend and pareto charts

Data analysis-statistical methods: Identify common and special cause variation

Root cause analysis: Use cause and effect diagrams, technique of 5 whys and graphical analysis to understand and verify root causes

Identification & prioritisation: Identify and prioritise improvement solutions

Benchmarking: Recognise the value of sharing best practice

Sustainability & control: Create control and reaction plans with detection measures, identify opportunities to embed changes to leverage benefit to the business.

IMPROVEMENT TECHNICIANS DEMONSTRATE THE FOLLOWING BEHAVIOURS:

Drive for results: Clear commitment for identifying opportunities and delivering improvements, pays attention to detail

Team-working: Helps when asked, works effectively in a diverse team, considers impact of own actions on others, motivates peers

Professionalism: Acts in a moral, legal and socially appropriate manner, aligns behaviours to the organisation's values, trusted to working on own when appropriate

Continuous development: Acts upon feedback, reflects on performance and has a desire for learning

Safe working: Ensures safety of self and others, challenges safety

Benchmarking: Recognise the value of sharing best practice

Sustainability & control: Create control and reaction plans with detection measures, identify opportunities to embed changes to leverage benefit to the business.

ASSESSMENT

To achieve this qualification learners must go through an End Point Assessment consisting of 5 elements:

- Knowledge Tests – The learner will be given a multiple choice tests as part of checking their under pinning knowledge for the competence elements
- Portfolio of Evidence - Although the portfolio is not directly assessed for end point assessment, it is used indicate that the learner is ready for end point assessment and to help inform the Report & Presentation. In-Comm has however incorporated the registration to the Level 3 Diploma in Business Improvement Techniques so the portfolio will be assessed by an awarding body to gain this qualification.
- Multiple Choice Examination – 40 knowledge based questions time limited to 40 minutes.
- Project Report, Presentation & Questioning – Following the portfolio, learners are required to produce a report which clearly demonstrates the delivery of business improvement benefit, addresses business problem(s) and follows the recognised improvement methodology which is then confirmed in writing by their employer
- Log book and diary evidence of Continuous Professional Development
- Professional Discussion – utilising the CPD log a discussion will happen to address knowledge, skills and behaviours across the standard.

IMPROVEMENT PRACTITIONER STANDARD – LEVEL 4

15 MONTH PROGRAMME –
Block off the job training and assessor visits to company

ROLE PROFILE:

Improvement Practitioners use a blend of Lean and Six Sigma, project and change management principles and tools to identify and lead the delivery of change across organisational functions and processes. Improvement Practitioners can be found across all sectors and functions including automotive, banking, engineering, food products, IT, property, retail, telecoms etc.

Typically, Practitioners lead smaller projects and/or play a key supporting role in a larger programme – tackling issues that may require swift problem solving, or re-occurring challenges that require in-depth analysis and the implementation of a range of effective and sustainable countermeasures. They are the focal point for all stakeholders and responsible for communication throughout a project. Typical activities include:

- Identifying potential opportunities, diagnosing issues, proposing solutions and implementing changes and controls
- Coaching teams and sharing best practice
- When leading projects they may manage small teams ensuring motivation and momentum, and be responsible for the successful

There are a variety of job titles associated with the occupation, these include, but are not limited to: Business Improvement Practitioner, Continuous Improvement Manager, Process Excellence Manager, Lean Six Sigma Green Belt and Quality Control Senior Analyst.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their learning journey will complete a Level 3 Apprenticeship as an Improvement Technician. Dependent upon prior qualifications learners may also need to complete functional skills in English and Maths at Level 2.

For the off the job training element, during the first four month's of their programme the learner is required to attend our training academy to undertake a twelve day intensive course covering training on the following subjects in order to ensure they gain knowledge, understanding and competence to further enhance their Knowledge, Skills and Behaviours working within business improvement:

- Compliance & Risk Analysis
- Team Management, Leadership & Decision Making
- Advanced Lean Principles & Methods
- Six Sigma Principles & Methods using DMAIC Roadmap
- Relentless Root Cause Analysis & Action Planning
- Project Management & Advanced Product Quality Planning (APQP)
- Change Management & Experimentation
- Project Definition & Scope with Scorecards
- Lean & Quality Statistics and Measures
- Process & Value Stream Mapping
- Process Capability, Performance & Distribution
- Sustainability, Failure Modes & Effects Analysis (FMEA) and Control Plans

Throughout their programme further enhancement to knowledge, Skills and Behaviour will be derived from individuals requiring to undertake a work place improvement project putting into practise the theory delivered across Business Improvement Techniques along with building a portfolio of evidence to demonstrate competence the learner is required to undertake a work based project which culminates as part of their End Point Assessment in a presentation to give an overview of what they have achieved.

IMPROVEMENT PRACTITIONERS HAVE THE KNOWLEDGE AND UNDERSTANDING OF:

Compliance: Legislative and customer compliance requirements including health and safety

Team formation & leadership: Decision-making techniques e.g. consensus, authority rule, majority rule

Project management: Business case, risk analysis and management, toll-gate reviews, work breakdown structure, lessons learned, pilot studies, project review, process management and measures, benefits tracking

Presentation & reporting: Reporting templates, message mapping, case for change

Change management: Stakeholder identification, analysis and management (RACI). Change curve, resistance characteristics, change sponsorship, compelling point of view

Principles & methods: Business value of Lean and Six Sigma improvement methods - 8D, practical problem solving, Define Measure Analyse Improve Control, Design for Six Sigma

Project selection & scope: Y=f(x) equation (outputs are the result of inputs), business scorecard cascade

Problem definition: Cost of Poor Quality, problem analysis models such as Is/Is Not

Process mapping & analysis: Swim lane, value stream map, performance metrics – continuous, Parameter diagram, Takt time, Overall Equipment Effectiveness, theory of constraints principles, Kanban

Data analysis – basic tools: Spreadsheets and pivot table analysis, statistical analysis software

Measurement systems: Repeatability and Reproducibility principles

Basic statistics & measures: Control charts - attribute data, principles of normality

Data analysis: Statistical methods: Measures of central tendency and spread

Process capability & performance: Capability analysis – continuous data for normal distribution

Root cause analysis: Key principles including symptoms, failure-mode, potential/verified cause, critical inputs, escape point. Graphical representation of data with dot, scatter and box plots

Experimentation: Active versus passive analytics, design of experiments, experiment plan

Identification & prioritisation: Selection and prioritisation matrix, Failure Mode and Effects Analysis

IMPROVEMENT PRACTITIONER STANDARD – LEVEL 4

CONTINUED...

IMPROVEMENT PRACTITIONERS HAVE THE SKILLS TO:

Compliance: Work in accordance with organisational controls and statutory regulations

Communication: Speak and write clearly. Influence others, question effectively. Plan and deliver meetings presenting insight to engage audiences

Coaching: Observe, listen, use questioning, provide feedback and spot learning opportunities

Project management: Define, sequence, plan and schedule activities with phases and milestones. Estimate effort and duration. Create and update project charter. Review progress

Change management: Sponsorship contract, surface and manage resistance, build compelling narratives for change, assess change impact

Principals and Methods: Select and apply a structured method and appropriate improvement tools engaging with subject matter experts to deliver business benefits

Project selection and Scoping: Support the identification of improvement opportunity and the scoping of these projects

Problem definition: Support development of problem/opportunity statements

Voice of the customer: Support application of techniques to identify and prioritise customers, their requirements and ensure balance against the stated and unstated needs of the business (Voice of the Business)

Process mapping & analysis: Process map to measure and analyse flow and value. Identify interfaces, functional responsibilities and ownership. Use insight to identify potential opportunities and map future state

Lean tools: Seek in-process waste through understanding of value within the value stream

Measurements systems: Plan, carry out and assess results of a measurement system study

Data acquisition for analysis: Develop a sampling strategy

Basic statistics & measures: Use graphical analysis to understand distribution and stability

Data analysis-statistical methods: Identify data-types and select analysis methods and tools. Assess time series data stability and analyse making relevant insight

Process capability & performance: Select methods and metrics for analysis

Root cause analysis: Select and apply the appropriate graphical tool dependent on the data type to identify patterns, trends and signals to establish hypothesis

Experimentation & optimisation: Plan designed experiment with clear objectives, and appropriate levels of Measurement Systems Analysis, analyse experiment data and optimise

Identification & prioritisation: Identify and prioritise factors, ideas and solutions

Data analysis – SPC: Select and apply appropriate tools for ongoing monitoring and control. Analyse and interpret control charts

Benchmarking: Conduct structured benchmarking to support target setting

Sustainability & control: Identify failure modes and embed learning from improvements

IMPROVEMENT PRACTITIONERS DEMONSTRATE THE FOLLOWING BEHAVIOURS:

Drive for results: Continuous drive for change and encourages others to deliver results across functional areas capturing and standardising best practice

Team-working: Awareness of own and others' working styles. Creates high performing team

Professionalism: Promotes a moral, legal and socially appropriate working manner, aligns behaviours to the organisation's values. Maintains flexibility to needs of project

Continuous development: Proactively seeks and acts on feedback. Reflects on performance and has a desire for development. Adapts quickly to working with new situations/stakeholders/challenges

Safe working: Ensures safety of self and others, speaks out to challenge safety issues

ASSESSMENT

To achieve this qualification learners must go through an End Point Assessment consisting of 5 elements:

- Portfolio of Evidence - Although the portfolio is not directly assessed for end point assessment, it is used indicate that the learner is ready for end point assessment and to help inform the Report & Presentation. In-Comm has however incorporated the registration to the Level 3 Diploma in Business Improvement Techniques so the portfolio will be assessed by an awarding body to gain this qualification.
- Multiple Choice Examination – 40 knowledge based questions time limited to 40 minutes.
- Project Report, Presentation & Questioning – Following the portfolio, learners are required to produce a report which clearly demostrates the delivery of business improvement benefit, addresses business problem(s) and follows the recognised improvement methodology which is then confirmed in writing by their employer
- Log book and diary evidence of Continuous Professional Development
- Professional Discussion – utilising the CPD log a discussion will happen to address knowledge, skills and behaviours across the standard.

IN-COMM TRAINING SERVICES

IMPROVEMENT SPECIALIST LEVEL 5 STANDARD

15 MONTH PROGRAMME -
Block off the job training and assessor visits to the company

ROLE PROFILE:

Improvement Specialists are responsible for leading the deployment of improvement strategy, for training others and for providing broad and deep technical expertise in advanced and complex Lean and Six Sigma, Project and Change Management principles and tools to enable identification and delivery of improvement opportunities aligned to key business goals.

Improvement Specialists typically report to Improvement Leaders who develop the improvement strategy and governance processes, and who provide technical guidance on advanced analysis. Improvement Specialists manage (directly and/or matrix) Improvement Practitioners who lead smaller improvement projects aligned to the improvement strategy. A typical ratio of Improvement Specialists to Improvement Practitioners in an organisation could be 1:10. In comparison with the work of an Improvement Practitioner, Improvement Specialists draw on their advanced knowledge and skills in applying Improvement principles and tools across a range of programmes/ projects/areas to build the capability of others. They also swiftly visualise processes, problems and opportunities and use both graphical and statistical analysis to deliver improvements.

They work closely with other Improvement Specialists to support the delivery of improvement strategy, working on multiple simultaneous projects linked to key business objectives, identifying and engaging both subject matter experts and key stakeholders. Their work generally requires them to interact with others but typically involves a high-degree of autonomy.

TYPICAL ROLES AND RESPONSIBILITIES:

Leading the local deployment of improvement strategy; supporting delivery of business goals, for example they may model critical process inputs to enable root causes of complex problems to be verified or they may develop bespoke measurement processes to enable the collection of good-quality data in support of change

Providing technical expertise in structured Improvement methods and advanced tools such as Multiple Regression and Designed Experiments to analyse relationships between inputs and outputs

Leading advanced and/or cross-functional Improvement projects such as process re-engineering and change programmes or reducing defects on complex products.

Co-ordinating Practitioner-level Improvement training, activities and projects; for example, they may deliver Lean Six Sigma Green Belt training and coaching to an awarding body accreditation standard

Coaching, mentoring and communicating with Improvement Practitioners, business leaders and stakeholders

The role is typically office-based but involves working wherever their improvement activities are focused, for example they could be delivering training in a classroom environment, they could be working on the shop-floor or at a supplier premises.

Roles are commonly found in all industry sectors and functions including Automotive, Pharmaceutical, Telecommunication, Retail, Finance, Food, Drink, Travel and Leisure. Job titles associated with the Specialist occupation include, but are not limited to: Business Improvement Expert, Continuous Improvement Consultant, Process Excellence Manager, Lean Six Sigma Black Belt, Business Improvement Consultant, Business Transformation Consultant.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their learning journey will complete a Level 5 Apprenticeship as an Improvement Specialist. Dependent upon prior qualifications learners may also need to complete functional skills in English and Maths at Level 2.

For the off the job training element, during the first four month's of their programme the learner is required to attend our training academy to undertake a twelve day intensive course covering training on the following subjects in order to ensure they gain knowledge, understanding and competence to further enhance their Knowledge, Skills and Behaviours working within Business Improvement Techniques:

- Commercial Riosks, Project & Change Planning
- Leading Teams, Project Selection & Scope
- Advanced Lean Principles, Methods & Concepts
- Six Sigma Principles and Continuous Improvement Strategic Deployment
- Relentless Root Cause Analysis and Action Planning
- Change Management, Experimentation and Optimisation
- Project Management, Review and Coaching
- Process Capability, Performance, Statistics and Measures
- Voice of the Customer, Process and Value Stream Mapping
- Data Planning & Analysis and Advanced Part Quality Control (APQP)
- Process Capability, Development & Distribution
- Sustainability, Failure Modes Effect Analysis (FMEA) and Avoidance, Identification & Prioritisation

Throughout their programme further enhancement to Knowledge, Skills and Behaviour will be delivered from individuals requiring to undertake a work place improvement project putting into practise the theory delivered across Business Improvement Techniques along with building a portfolio of evidence to demonstrate competence the learner is required to undertake a work based project which culminates as part of their End Point Assessment in a presentation to give an overview of what they have achieved.

IN-COMM TRAINING SERVICES

IMPROVEMENT SPECIALIST LEVEL 5 STANDARD

CONTINUED...

IMPROVEMENT SPECIALISTS HAVE THE KNOWLEDGE AND UNDERSTANDING OF:

Leading improvement teams:	Personality types, team development stages, motivational techniques, situational leadership, learning styles, mentoring models.
Project planning:	Multi-element business case, financial plan, benefits realisation plan, risk management plan, project plan.
Project reviews & coaching:	Coaching models, Maslow's hierarchy of needs.
Change planning:	Change management methods, impact/readiness, influencing strategies.
Commercial environment:	Business and economic risks including changes in legislation, government regulation or trading condidtions that can impact all aspects of improvement from Project Selection through to selection/ implementation of improvements.
Principles & methods for Improvement:	How to apply Improvement Methods (eg. Practical Problem Solving, Define-Measure-Analyse-Improve-Control, 8-Disciplines, Identify-Define-Optimise-Verify) across all functions, policy deployment principles, Lean culture.
Voice of the customer:	Interviewing and focus groups, Quality Function Deployment principles and how to build a House of Quality.
Process mapping & analysis:	Activity network diagrams, design structure matrix, process modelling, key function diagrams and analysis.
Data acquisition planning:	Stratification, rational sub-groups, power and sample size.
Statistics & measures:	Probability distributions and how to test for fit of probability distributions to data. Confidence intervals, central limit theorem. How to test data for stability and normaility and strategies for dealing with non-stable or non-normal data.
Lean concepts and tools:	Principles of Lean Thinking and Lean tools including origins and cultural aspects critical to successful application within an organisation.
Measurement system analysis:	Repeatability & Reproducibility analysis. Long term measurement error.
Process capability:	Data transformation, life data analysis and prediction.
Root cause analysis:	Matrix plots, multi-vari charts, hypothesis testing principles and methods, correlation and regression principles and methods.
Experimentation:	Principles of full and fractitional designed experiments including replicates, repeats, randomisation, blocking and centre points, resolution and confounding. Planning and analysis using residuals, main effects & interaction plots, hierarchy of terms, Response Surface Method, Split plots, Analysis of variance (ANOVA). Approaches for model optimisation.
Identification & prioritisation:	Creativity tools e.g. theory of inventive problem solving (TRIZ), Pugh matrix.
Failure mode avoidance:	System state flow, boundary diagram, interface analysis tables, fault tree analysis, robustness checklist, tolerance design and analysis. Principles and links between Failure Modes and Effects analysis for concepts, designs, processes.
Sustainability & control:	Control and reaction plans. Prevention controls.

IMPROVEMENT SPECIALISTS HAVE THE FOLLOWING SKILLS:

Leading improvement teams:	Holding team members/stakeholders to account for delivering agreed actions within an improvement project and building/maintaining appropriate stakeholder relationships inside and outside the organisation to deliver improvement project objectives.
Strategic Deployment of Continuous Improvement:	Contribute to deployment of improvement strategy, participating as an active member of the improvement community.
Communication:	Prepare and present concise proposals and plans. Capture and share progress through effective formats and channels. Use and handle questions effectively. Build rapport with others.
Capability Development:	Train, facilitate and critique the application of tools used by improvement practitioners including tool-selection, links between tools, how they are used within a structured method, analsysis of results and presentation of recommendations.
Project planning:	Plan and manage finances, multi-stakeholder delivery and benefits realisation.
Change planning:	Design reinforcement, engagement and communication strategies.
Principles and Methods for Improvement:	Guide others on the selection of appropriate methods (eg. Practical Problem Solving, Define-Measure-Analyse-Improve-Control, 8-Disciplines, Identify-Define-Optimise-Verify) to deliver improvements. Conduct gateway assessments to ensure suitability of projects to progress.
Project selection & scope:	Guides others on the selection and scoping of improvement projects and the intial response to product/ process performance issues. Identify, scope and prioritise improvement opportunities that map to high-level organisation objectives and key value-streams.

IMPROVEMENT SPECIALIST LEVEL 5 STANDARD

CONTINUED...

IMPROVEMENT SPECIALISTS HAVE THE FOLLOWING SKILLS CONTINUED:

Process mapping & analysis:	Guide others on the selection of appropriate process mapping and analysis tools. Critique improved state.
Lean tools:	Identify and analyse value-streams using appropriate methods and tools to optimise flow to customer. Develop a plan for Lean deployment within the organisation including effective and relevant performance metrics.
Measurement:	Guide others on the planning, analysis and interpretation of data collection & measurement studies including the design of tests to recreate failures & steps to diagnose/reduce short & long-term measurement variation.
Statistics & measures:	Confirm data and fit for a range distribution models. Establish predictions. Calculate confidence intervals.
Data analysis-statistical methods:	Model random behaviour and make inferences with levels of confidence. Calculate/recommend sample size. Test hypotheses for all data types. Assess input/output correlation. Generate, analyse and interpret simple and multiple predictive relationship models.
Process capability & performance:	Identify data stability/distribution issues and apply appropriate strategies to enable robust Capability Analysis. Analyse life data to establish rates and patterns.
Root cause analysis:	Make appropriate use of data to assess contribution of critical inputs/root cause(s) to product/process performance using appropriate graphical and statistical tools to draw and communicate conclusions.
Experimentation & optimisation:	Guide others on the planning, analysis and interpretation of experiments. Plan,conduct, analyse and optimise both full & fractional experiments.
Data analysis – Statistical Process Control:	Monitor and asses ongoing process variation and changes through chart-selection, control-limit setting, sample sizing/frequency and control-rules.
Benchmarking:	Guide others on benchmarking to support all stages of improvement projects including future-state design.
Failure mode avoidance:	Decompose complex systems in order to define main functions. Anaylse system interactions. Cascade knowledge through fault tree analysis. Create and assess design rules, standards & verification methods. Complete robustness studies to select appropriate control strategies and detection methods.
Sustainability & control:	Guide others on control and sustainability planning including methods and tools to maintain benefits, extraction of learning, replication, sharing and consolidation of new knowledge into organisational learning.

IMPROVEMENT SPECIALISTS DEMONSTRATE THE FOLLOWING BEHAVIOURS:

Drive for results:	Co-ordinates and delivers sustained improvement across the business by engaging with, and inspiring stakeholders; adopting a can-do attitude.
Team-working:	Leads cross functional project teams proactively, regularly supports others and replicates learning.
Professionalism:	Exemplifies high standard of professional integrity, ethics and trust within the organisation, whilst maintaining flexibility to the needs of the business.
Process Thinking:	Drives process-thinking and customer-focused, data-driven decision making.
Continuous development:	Identifies & models opportunities for development of self & others.
Safe working:	Adopts a proactive approach to safety, encouraging others and suggesting compliance improvements.

ASSESSMENT

To achieve this qualification learners must go through an End Point Assessment consisting of 4 elements:

- Portfolio of Evidence - Although the portfolio is not directly assessed for end point assessment, it is used indicate that the learner is ready for end point assessment and to help inform the professional discussion.
- Log book and diary evidence of Continuous Professional Development.
- Professional Discussion – utilising the portfolio of evidence; a discussion will happen to address knowledge, skills and behaviours across the standard.
- Examination – The learner will be given an examination consisting of eight separate mini case studies, covering topics where there is a series of right/wrong answers. With each separate case study the individual will be required to answer 10 multiple choice questions in relation to the case study. The case studies and questions will be constructed so that capability to link outputs from one tool into another is tested.

IN-COMM TRAINING SERVICES

QUALITY PRACTITIONER STANDARD LEVEL 4

15 MONTH PROGRAMME –
Block Session Academy Attendance for Off the Job Training .
Monthly Assessor Visits to Company

ROLE PROFILE:

This occupation is found in the public and private industries to ensure that their organisations fulfil the requirements of their customers and other stakeholders. A fully competent Quality Practitioner can work in a wide range of organisations (from multi-nationals to SMEs), including automotive, defence, food, pharmaceutical, nuclear, retail, financial services, logistics services, public sector and government.

The broad purpose of the occupation is to deploy effective Quality Practices in their responsible area to ensure organisations fulfil the contractual and regulatory requirements of their customers and other stakeholders. This includes four main elements: 1. Quality Planning (planning a delivery system for reliable outputs, such as implementing Quality Management Plans), 2. Quality Assurance (providing confidence to stakeholders that Quality standards are maintained, such as conducting audits), 3. Quality Control (verifying a product or service is meeting agreed specifications, such as carrying out inspections) and 4. Continuous Improvement (preventing recurrence of poor quality through analysis and addressing the root cause of poor quality, such as conducting investigations).

In their daily work, an employee in this occupation interacts with a variety of departments within the organisation (engineering, supply chain/procurement, manufacturing, and service delivery departments) and external organisations, such as customers, suppliers and certification bodies when required. Being the advocate for implementing Quality Practice and Governance. A typical day will likely include internal meetings to review quality performance, such as gathering and analysing quality performance data, inspection or audit findings, carrying out audits or inspections, stakeholder visits, interacting with people from other functions to plan the quality delivery system for their area of responsibility. Individuals will also support and develop people within and outside the Quality Function.

An employee in this occupation will be responsible for All aspects of quality in his/her area of responsibility, such as production or procured goods. This responsibility will be discharged through engagement with those accountable for product/service delivery, such as production / service managers, in order to meet Key Performance Indicators, such as Right First Time measures and Service Level Targets.

Individuals will be responsible for providing Quality duties within the following key areas:

- Support Senior Quality Practitioner and Leaders to formulate Quality Strategy
- Contribute to the management of customer satisfaction and supplier performance
- Deploy Quality Policies and Governance
- Guide and support others to improve quality competency and performance
- Plan and Conduct Audits and other assurance activities
- Develop Quality Control Plans for products/services
- Provide guidance on use of methods/tools to improve quality performance
- Solving Quality problems, such as non-conformances, and overcoming challenges to the implementation of solutions
- Effective application of quality risk management and mitigation to drive new products/services development

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

OCCUPATIONAL DUTIES:

DUTY 1	Contribute to the formulation of quality strategy, such as reducing product defects or improving service performance and support the achievement of these by themselves or others, such as other employees or suppliers.
DUTY 2	Contribute to the formulation of output related customer satisfaction activities, such as Right First Time and On-Time delivery and support the achievement of these by themselves or others, such as customer stakeholders, other employees or suppliers.
DUTY 3	Contribute to the formulation of supplier performance measurements, such as improving quality of supplied goods or services and support the achievement of these by themselves or others, such as other company employees or employees throughout a multi-tier supply chain.
DUTY 4	Responsible for deployment of Quality Policies, Processes and Procedures as defined in the organisation's Quality Management System and identification of opportunities for improving the Quality Management System.
DUTY 5	Plan and conduct audits/assurance in line with the organisation's audit plan/programme to meet customer/ organisational/regulatory audit requirements.
DUTY 6	Identify, investigate and contain non-conformances and advise on actions to prevent recurrence.
DUTY 7	Inspect/verify/validate a Product or Service against stated product requirements/acceptance criteria/service levels, such as checking the weight or dimensions of a product or timely delivery of a service.
DUTY 8	Develop quality control/assurance plans for the product, service or project they are responsible for, such as product dimensional control, on-time service delivery.
DUTY 9	Advise on and/or use tools and techniques to improve quality performance, such as reducing waste, improving right first time delivery, reducing non-compliance.
DUTY 10	Gather and analyse routine quality performance data and produce relevant reports to support governance, assurance and improvement activities.

QUALITY PRACTITIONER STANDARD LEVEL 4

CONTINUED...

OCCUPATIONAL DUTIES:

DUTY 11	Guide and support others inside the Quality Function or in other functions to improve quality competence and quality performance.
DUTY 12	Support the development of new/changed products or services, through identifying/quantifying quality risks and contribute to the analysis and mitigation/prevention of these risks.

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their programme will complete their Level 4 Apprenticeship as a Quality Practitioner. Dependent upon prior qualifications learners may also need to complete Functional Skills in English and Maths at Level 2.

For the off the job training, it is compulsory that learners attend centre to achieve knowledge, understanding and competence in the following subjects:

- Internal Auditor
- Lead Auditor
- Quality Outputs & Measures
- Supplier Performance Measures
- Quality Inspection, Verification & Validation
- Quality Control & Assurance Plans
- Quality Performance Improvements
- Quality Performance Data & Reports
- Quality Risk Management

KNOWLEDGE

K1: Understand the organisations operating environment and the factors that may influence its direction and performance, including the markets it operates in, roles and responsibilities, who its stakeholders are and what they require from the organisation.

K2: Understand the environment in which the organisation's products/services are produced or supplied, and the factors that may influence performance, including legislation, customer requirements and regulatory requirements.

K3: How the organisation's strategy is sensitive to stakeholder perceptions and how this knowledge informs priorities at a tactical level.

K4: How applicable contractual and commercial requirements for quality affect the organisation's performance objectives for their specific products / services.

K5: The methods and tools for identifying customers/stakeholders and gathering information about their requirements including the tools for analysing and prioritising customer/stakeholder quality requirements using tools such as Kano model.

K6: How to convert quality requirements into performance measures objectives using tools such as Critical to Quality Trees (CTQ Trees), requirements matrices and operational definition.

KNOWLEDGE

K7: Risk and opportunity management, including the risk and opportunity management principles, framework and processes, types of risk/opportunity associated with new product/service development and improvement, process and supply chain management and methods and tools for identifying, assessing, and mitigating risks/realising opportunities, such as risk and opportunity register, risk and opportunity matrix, Fault Tree Analysis (FTA), Failure Mode and Effects Analysis.

K8: Products/services life cycle stages (such as Capture, Design and Development, Integration, Production, Support and Closure) and the implication for quality.

K9: Concept of process design and how this supports specific organisational objectives using tools such as process flowchart, value stream mapping and SIPOC (Supplier, Input, Process, Output, and Customer).

K10: Tools and techniques for managing the organisation's specific products / services to meet customer requirements such as Quality Function Deployment, Lean Product Development and Design for Manufacturing.

K11: How to plan, measure, manage and monitor organisation's quality objectives.

K12: Understand the purposes for auditing and how to plan, conduct, report and follow up an audit.

K13: When to apply a range of business improvement approaches tools and techniques such as Problem definition, measurement systems analysis, Basic data analysis, graphical data analysis, use of software tools for data analysis, root cause analysis, identification and assessment of improvement options, process control tools.

K14: The key considerations (such as political, economical, social, technological, legal and environmental) and approaches necessary (such as Tuckman's Storming, Norming, Forming and Performing) to enable change in organisations, products or services.

K15: The company's key drivers for change (internal and external) may influence priorities and objectives.

K16: How to promote the right behaviours to create a quality culture in the organisation and how this leads to organisational performance improvements.

K17: The techniques used for improving awareness and performance in relation to quality objectives and requirements.

K18: Learn how different sources and methods will aid in maintaining own development in the quality profession.

K19: Principles of the foundation of Quality and Quality Management System.

IN-COMM TRAINING SERVICES

QUALITY PRACTITIONER STANDARD LEVEL 4

CONTINUED...

SKILLS

S1: Identify, interpret and apply relevant legal, governmental or industry regulations affecting the organisation.

S2: Communicate using appropriate methods (verbal, written, visual) to influence internal and external stakeholders, using appropriate questioning techniques such as open questions, leading questions.

S3: Identify, collect and analyse relevant quality data using appropriate tools and techniques such as Pareto analysis, statistical methods and trending analysis.

S4: Apply methods and tools to improve the quality performance of processes, products and services such as production control plans, standardised work, use of failure modes and effects.

S5: Identify, analyse and prioritise quality specific risks and opportunities. Support the development, implementation and effectiveness of resulting actions.

S6: Plan and conduct system, product or process audits.

S7: Assess the effectiveness of the measurement systems using tool such as Measurement Systems Analysis.

S8: Identify requirements from technical documents, commercial input or stakeholder statements and converting to definitions that can drive the organisations processes.

S9: Identify gaps in process performance and develop improvement plans to close gaps.

S10: Apply structured problem solving including identification, definition, measurement, analysis, improvement and control methods and tools.

S11: Communicate organisational quality strategy to all levels of the organisation.

S12: Identify who the internal and external stakeholders are and their current and optimal positions (such as hostile, help it work, opposed, uncooperative, indifferent, hesitant, enthusiastic support) required to support quality related activities.

BEHAVIOURS

B1: Promote actively best practices and continuous improvement.

B2: Operates diligently with professionalism considering a wider picture.

B3: Act with integrity by being open and honest.

B4: Always put customers at the heart of every task.

B5: Seek continuous professional development opportunities such as self-reflection, gathering information, producing personal development plans and keeping up to date on sector/organisation regulation.

ASSESSMENT

To achieve this qualification learners must go through End Point Assessment consisting of:

- Portfolio of Evidence – a portfolio of evidence comprising of naturally occurring evidence during the on-programme period from the workplace, backed up by relevant company processes and procedures along with project work undertaken as part of their daily tasks.
- Work Based Project with Presentation and Q&A – undertaken by an independent assessor looking at the learner completing a relevant work based project with presentation of findings with questioning against the Knowledge, Skills and Behaviours.
- Professional Discussion – which is designed to do two things: firstly, to further explore the apprentice's knowledge relevant to his/her role and, secondly, to assess if the apprentice's occupational behaviours meet the requirements specified in the Apprenticeship Standard whilst reviewing the portfolio of evidence.
- Log book & diary of Continuous Professional Development.

IN-COMM
TRAINING SERVICES

HEALTH & SAFETY COURSES

#SHAPINGFUTURES

IN-COMM TRAINING SERVICES

SAFETY, HEALTH & ENVIRONMENT TECHNICIAN LEVEL 3 STANDARD

20 MONTH PROGRAMME COVERING –

- Block days off the job at training centre
- Quarterly virtual sessions covering portfolio building
- Assessor visits to company

ROLE PROFILE:

The SHE Technician will be able to work in organisations of varying size and industry; the role could be based in one location or may involve travel across a range of contracts. The role will be partly office based and partly at the work front providing advice to others on how to work without harming themselves or others. The Technician will work with the management and delivery team of the organisation to advise on the statutory health, safety and environmental requirements as they affect the company's operations. They will assist the management team in ensuring that the legal and company SHE requirements are implemented. On a daily basis the SHE Technician will assist to develop, review and check on the implementation of safe systems of work, deliver training (e.g. toolbox talks & inductions), investigate incidents, analyse data and present findings to the management team. The SHE Technician will engage with all aspects of the organisation to support the embedment of a culture that ensures everyone is able to return to their family and friends unharmed every day whilst also protecting and enhancing the global land, air and water resources for future generations. This will be achieved by inspiring and influencing others to see the benefit of working responsibly, understanding the legal framework and showing how safety, health and environmental management can enhance operational activities.

INDUCTION:

All learners will receive induction onto their programme covering:

- Induction to In-Comm
- Induction to the qualification
- Working Safely
- Employment Rights & Responsibilities
- Diary keeping & Continuous Professional Development Log
- Equality & Diversity
- Safeguarding
- Prevent Agenda & British Values

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard and at the end of their learning journey will complete a Level 3 Apprenticeship as a Safety, Health & Environment Technician. Dependent upon prior qualifications learners may also need to complete functional skills in English and Maths at Level 2 and ICT at level 1.

For the off the job training element, during the first six month's of their programme the learner is required to attend our training academy to undertake seventeen days of training on the following subjects in order to ensure they gain knowledge, understanding and competence to further enhance their Knowledge, Skills and Behaviours working within Health & Safety:

- Health and Safety Management Systems: Policy
- Health and Safety Management Systems: Organisation
- Health and Safety Management Systems: Planning and Implementation
- Health and Safety Management Systems: Monitoring Review
- Chemical and Biological Health Hazards & Controls
- Work Equipment Hazards and Controls
- Electrical, Fire Hazards and Risk Control
- Construction Activities, Hazards and Risk Controls
- Physical and Psychological Health Hazards and Control
- Workplace transport, Muscular-skeletal and Risk Control
- Project work & Presentation

SAFETY, HEALTH & ENVIRONMENT TECHNICIAN LEVEL 3 STANDARD

CONTINUED...

All off the job knowledge elements cover the foundations for the IOSH Managing Safety and the NEBOSH Level 3 Certificate in Health & Safety. Companies have the option to pay a top up fee to gain these qualifications outside of the Level 3 Apprenticeship should they so wish.

Throughout their programme further enhancement to knowledge, Skills and Behaviour will be introduced through modules covering:

- Importance of Health and Safety
- Accountability and Responsibility
- Assessing Risks
- Controlling Risks
- Law Functions, Legislation, and Regulation
- Management System
- Common Hazards
- Investigation
- Performance Measuring
- Auditing
- Legal requirements for health and safety at work
- Implementation of health and safety management systems
- Identification of workplace hazards
- Methods of hazard control
- Practical application of knowledge and understanding

In addition to the above further enhancement to knowledge, Skills and Behaviour will be derived from individuals requiring to undertake a work place project putting into practise the theory delivered; along with building a portfolio of evidence to demonstrate competence which culminates as part of their End Point Assessment in a presentation to give an overview of what they have achieved.

BEHAVIOURS – THE SHE TECHNICIAN WILL SHOW HOW THEY:

Communicate effectively: Be able to contribute effectively in both spoken and written styles, adapting to the audience to present information or training in an assertive, engaging way.

Work effectively in a team: Be able to work with others (colleagues, suppliers, clients and the public) and lead by example in a collaborative and non- confrontational way. Be able to adjust to change in relation to the requirements of the organisation.

Contribute to a positive SHE culture. Challenge behaviour that is inconsistent with SHE culture, respect the culture and values of others in contributing a positive SHE culture. Positively influence behaviour in others to achieve desired outcomes and resolve conflicts.

Drive Innovation: Be able to identify areas for improvement and suggest sustainable innovative solutions.

Use their Professional Judgement: Be able to work within own level of competence, know when to seek advice from others.

Apply the code of ethics: Work within rules and regulations of professional competence and code of conduct as defined by a professional institution. Be able to resist pressures to allow others to utilise unsafe working practices.

Commit to equality and diversity: Apply attributes of equality and diversity to meet the requirements of fairness at work.

Continue their professional development: Identify own development needs and take action to meet those needs.
Use own knowledge and expertise to help others when requested.

SKILLS – THE SHE TECHNICIAN WILL BE ABLE TO:

Present and hold an audience's attention, for example when delivering SHE training, toolbox talks, inductions or presenting data or investigation findings to the workforce or management team. Show they can sell the SHE message, have personal impact, deal with challenge, reflect on personal performance, use appropriate language for the audience.

Assist the management team in the development, management, implementation and monitoring of the Safety, Health and Environmental Management System by updating systems in line with changes in legislation or best practice, delivering training, coaching operational teams and undertaking workplace inspections.

Provide advice on the practical implementation of the company's SHE policies and processes applying generic industry guidance into the context of the workplace.

Identify the hazards and evaluate:	1. Workplace instructions that are relevant to the individual's job
	2. Working practices in the individual's job that may harm themselves or others'
	3. Aspects of the individual's job that could harm themselves or others
	4. Which of the potentially harmful working practices and aspects of the individual's work present the highest risks to themselves or others
	5. How to deal with hazards in accordance with workplace instructions and legal requirements

Support and assist in the implementation of SHE inspections and monitoring systems demonstrating the balance between enforcement and internal support

Undertake and/or assist with the monitoring, analysis of and reporting of SHE performance

Prepare and maintain records relating to safety, health and environmental matters that comply with legal and workplace requirements and are accessible to those who are authorised to use them. E.g. records associated with Provision and Use of Work Equipment Regulations, Lifting Operation and Lifting Equipment Regulations, Noise at Work Regulations, Hand Arm Vibration Regulations or Environmental Permitting Regulations

Assist the management team in establishing, managing and maintaining relationships with external stakeholders such as local authorities, Health and Safety Executive, Environment Agency, Occupational Health, Occupational Hygienists and others as required and directed

IN-COMM TRAINING SERVICES

SAFETY, HEALTH & ENVIRONMENT TECHNICIAN LEVEL 3 STANDARD

CONTINUED...

SKILLS – THE SHE TECHNICIAN WILL BE ABLE TO:

Research Safety, Health and Environmental Issues and best practices. Review updates of health and safety regulations e.g. changes to Construction, Design and Management Regulations or updates to the Control of Substances Hazardous to Health along with workplace instructions, making sure that information is from reliable sources

Assist and/or manage the investigation of accidents, incidents, dangerous occurrences, near misses and other incidents as directed

Recognise where decisions have a financial cost and assisting to develop a budget

Recognise situations where the activity will benefit from contributions and expertise of other internal departments such as HR, Finance, IT or Occupational Health

KNOWLEDGE – THE APPRENTICE WILL KNOW:

The moral reasons for good safety, health and environmental working practices, ensuring no harm to people or the environment

The statutory health, safety and environmental legislation and sources of associated guidance and information applicable to their working environment. E.g. Health and Safety at Work etc. Act 1974, Management at Work Regulations 1999, Environmental Protection Act 1990, Environment Act 1995

How a SHE Management system works, the range of standards which a typical HSE professional would be involved with e.g. OHSAS 18001, ISO 45001, ISO 14001 and if applicable how these are applied in their working environment

Appropriate methods for identifying, evaluating and controlling hazards relevant to their workplace. E.g. 5 steps to Risk Assessment and involving people who are experienced in the activity

The range of work activities in a given situation and identify how to prioritise and scope out the hazards with the potential to cause harm and/or loss

The difference between occupational hygiene, health surveillance and health and wellbeing campaigns and methods for implementing these in the workplace

How to plan and have systems in place to manage change during an activity relevant to the working environment

How people think and why they make decisions which can lead to risk, how behaviours can be used, the components of a behavioural program and potential blockers to the successful implementation of a behavioural programme

How to plan for Safety, Health or Environmental emergencies – e.g. accidents, exposure to hazardous substances, fire, pollution

Theories for incident causation and prevention such as James Reason's Swiss Cheese model, Heinrich and Hertzberg theories (Domino, Competency Matrix) including behavioural considerations and implications on business risk (fines, reputation, lost work etc)

How to write and present a business justification e.g. cost/benefit analysis to influence managers

ASSESSMENT

To achieve this qualification learners must go through an End Point Assessment, this consists of four elements. Each assessment method will directly assess the Knowledge, Skills and Behaviours of the standard. The elements are:

- Knowledge Test – The learner will be given a test which comprises of 11 two part questions. Each question will have a multiple choice part worth one mark and an open question worth 4 marks.
- Portfolio - Although the portfolio is not directly assessed for end point assessment, it is used indicate that the learner is ready for end point assessment. In-Comm has however incorporated the registration to the Level 3 Occupational Health & Safety so the portfolio will be assessed by an awarding body to gain this qualification.
- Work Project and Presentation – the apprentices will present evidence from their real work that illustrates their application of knowledge, skills and behaviours and culminates in a presentation covering 20 minutes with 15 minutes thereafter for a Q&A session.
- A Professional Discussion is held between the learner and the Independent End Point Assessment Organisation. The discussion will focus on skills and behaviours.

IN-COMM TRAINING SERVICES

BUSINESS FIRE SAFETY ADVISOR LEVEL 3 STANDARD

18 MONTH PROGRAMME –

Block days off the job training at Centre

Monthly assessor visits to company to cover portfolio building over 14 months

ROLE PROFILE:

A Business Fire Safety Advisor works with businesses to help them keep their premises safe from fire, by offering advice and education to reduce risk. People in this role also recognise and take appropriate steps when enforcement action may be required. The role contributes to the aims of saving life, preventing injury, enhancing business continuity and protecting premises. People in this role are typically employed by a Fire and Rescue Service. The role involves a diverse mix of essential work, including visits to a wide spectrum of businesses and joint visits with other agencies, in order to actively support and promote business safety. The role may also involve proactive promotional work at events and reactive work after incidents, to raise awareness of Fire Safety in the business community. As ambassadors of Fire and Rescue Services, Business Fire Safety Advisors represent their organisation and will demonstrate excellent customer service skills to businesses in their community. The key function of a Business Fire Safety Advisor will be to visit simple premises - this is defined by the sector as small buildings with a simple layout such as small shops, offices or industrial units with non-complex means of escape, for the purpose of providing fire safety advice.

A typical day, in this important role, will see the Business Fire Safety Advisor assessing risks and hazards associated with fire, evaluating measures in place to protect people and premises, influencing and supporting businesses to act on recommendations and where appropriate reporting breaches.

TOPICS COVERED:

All learners will complete both on and off the job training elements for this standard, and at the end of their programme will not only complete their Level 3 Apprenticeship in Business fire Safety Advisor, learners will also gain a Level 3 Certificate in Fire Safety. Dependent upon prior qualifications, learners may also need to complete functional skills in English & Maths.

For the off the job training element, it is compulsory that learners attend centre to achieve knowledge, understanding and competence training. This begins with a 3 day induction covering the principles of the apprenticeship and Induction to Programme. This then moves on to block days off the job, throughout the 18 months, covering the following subjects:

- Managing Safety
- Health and Safety Management Systems: Policy
- Health and Safety Management Systems: Organisation
- Health and Safety Management Systems: Planning and Implementation
- Health and Safety Management Systems: Monitoring Review
- Managing Fire Safety
- Principles of Fire & Explosion
- Causes and Prevention of Fires & Explosions
- Fire Protection in Buildings
- Safety of People in the Event of a Fire
- Fire Safety Risk Assessment

All of the off the job training elements cover the foundations for the NEBOSH National Certificate in Fire Safety & Risk Assessment. Companies and learners have the option to pay a top up fee to gain this qualification, outside of the apprenticeship, should they so wish.

For the Level 3 Certificate in Fire Safety, learners have to complete the following subjects:

- Plan & gather evidence for the purpose of fire safety regulation in simple premises.
- Visit simple premises for the purposes of fire safety regulation.
- Assess risks associated with fire in simple premises.
- Identify and report hazards and risks associated with fire in simple premises.
- Confirm measure are in place to protect from fire in simple premises.
- Review fire protection systems in simple premises.

BUSINESS FIRE SAFETY ADVISOR LEVEL 3 STANDARD

CONTINUED...

ASSESSMENT

To achieve this qualification, learners must go through Assessment and End Point Assessment consisting of 6 elements. Each assessment method will directly assess the Knowledge, Skills and Behaviours of the Standard. The elements are:

- Off the Job Training – Learners must attend the off the job sessions in order to gain the relevant underpinning knowledge, in order to complete the requirements of the elements of the standard
- Portfolio of Evidence - Although the portfolio is not directly assessed for end point assessment, it is used to indicate that the learner is ready for end point assessment and to help inform the Report & Presentation, plus the professional discussion.
- Workplace Observation– Apprentices will be observed carrying out a Fire Safety visit to simple premises. During the observation, the individual may be asked questions to demonstrate understanding, relating to the activity and confirm the apprentice's approach and behaviours, while applying their skills and knowledge in a live working situation.
- Project Report– Following on from the observation, learners are required to produce a report of approx. 1800 words, which clearly covers the Fire Safety Visit undertaken during the observation.
- Log book and Diary - evidence of Continuous Professional Development
- Professional Discussion –a discussion will happen to address knowledge, skills and behaviours across the standard.

KNOWLEDGE: UPON COMPLETION OF THE APPRENTICESHIP, THE BUSINESS FIRE SAFETY ADVISOR WILL UNDERSTAND:

How to plan and gather information, such as the history of the premises and data from partner agencies, for the purpose of fire safety regulation in simple premises

The principles and parameters for visiting simple premises, for the purposes of fire safety regulation

Principles for assessing fire risks associated with simple premises; for example, the means of escape, fire detection and emergency lighting

Processes and guidance relevant to fire risk assessment in simple premises

How to identify hazards and risks associated with fire in simple premises and report on them

Control measures used to mitigate the risks from fire in simple premises; for example reducing the quantity of flammable products and limiting or adapting the means of escape

Measures for the protection of people from fire in simple premises including legislation, codes and guidance

Legislative and organisational requirements applicable to fire protection systems in simple premises

Procedures and processes for reviewing matters relating to fire protection systems in simple premises

Chemical principles of combustion; including fire growth and how smoke spreads through a building

SKILLS: UPON COMPLETION OF THE APPRENTICESHIP, THE BUSINESS FIRE SAFETY ADVISOR WILL BE ABLE TO:

Plan and prepare for visits to simple premises including interpreting building information

Conduct effective visits to simple premises

Advise, influence and educate stakeholders on fire safety matters in relation to simple premises

Identify fire hazards and risks in simple premises

Evaluate fire hazards, risks and control measures in simple premises

Report on the compliance and findings of visits to simple premises

Recommend options to support appropriate risk reduction measures, fire precautions and maintenance routines in simple premises

Recognise when a situation is beyond the scope of their role and take appropriate action

Record and keep in line with organisational requirements

Use ICT effectively to support work

Demonstrate good organisational skills, the ability to work unsupervised and manage workloads within agreed timescales

Demonstrate strong communication skills, the ability to work with others and build positive and professional working relationships

BEHAVIOURS: UPON COMPLETION OF THE APPRENTICESHIP, THE BUSINESS FIRE SAFETY ADVISOR WILL:

Respect and welcome stakeholder and co-worker diversity

Treat people fairly and ethically

Remain in control of own emotions during challenging situations and concentrate on the task despite pressure, and retain confidence in own ability or convictions, despite setbacks

Behave courteously, to calmly acknowledge the concerns of clients who may be hostile, rude, confused and / or frustrated

Adopt a conscientious approach and complete work, as required, within agreed timescales

Be committed to organisational values

Respond with courtesy, clarity and accuracy to enquiries from stakeholders and other departments and agencies

Apply due diligence and sound judgement, when responding to requests and dealing with confidential information

IN-COMM CHOSEN TO DELIVER **NEW SKILLS FUND**

In-Comm Training has been named as one of the training providers for a new skills fund launched by the West Midlands Combined Authority (WMCA).

We will be galvanising SMEs and larger firms to make the most of unspent Levy money currently available in the region.

The aim is to encourage employers to take on more young people in advanced manufacturing, digital skills and STEM-related apprenticeships as the area looks to cement its position as a global leader in engineering.

Our employer-led approach to skills was one of the main reasons we have been chosen, with our team of expert advisers and trainers now responsible for supporting potential users of the fund to meet the criteria and recruit the right young people.

More than 146 standards are available, covering science, technology, engineering, manufacturing, construction and digital - all the skills industry is going to need if it is going to exploit the UK's strengths.

The new fund will essentially remove the 5% fee that SMEs normally have to pay to take on an apprentice, making it easier to invest in young people.

GARETH JONES
MANAGING DIRECTOR

BEKKI PHILLIPS
CHIEF OPERATIONS OFFICER

STUART DALLAWAY
ACADEMIES MANAGER

IN-COMM TRAINING SERVICES

NOTES

IN-COMM TRAINING SERVICES

Ofsted Outstanding Provider

IN-COMM TRAINING SERVICES

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Apprenticeships

matrix

TRAINING EXCELLENCE

European Union
European Regional Development Fund

European Union
European Social Fund