Apprenticeship Training Programme

Phase 1: *With Employer*
Induction Training
Introduction to Health & Safety Training
Introduction to Tools & Equipment
Introduction to Basic Skills

Phase 2: *Delivered in Training Centre (20 weeks)*
Course Content:
Induction
Bench Fitting
Turning
Milling
Thermal Processes
Plant & Machine Maintenance
Fluid Power Systems
Introduction to CNC (computer numerical control)
Mounting of Abrasive Wheels
Related Theory

Phase 3: *With Employer*
Work Based Assessments

Phase 4: *Delivered in Educational Colleges (11 weeks)*
Course Content:
Bench Fitting
Turning
Milling
Thermal Processes
Plant, Machine Maintenance & Electrical
Automation & Control
CNC (computer numerical control) Programming, Operations & Communications
Related Theory

Phase 5: *With Employer*
Work Based Assessments

Phase 6: *Delivered in Educational Colleges (11 weeks)*
Course Content:
Integrated Manufacturing Systems
Thermal Processes
Plant & Machine Diagnostic Skills
Flexible Automation, CAD/CAM (computer aided design/computer aided manufacturing) & Communications
Related Theory

Phase 7: *With Employer*
Work Based Assessments

The overall duration of this apprenticeship is a minimum of 4 years provided all phases are successfully completed. On successful completion of the programme the learner is awarded a Level 6 Advanced Certificate Craft – Mechanical Automation and Maintenance Fitting

KERRY ETB
TRAINING CENTRE

For further information please contact:
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The Craft of **Mechanical Automation and Maintenance Fitting**

Apprenticeship
KNOWLEDGE. SKILL. COMPETENCE

Overview

The work of the Mechanical Automation and Maintenance Fitter involves plant and machinery installation, maintenance and repairs, replacement of broken or worn parts, adjustment and servicing. The work also involves fabrication of replacement parts using machine tools i.e. lathes, milling machines, grinders etc. Components may have to be repaired or fabricated using welding, brazing, riveting and soldering techniques. Increasingly machines and processes involve integration of computer, electronic and programmable control systems with mechanical/hydraulic, pneumatic systems e.g. PLCs (programmable logic controllers), CNC (computer numerical control), Robots and CIM (Computer Integrated Manufacturing)

Work activities

In their work, Mechanical Automation and Maintenance Fitters use lathes, CNC (computer numerical control) machine tools, drilling and milling machines and welding plants. In plant maintenance, they dismantle and fit new parts and they may also have to make these parts. They also Install plant and production equipment and carry out condition monitoring using modern maintenance techniques.

Personal qualities and Skills

You must have strong practical skills and an interest in understanding how machines and control systems function. Good observational skills are required for fault finding. Mechanical Automation and Maintenance Fitters need a logical, methodical approach to problem-solving.

The ability to understand technical information and diagrams is important. You should also be able to write reports of completed repairs.

Aspects of Work

- Learning new practical skills
- Learning how machines function
- Restoration and Repair
- Learning and developing new craft-related skills, knowledge and competence
- Being responsible for controlling or adjusting equipment
- Understanding technical drawings and diagrams
- Craft calculations
- Practical skills and theoretical knowledge
- Applying physics and mathematical principles
- Being physically active and on your feet
- Working with control systems
- Work requiring accuracy and attention to detail
- Working in a noisy environment
- Taking responsibility for own learning, including the allocation of study time

Opportunities

Opportunities arise from time-to-time for promotion to supervisor level. Many people use an apprenticeship as a first step in proceeding to such occupations as instructors, teachers, engineers, training advisers, managers and owners of businesses.

Where apprentices and crafts persons have the necessary ability, initiative and basic qualifications, opportunities are available for advancement. These include advanced technological courses leading to associate and professional engineering level and management courses which are available in Institutes of Technology, schools of management, professional institutes, etc.

Educational Requirements

The minimum age at which the employment of an apprentice may commence is 16 years of age.

The minimum educational requirements are:

1. Grade D in five subjects in the Department of Education & Science Junior Certificate Examination or an approved equivalent,

   or

2. The successful completion of an approved Pre-Apprenticeship course

   or

3. Three years' work experience gained over sixteen years of age in a relevant designated industrial activity as SOLAS shall deem acceptable

You must obtain a job as an apprentice in your chosen occupation. Your employer must be approved to train apprentices and must register you as an apprentice within 2 weeks of recruitment.

In certain crafts, apprenticeship applicants are required to pass a colour vision test approved by SOLAS.