CRAVEN COLLEGE APPRENTICESHIPS STANDARDS





LAND-BASED ENGINEER LEVEL 2

THE FACTS

The full cost	£14,400
Employer cost	£0 - £1,440
Employer incentive	£0 - £1,000
Duration	18-24 months
Qualification	Land-based Service Engineering Level 2 Diploma
Attendance	Day release
End assessment	EPA & E-Folio
Wages	£3.70 min.

OVERVIEW

LBSE Service Engineers will work under supervision and where appropriate on their own initiative upon a diverse range of machinery, plant, equipment and tasks specific to their industry sector. These tasks may include preparation and pre-delivery inspection of new and used machinery, carrying out scheduled service and routine maintenance operations, preparation of equipment for repair which may include dismantling and reassembly of the equipment and their component parts, conducting system tests and simple diagnostic tasks, handing over machinery plant and equipment to the control and use of others in the workplace. These operations may take place in the workplace or on the customer's site, often outdoors. The nature of the job role presents challenges ranging from simple fabrication to the repair of mechanical faults. This requires a diverse blend of skills, industry underpinning knowledge and the disciplines required for environmental and safe working practice.

Entry Requirements

- Ideally candidates will have GCSEs grade 9-4 (A*-C) in English and maths
- Basic understanding of Information and Communication Technology (ICT)

Knowledge

- How to source, interpret and comply with the Health & Safety at Work Act, Manual Handling regulations and legislation relevant to Land-based Engineering apprentice employees
- Procedures (company, client, Health & Safety)
 How to communicate effectively both verbally and
- in writing using technical terminology • The identification and correct application of tools
- and equipment used in maintenance operations
 Methods of thermally and chemically joining metals and components
- Fundamental principles of machinery, plant and equipment within the chosen sector
- Underpinning service, maintenance and repair principles and practices
- How to handover machinery, plant and equipment to the control and use of other in the workplace
- How to access and interpret basic technical data
 Emergency First Aid and the Abrasive Wheels
- Emergency First Aid and the Abrasive Wheels regulations

Skills

- Demonstrate manual dexterity, resourcefulness, and good service engineering practice
- Access and interpretation of basic technical data and documentation
- Effective communication and customer care approaches
- Work efficiently and effectively both under supervision, individually and as a team member
- Apply their skills in a logical and systematic manner
- Carry out basic repairs and the maintenance of power units, simple power trains, mechanical equipment, plant and machinery and their components
- Maintain and conduct basic repairs to hydraulic systems and associated components.
- Maintain and conduct basic repairs to electrical systems and associated components
- Carry out simple diagnostic tasks on low technology plant, equipment and machinery



CRAVEN COLLEGE APPRENTICESHIPS STANDARDS





LAND-BASED ENGINEER LEVEL 3

THE FACTS

The full cost	£13,800*
Employer cost	£0 - £1,380*
Employer incentive	£0 - £1,000
Duration	36-40 months or 14-18 following L2
Qualification	Land-based Service Engineering Level 3 Diploma
Attendance	Day release
End assessment	EPA & E-Folio
Wages	£3.70 min.

* Cost of Level 3 if completed Level 2. Direct Level 3 cost £23,000, with an employer contribution of £0 - £2,300

OVERVIEW

LBSE Technicians are involved in preparation of machinery, plant and equipment and the verification of its performance, installation and handover of plant and equipment to the end user, conducting scheduled maintenance operations, safety inspections and the compilation of machinery condition reports, diagnosis and repair of complex faults in machinery, plant and equipment, compilation of repair proposals and the implementation of timely cost effective repairs. This requires a blend of skills, knowledge, safe working and environmental practice capabilities covering, power units, power trains, fabrication, mechanical, electrical, electronic, mechatronic, hydraulic and pneumatic system applications as applicable to the chosen industry sector. The nature of the industry will present technical challenges ranging from simple mechanics to diagnosis and repair of complex mechanical, electronic, mechatronic and telemetry systems. These operations may take place in the employer's workplace or on the customer's site requiring flexible working hours as dictated by seasonal requirements. Technicians may be called upon to mentor junior colleagues and advise customers on the selection and application of machinery plant and equipment.

Entry Requirements

- Ideally candidates will have GCSEs grade 9-4 (A*-C) in English and maths
- Basic understanding of Information and Communication Technology (ICT)

Knowledge

- Understanding and compliance with environmental, safe working and relevant legislation, policies and practices
- Company, client and Health & Safety procedures and their application
- How to record and communicate effectively using a range of techniques
- The identification and correct application of tools and equipment used within the profession
- Methods of thermally and chemically joining metals and components
- Advanced technical and engineering principles applied in land-based engineering machinery, plant and equipment
- The service, maintenance and repair principles and practices used to support complex machinery
- How to access, interpret and apply technical data in the diagnosis and repair of current and emerging technology
- How to work effectively and efficiently including accessing continual professional documentation

- Techniques used in logical diagnosis and verification of complex machinery, plant and equipment performance
- Emergency First Aid requirements and the Abrasive Wheels regulations

Skills

- Access and interpret legislative, technical data and documentation
- Effectively communicate employing a range of methods and customer care techniques
- Demonstrate efficient and effectively work practices both as an individual and a team member
- Install and handover machinery, plant and equipment, test and verify its performance
- Carry out complex diagnostics, maintenance, repairs and re-instatement of high and low technology products and verify conformity to manufacturer's specification
- Maintain and repair power units, power trains, equipment, plant and machinery and components
- Maintain and repair hydraulic systems and their components as appropriate to the sector
- Maintain, interrogate and calibrate electronic equipment and systems
- Minimise machinery, plant and equipment downtime by carrying out diagnostic and preventative maintenance efficiently and effectively

To find out more about this qualification please contact: Craven College Apprenticeships Team on: **01756 693 680** or email: **apprenticeships@craven-college.ac.uk**

