

T Level: Building Services Engineering for Construction

Occupational Specialism: Electrotechnical Engineering

Role Title	Working Pattern	To be agreed between the provider and employer
Electrotechnical engineering trainee	Duration	315 hours
Objective(s)		
To support the electrotechnical team by contributing to the maintenance of electrotechnical systems that can increase efficiency and inspire energy saving for the principle owner in order to contribute to the sustainability agenda		
Typical Activities		
<ol style="list-style-type: none"> 1. Work under supervision to plan the maintenance of electrotechnical systems (at least once a week) by <ul style="list-style-type: none"> ○ Interpreting electrotechnical systems information and data and maintenance plans ○ Producing risk assessments and method statements ○ Identifying additional information requirements and obtaining information required ○ Updating maintenance documentation and drawings as appropriate ○ Interacting with different stakeholders e.g. client, user to obtain information about maintenance requirements 2. Work within a team to carry out maintenance and servicing of electrotechnical systems (at least once a week) by <ul style="list-style-type: none"> ○ Replacing components ○ Repairing components ○ Testing the system ○ Using software to analyse data from work activity ○ Diagnosing faults and propose solutions ○ Rectifying faults 3. Work under supervision to evaluate electrotechnical systems (at least once a week) <ul style="list-style-type: none"> ○ Testing the system ○ Recording testing data and information ○ Completing maintenance documentation 		

Learning goals	TQ Reference
<p>On the placement the student will need to further develop and hone through activity 1:</p> <p>Employability skills</p> <ul style="list-style-type: none"> • Planning: identifying discrete steps, estimating time and resources, prioritising, sequencing activities • Analysing: identifying common features, classifying, ordering • Investigating: identifying sources, developing search queries/questions, interrogating data • Self-managing: reflecting and inviting feedback on own performance, referring to others for advice • Assessing a situation for potential adverse effects • Communicating: active listening, engaging an audience, building rapport, adapting style and tone <p>Technical skills and understanding</p> <ul style="list-style-type: none"> • Using software to record and analyse data • Communicating effectively with different audiences using different media • Updating records digitally • Understanding electrotechnical installations <p>On the placement the student will need to further develop and hone through activity 2:</p> <p>Employability skills</p> <ul style="list-style-type: none"> • Working with others with different skills, expertise, and experience to accomplish a task or goal • Applying a logical approach to identifying issues and problems • Assessing a situation for potential adverse effects • Physical dexterity: precise and controlled movement, agility, coordination, delicacy, appropriate application of force • Observing: situational awareness, monitoring <p>Technical skills and understanding</p> <ul style="list-style-type: none"> • Using software to record and analyse data • Isolating electrical and mechanical supplies • Replacing component equipment • Repairing components • Diagnosing faults • Understanding electro-technical installations 	<p><i>[Insert corresponding reference from the TQ content]</i></p>

<p>On the placement the student will need to further develop and hone through activity 3:</p> <p>Employability skills</p> <ul style="list-style-type: none"> • Applying a logical approach to identifying issues and propose solutions • Assessing a situation for potential adverse effects • Self-managing: managing time, referring to others for advice • Recording: transcribing, noting, capturing, saving, storing • Evaluating: considering and appraising process and evidence, making recommendations • Observing: situational awareness, monitoring • Physical dexterity: precise and controlled movement, agility, coordination, delicacy, appropriate application of force <p>Technical skills and understanding</p> <ul style="list-style-type: none"> • Ensuring system components are fit for purpose • Testing the system • Completing maintenance records and reports • Understanding electrotechnical installations 	
<p>Minimum starting requirements</p>	
<ul style="list-style-type: none"> • Information pack from the employer providing the placement • Attendance at induction day into employer policies and procedures • Health and Safety Training (Mandatory) • Any PPE required for carrying out activities • Training in the use of any specific software • Details of their mentor or other ways they will be supported by the employer 	
<p>Suggested prior learning</p>	
<ul style="list-style-type: none"> • Knowledge of typical hazards associated with maintenance activities and related controls • Experience of maintaining electrotechnical systems effectively in controlled environments e.g. college, training centre • Knowledge of electrotechnical installations • Knowledge of the range of tools, equipment and materials that can be used for maintenance and their suitability for different situations • Knowledge of building technology and how that knowledge is used to plan for maintenance activities • Knowledge of building services systems and how they impact on electrotechnical systems • Knowledge and skills needed to interpret drawings and other sources of information and data • Typical workplace behaviours needed for role, including: 	

- Punctuality
- Respect for others and their property
- Clean and tidy in their work
- Safety conscious
- Positive thinking and 'can do' attitude
- Polite
- Awareness of potential risks from the environment to their own safety
e.g. dogs on site
- Awareness of potentially compromising situations e.g. where
expensive items are on site and unsecured