

# HEEA

## Highway Electrical Association

### Information Required and Learner Actions

1. The Learner must bring with them:
  - In date calibrated and mechanically sound test equipment and test leads that are required to be used during onsite testing
  - Current copy of the IET regulations BS7671:2018, GN3 and Onsite Guide

### 714 - Initial and Periodic Electrical Inspection and Testing (Public Lighting)

**Duration:** 3 days

**Suitable for:** This course is for those who carry out, or who are working towards as part of their duties the Initial Verification and the Periodic Inspection of a Highway Electrical Installation for verifying compliance with BS 7671 (IEE Wiring Regulations) and confirming that deterioration has not made the Highway Electrical Installation unsafe. These processes rely on observation, electrical testing and the recording of data together with subsequent judgements to determine whether the installation is compliant and safe for use

This course provides the required level of underpinning knowledge as required for the Level 3 Highway Electrical Competence Based Qualification (NVQ) leading to the independent Practical Performance Assessment (PPA).

**Course aim:** This course aims to provide operatives with the knowledge and skills required for Initial and periodic electrical inspection and testing of new, existing or refurbished installations

**Prerequisites:** In order to gain maximum benefit and learning outcomes from this course there are a number of training modules, which are required before attending. A complete list of pre-course requirements are available from the Training Specification located in the Download section of the HERS web site at: <https://thehea.org.uk/hers-hesa/hers-resources/> - Category: HERS Handbook and Training Specification

\*\* Confirmation will be required that the prerequisites have been achieved with in date certificated evidence of attending course 403 or equivalent \*\*

\*\* A pre-questionnaire will need to be completed before Learners are accepted on the course. This will be sent upon receipt of order \*\*

**Course Objectives:** On completion of the course learners will be able to

- Define the purpose and difference of initial and periodic inspection and testing
- Use appropriate Test Equipment correctly and safely
- Define the tests, test equipment and test methods
- Carry out initial inspection and testing
- Carry out periodic inspection and testing
- Complete an appropriate Certificate
- Explain the reasons for an appropriate record system
- Identify appropriate action for unsatisfactory results
- Record and report variations

**What to do now:** Further details and booking may be made from the website: <https://thehea.org.uk/hea-specialist-training/>  
Or by contacting the HEA (Highway Electrical Association) Office, on 01903 705140

## Course Programme

Please note that timings may vary from course to course – and the detailed order may change, to take into account individual learning needs and to ensure an effective learning experience for all Learners

<b>Time</b> (All timings approximate and may vary)	<b>Content of Learning Sessions</b>
<b>Day 1</b> <b>08:45</b>	<b>Arrival, coffee and Learner Introductions</b>
<b>AM</b>	<ul style="list-style-type: none"> <li>Background recap – HASAWA, MHSWR, EAWR, ESQC Regs</li> <li>Electrical Theory and BS7671 Recap – what do we need to know – Ohm's Law</li> </ul>
<b>PM</b>	<ul style="list-style-type: none"> <li>Hazard Identification- hazards are introduced through insp. &amp; testing</li> <li>Risk Assessment – who is affected; what is the risk associated with the hazard and how likely is it to occur?; specific control measures</li> <li>Supply types / system earthing arrangements / main voltage levels present (ELV, 230, 400)</li> <li>Visual (Electrical) Inspection exercise. Safe Isolation / Carrying out a visual inspection</li> </ul>
<b>Day 2</b> <b>08:45</b>	
<b>AM</b>	<ul style="list-style-type: none"> <li>Initial and Periodic Electrical Inspection &amp; Testing – purpose, procedures, verification</li> <li>Continuity – why do we do it, what should we expect, how do we do it, followed by practical to carry out test</li> </ul>
<b>PM</b>	<ul style="list-style-type: none"> <li>Insulation Resistance – why do we do it, what should we expect, how do we do it, followed by practical to carry out test</li> <li>Polarity – why do we do it, what should we expect, how do we do it, followed by practical to carry out test</li> <li>E.L.I.– why do we do it, what should we expect, how do we do it, followed by practical to carry out test</li> <li>PSCC– why do we do it, what should we expect, how do we do it, followed by practical to carry out test</li> </ul>
<b>Day 3</b> <b>08:45</b>	
<b>AM</b>	<ul style="list-style-type: none"> <li>Day 2 review</li> <li>Earth Electrode – why do we do it, what should we expect, how do we do it, followed by practical to carry out test</li> <li>Full inspection &amp; test on test rig, record results and verify</li> </ul>
<b>PM</b>	
<b>13:00</b>	<b>Practical Assessment</b>
<b>15:15</b>	<b>Summative Assessment</b>
<b>17:00</b>	<b>Course Conclusion / Feedback</b>


# HEA Training

Include▶▶Involve▶▶Inspire!™

## 714 - Initial and Periodic Electrical Inspection and Testing (Public Lighting):

at The Granary, Manor Farm, Brogborough, Milton Keynes MK43 0YD (<http://www.thegranarypage.co.uk/Location.htm>)

(By completing this booking form, you are confirming that the Employing Organisation has the employee consent to provide the information required below for Learner registration and certificate processing, Course 403 or equivalent in date certificate evidence will be required).

Learner First Name	Learner Surname	 Operative register to HERS?	Have the Prerequisites been met (See Page 1)				Course Date Required	Course Location (see website)	<b>HEA</b> Your Organisation Status HEA Member?

If you answered No to any of the above questions, then please provide further information below.

### Dietary and Special Consideration:

Do you require help with reading or writing?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Do you consider yourself to have a disability that may impact on your learning experience and outcome?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
Do you have any dietary requirements?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Is English your first language?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>

If you answered Yes to any of the above questions, then please provide further information below.  
(This information is for the use of the HEA only and will not be shared with any third parties).

The cost of this course per learner is **£285 + VAT for HEA MEMBERS** and for **HERS REGISTERED** and **Non - HEA MEMBERS - £495 + VAT** (Inclusive of course material, course certificate, food and refreshments on the day).

<b>Organisation Name:</b>	<input type="text"/>	<b>Contact Tel</b>	<input type="text"/>
<b>Contact Name:</b>	<input type="text"/>	<b>Contact E-Mail:</b>	<input type="text"/>

CANCELLATION FEES - Where cancellation is made 14-28 days before course date fee will be charged at 50%. Where cancellation is made less than 14 days before course date fee will be charged at 100%. Prices are inclusive of food & course venue – please arrange your own accommodation if required. HEA Training reserves the right to change the date of the training if minimum viable learner numbers are not met.

<b>Purchase Order No.:</b>	<input type="text"/>	<b>Signed:</b>	<input type="text"/>	<b>Date:</b>	<input type="text"/>
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Please email your completed form to [training@thehea.org.uk](mailto:training@thehea.org.uk) or post to HEA, Highdown House, Littlehampton Road, Ferring, West Sussex, BN12

## Learner Course Check list

To ensure a covid secure learning environment you are required to bring with you the listed items below, which include the correct test equipment and PPE in line with your organisations method statement/ safe system of work. This form must be completed in full.

<b>Covid Secure Measures</b>				
<p>The HEA has taken a range of measures to ensure that Training conforms to the current Government guidelines. To facilitate this your employee will be required to bring with them the following items:</p> <ul style="list-style-type: none"> <li>Their own Drinking Cup</li> <li>Their own Pen</li> <li>Their own face covering (enough for the course minimum of 4)</li> <li>Their own hand sanitiser and antibacterial wipes</li> </ul> <p>Each Learner will be provided with a rubbish sack, all food, cartons, wrappers, and unused course materials will be required to be placed within the Sack. The Learner will be required to remove from the venue and dispose of in line with their hometown collection guidance.</p> <p>Your co-operation during this period is appreciated</p>				
<b>Personal Protective Equipment (PPE)</b>				
<p>The Learner is required to bring to the course the correct level of PPE as specific within the Organisations safe system of work for the course activity.</p>				
Type	Confirmed and Communicated to Learner			
<ul style="list-style-type: none"> <li>Copy of Safe System of Work/Method Statement for works</li> <li>PPE as Specified for Works</li> <li>Copy of BS7671 (current edition) and IET GN / Onsite Guide</li> <li>Copy of Organisation Test Certificate (Blank)</li> </ul>				
<b>Test Equipment</b>				
<p>The Learner is required to bring to the course the correct level of Test Equipment as specific within the Organisations safe system of work for the course activity. The test equipment is required to comply with GS38, and where required, in date for calibration</p>				
Type	Confirmed and Communicated to Learner			
<ul style="list-style-type: none"> <li>Appropriate, GS38 compliant and calibrated test equipment for conducting the following tests:                             <ul style="list-style-type: none"> <li>Polarity</li> <li>Continuity of protective and bonding conductors</li> <li>Insulation Resistance</li> <li>Earth fault loop impedance</li> <li>Voltage Drop</li> <li>RCD</li> <li>Earth Electrode Resistance</li> </ul> </li> <li>A selection of insulated screwdrivers for tasks</li> <li>Non-contact voltage tester– with suitable spare batteries</li> <li>Proving unit – with suitable spare batteries</li> </ul>				
<b>Sharing Test Equipment?</b>				
<p>Where the organisation may have more than one Learner on the course, or they work in pairs during normal works where they share test equipment, the Organisation <b>must provide by e-mail</b> confirmation and the details that are in place to ensure a covid secure working environment.</p>				
<p>Is the Learner sharing test equipment on the Course?</p>				
<b>Form Completed By</b>				
Name	Date	Role		

Note:

Where your nominated Learner fails to bring to the course the specific check list items, or the organisation fails to appropriately instruct the Learner in line with the check list and joining instructions the learner will not be able to continue with the course. Where this situation arises, the course fee will be charged at 100%.