

Auto-Electrical & Mobile Electrical Installation **(Assessment Requirements-Skills Units)**

Assessment Requirements

Unit G0102S – Demonstrating Skill in Health, Safety and Good Housekeeping in the Automotive Environment

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. produce evidence of use of personal and vehicle protection, cleaning the work environment and disposal of waste on **2** separate **occasions**.
5. produce evidence of identifying risks which may result from at least **2** of the items listed below:
 - the use and maintenance of machinery or equipment
 - the use of materials or substances
 - working practices which do not conform to laid down policies
 - unsafe behaviour
 - accidental breakages and spillages
 - environmental factors
7. produce evidence of identifying risks.
8. produce evidence of following at least **2** of the workplace policies listed below:
 - the use of safe working methods and equipment
 - the safe use of hazardous substances
 - smoking, eating, drinking and drugs
 - what to do in the event of an emergency
 - personal presentation
9. produce evidence of following workplace policies

Assessment Requirements

Unit G3S – Demonstrating Skill in Supporting Job Roles in the Automotive Work Environment

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. produce witness testimony from your peers **and** supervisor **or** tutor that you have worked well with others.
5. produce evidence carrying out the above whilst performing your normal duties.

Assessment Requirements

Unit G4S – Demonstrating Skills in the use of Materials, Fabrication, Tools and Measuring Devices in the Automotive Environment

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. produce evidence of undertaking basic routine checks of hand tools, measuring devices and workshop equipment covering all of those listed below:
 - electrical
 - mechanical
 - pneumatic
 - hydraulic
5. produce evidence of fabricating **at least 1 item** from suitable materials to known tolerances, which includes the following processes:
 - filing
 - tapping threads
 - cutting
 - drilling
 - joining
5. be observed by your assessor carrying out routine checks and during stages of fabrication

Assessment Requirements

Unit G6S – Demonstrating Skills in Making Learning Possible through Demonstration and Instruction

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. provide **1 record** of an activity which has been a combination of demonstration and instruction.
5. provide records of an **observation**, which covers **a combination of demonstration and instruction**.

It is expected that the **records** must include evidence to show how you:

- decided on the sequence of the demonstration
- ensured that the demonstration was accurate and realistic
- identified which learning outcomes were achieved
- ensured a safe environment for the demonstration and allowed all learners to see the demonstration clearly

In preparing the record you should consider:

- which types of learning are best achieved and supported through demonstrations
- how to choose between instruction and demonstration as learning methods
- how to identify individual learning needs
- which factors are likely to prevent learning and how to overcome them
- how to choose and prepare appropriate materials, including technology based materials.
- which types of learning are best achieved through instruction
- how to make sure everybody acts in line with health, safety and environmental protection legislation and best practice
- how to analyse developments in learning and new ways of delivery, including technology based learning

It is also expected that evidence from your observations **will show** how you:

- structured the demonstration so that the learner got the most out of it
- encouraged learners to ask questions and get explanations at appropriate stages in the demonstration
- gave learners the opportunities to practice the skill being demonstrated
- gave learners positive feedback
- reinforced learning by repeating demonstration
- responded to the needs of learners during the demonstration
- reduced distractions and disruptions as much as possible
- matched instruction to the needs of learners
- ensured that the manner, level and speed of the instruction encourages learners to take part
- regularly check that learners understand and adapt instruction as appropriate
- gave learners positive feedback on the learning experience and the outcome achieved
- identified anything that prevented learning and reviewed this with the learner

Evidence from **real** or **simulated** activities and **role play** is acceptable for this unit.

Assessment Requirements

Unit G8S – Demonstrating Skills in Identifying and Agreeing Motor Vehicle Customer Service Needs

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out as managed and organised by an approved centre.
3. be observed by an assessor as defined by the .
4. produce evidence, including records, to show that you have dealt with **3 different customers**.
5. be observed by your assessor on at least **1** occasion

Evidence from real activity **or role-play is acceptable** for this unit

Assessment Requirements

G37S – Demonstrating Skills in Supporting Customer Service Improvements in the Automotive Sector

General Requirements

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. produce evidence, including records, to show that you have supported customer service improvements in the automotive sector on **3 different occasions**.
5. be observed by your assessor on **at least 1** occasion supporting customer service improvements within the automotive sector.

Evidence from real activity **or role-play is acceptable** for this unit

Assessment Requirements

Unit AE01S – Demonstrating Skills in Locating and Correcting Simple Electrical Faults

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor locating and correcting simple faults occurring in **5 out of the 11** engine systems listed, which covers the learning outcomes.
 - power storage devices
 - power generating devices
 - vehicle starting devices
 - vehicle lighting devices
 - wiring harness and connection devices
 - vehicle sensors and actuators
 - circuit protection devices
 - information and entertainment systems
 - telematic and tracking systems
 - security systems
 - communication systems

Assessment Requirements

Unit AE02S – Demonstrating Skills in Enhancing Vehicle Electrical Systems

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor carrying out electrical enhancement from **3 different systems out of the 10 listed below**, which covers the learning outcomes.
 - audio systems
 - visual systems
 - communication equipment
 - safety fitments
 - lamps
 - tow bars
 - reversing aids
 - navigation systems
 - alarm systems
 - immobilization system

Assessment Requirements

Unit AE03S – Demonstrating Skills in Overhauling Electrical Units

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor carrying out electrical overhauling activities from **3 different electrical units**, covering at least 2 of the areas listed below, which covers the learning outcomes.
 - generators
 - starters
 - motors
 - actuators

Assessment Requirements

Unit AE04S – Demonstrating Skills in Diagnosis and Rectification of Engine Electrical Faults

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor diagnosing and rectifying **3** faults from **3 different electrical systems** listed. The fault should involve a **2 or more** step diagnostic activity, which covers the learning outcomes.
 - starting systems
 - charging systems
 - engine management systems (including ignition and fuel)
 - electrical components of the cooling system

Assessment Requirements

Unit AE05S – Demonstrating Skills in Diagnosis and Rectification of Transmission and Chassis Electrical Faults

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor diagnosing and rectifying faults occurring in **3 out of the 9** systems listed, which covers the learning outcomes.
 - electronic clutch control system
 - electronic gearbox control system
 - electronic automatic gearbox control system
 - electric retarder system
 - electronically controlled slip differential system
 - electronic suspension control system
 - ABS and traction control system
 - electronic steering control systems
 - electronic stability control system

Assessment Requirements

Unit AE06S – Demonstrating skills in Diagnosis and Rectification of Auxiliary Equipment Electrical Faults

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor carrying out diagnosis and rectification activities from **3 different systems out of the 14 listed below**, which covers the learning outcomes. The fault should involve a **2 or more** step diagnostic activity.
 - lighting systems
 - heated seats
 - electrically adjusted seats
 - heated screens
 - electric mirrors
 - electric sunroofs
 - electric windows
 - heating and ventilation systems
 - information and entertainment systems
 - communication systems
 - SRS
 - wash wipe
 - locking systems
 - security and warning systems

Assessment Requirements

Unit AE07S – Demonstrating Skills in Fitting Auxiliary Locks and Security Devices (electrical & mechanical)

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor fitting auxiliary locks and security devices (electrical & mechanical) from **2 different systems out of the 6 listed below**, which covers the learning outcomes.
 - electronic and electro mechanical lock mechanisms
 - additional auxiliary mechanical door locks using cylinder type locks
 - additional auxiliary mechanical door and aperture locks using external locking systems
 - mechanical window protection devices (internal and external)
 - replacement security windows and window security films
 - pneumatic locking systems

Assessment Requirements

Unit AE08S – Demonstrating Skills in Inspecting Vehicles Using Prescribed Methods

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor carrying out **2 different inspections from the 4 listed below**, which covers the learning outcomes.
 - a. pre-work
 - b. installed system functional check
 - c. post-work
 - d. vehicle handover inspection

Assessment Requirements

Unit AE09S – Demonstrating Skills in Specifying and Installing Vehicle Electrical Enhancements and Electrical Security

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor carrying out **1 enhancement** activity out of the **6 listed below** and **1 security** activity out of the **4 listed below**, which covers the learning outcomes.

Enhancements

- in car entertainment
- audio systems
- communication equipment
- networking systems
- body electrical systems
- data logging

Security

- alarm systems
- immobiliser systems
- location tracking systems
- electronic deadlocking systems

Assessment Requirements

Unit AE10S – Demonstrating Skills in Conducting Installation and System Consultations with Customers

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. be observed by an assessor carrying out **2 different** installation and system consultations with customers* out of the **5 listed below**, which covers the learning outcomes.
 - in car entertainment
 - audio systems
 - communication equipment
 - networking systems
 - body electrical systems

* This can be assessed by the use of role-play if required

Assessment Requirements

Unit BP18S – Skills in Removing and Fitting Basic Motor Mechanical, Electrical and Trim Components and non Permanently Fixed Vehicle Body Panels

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined in the IMI VCQ Assessment Strategy.
4. produce evidence from your normal workplace of removing and replacing **4 of the 12** units or components from the list below on at **least 2 occasions**.
 - bumpers
 - headlamp units
 - road wheels
 - batteries
 - bonnet fittings
 - interior trim components
 - exterior trim components
 - wings
 - doors
 - bonnets
 - boot lids and tailgates
 - bumper bars, covers and components

Assessment Requirements

Unit LV03S – Skills in Removing and Replacing Motor Vehicle Electrical Units and Components

General Requirements

You must:

1. produce evidence to show you meet **all** of the Learning Outcomes
2. produce performance evidence resulting from work you have carried out in your training workshop as managed and organised by an approved centre.
3. be observed by an assessor as defined by the IMI Assessment Strategy.
4. produce evidence of carrying out the removal and replacement of vehicle electrical units and components from:
 - engine starting systems
 - engine charging systems

PLUS 2 different systems out of the 8 listed below:

- a. lighting
- b. wiper
- c. security and alarm
- d. comfort and convenience
- e. information and entertainment
- f. telephone and two-way communication
- g. electric window systems
- h. monitoring and instrumentation systems