



PUSAT TEKNOLOGI KENDERAAN HIBRID & ELEKTRIK KOLEJ KOMUNITI KEPALA BATAS



Ecology



Green
Environment



Low Carbon
Mobility



Energy Efficient
Vehicle

ABOUT US

Hybrid and Electric Vehicle Technology Centre (Kepala Batas Community College) was established with the mission of providing specialized training focusing on electric and hybrid vehicles, in line with the country's aim to be a regional energy-efficient vehicle (EEV) hub.

Since being recognized as an IMI Approved Centre in 2014, our training centre has equipped more than 4000 participants including IMI's international qualifications in Electric Vehicle Awareness, Electrically Propelled Vehicle Hazard Management, Routine Maintenance Activities on Electrically Propelled Vehicles and Electrically Propelled Vehicle Repair and Replacement.

Our training centre is located at Kepala Batas, Penang; 40km away from Penang International Airport. We're looking forward to having you as our guest.

HYBRID AND ELECTRIC VEHICLE TRAINING COURSE

INSTITUTE OF THE MOTOR INDUSTRY (UK) CERTIFICATION

LEVEL 1 [INT- EHV1-A]

IMI INTERNATIONAL LEVEL 1 AWARD IN ELECTRIC/HYBRID VEHICLE AWARENESS

The content of this qualification has been designed to give learners the knowledge required to work safely around electric and hybrid vehicles. It contains one mandatory unit covering:

- The types of electric and hybrid vehicles available
- Hazards associated with motor vehicle high energy electrical systems
- Working safely around electric and hybrid vehicles including charging

As a result, learners successfully completing this qualification will acquire significant core knowledge of working safely around, but not maintain electric and hybrid vehicles.

LEVEL 2 [INT-EHVHM2-A]

IMI INTERNATIONAL LEVEL 2 AWARD IN ELECTRIC/HYBRID VEHICLE HAZARD MANAGEMENT FOR EMERGENCY AND RECOVERY PERSONNEL

The content of this qualification has been designed to give learners the knowledge required to work safely around electric and hybrid vehicles that may have or had damage to their high energy/electrical system, during emergency and recovery situations. It contains one mandatory unit covering:

- How to reduce the risk of injury when encountering electric and hybrid vehicles
- How to safely transport and store electric and hybrid vehicles

As a result, learners successfully completing this qualification will acquire significant core knowledge and the ability to work safely around, but not maintain electric and hybrid vehicles.

LEVEL 2 [INT-EHVRM2-A]

IMI INTERNATIONAL LEVEL 2 AWARD IN ELECTRIC/HYBRID ROUTINE MAINTENANCE ACTIVITIES

The content of this qualification has been designed to give the learners the knowledge and skills required to work safely on electric and hybrid vehicles whilst carrying out routine maintenance and repair activities (not voltage components or systems). It contains one mandatory unit covering knowledge of:

- Electric and hybrid vehicle system components and operation
- Hazards surrounding electric/hybrid vehicles
- How to reduce the risks to yourself and others when working on electric/hybrid vehicles
- Safely preparing the vehicle when carrying routine maintenance (NOT high voltage components or systems)

As a result, learners successfully completing this qualification will acquire significant core knowledge and skills and the ability to work safely around and maintain electric and hybrid vehicles.

LEVEL 3 [INT-EHVS3-A]

IMI INTERNATIONAL LEVEL 3 AWARD IN ELECTRIC/HYBRID SYSTEM REPAIR AND REPLACEMENT

The content of this qualification has been designed to give learners the knowledge and skills required to work safely on electric and hybrid vehicles whilst carrying out diagnostic, testing and repair activities.

This may include vehicles that may have or had damage to their high energy/electrical system. It contains knowledge of

- Working safely on an electric and hybrid vehicle
- Using information to carry out the task
- Carrying out repairs on high energy electrical systems
- Recording information and making suitable recommendations

As a result, learners successfully completing this qualification will acquire significant core knowledge and skills and the ability remove and replace electric and hybrid vehicle high voltage components.

**LEVEL 4 [INT-LVEV4]

IMI INTERNATIONAL LEVEL 4 FAULT DIAGNOSIS, TESTING AND REPAIR OF ELECTRIC/HYBRID VEHICLES AND COMPONENTS

The purpose and aim of this qualification is to provide technicians who maintain and repair electric/hybrid vehicles with the knowledge and skills required to work on live high voltage vehicle electrical components and associated systems. This is the first qualification of its kind to address working on live electric/hybrid vehicle high voltage vehicle systems and components.

On completion of this qualification technicians will be able to practically demonstrate that they have the skills required for repairing high voltage vehicle systems and components.

**Only available after completing LEVEL 3 with 6 months experience in hybrid/electric vehicles.

Contact us at:

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DAY 1	
Level 1 – Electric/Hybrid Vehicle Awareness	
Level 2 – Electric/Hybrid Vehicle Hazard Management for Emergency and Recovery Personal	
Time	Course Description
0800-0900	Registration IMI Certification and Briefing On Safety
0900 - 1230	Lecture: MODUL 1: EEV MODUL 2: Hybrid Types MODUL 3: Auxiliary System MODUL 4: Vehicle Models MODUL 5: HV Battery MODUL 6: Electric/Hybrid Vehicle Safety and Hazard Management
1230-1400	Lunch Break
1400-1500	Demo practical of EV2 Isolate and Re-instate High Energy Electrical System
1500-1700	INT EV1 Written Assessment (IMI)

DAY 2	
Level 2 – Electric/Hybrid Vehicle Routine Maintenance	
Level 2 – Electric/Hybrid Vehicle Hazard Management for Emergency and Recovery Personal	
Time	Course Description
0800-1030	INT EV2.1 Written and Oral Assessment (IMI)
1030-1230	Lecture: MODUL 1: Routine Maintenance MODUL 2: 12V Battery and Jump Start. MODUL 3: Wiring And Inverter MODUL 4: Diagnostic DTC
1230-1400	Lunch Break
1400-1700	Demo and practical of EV2 Jump Start Procedure Demo and practical of Inverter Coolant Replacement Demo and practical of Transaxle CVTF Replacement

DAY 3	
Level 3 – Electric/Hybrid Vehicle System repair and Replacement	
Time	Course Description
0800-0930	Lecturer MODUL 1: Workshop Operation Manual MODUL 2: Replacement of Main Hybrid Battery MODUL 3: Power Control Unit MODUL 4: Hybrid Transmission Transaxle
0930 - 1230	INT EV2.2 Practical Assessment (IMI) Demo and practical of EV3 Inverter With Converter Assembly Remove And Replace Demo and practical of EV3 High Voltage Battery Remove and Replace Demo and practical of EV3 Hybrid Transaxle Overhaul
1230 - 1400	Lunch Break
1400-1700	Practical of EV3 Inverter With Converter Assembly Remove And Replace Practical of EV3 High Voltage Battery Remove and Replace Practical of EV3 Hybrid Transaxle Overhaul
DAY 4	
Level 3 – Electric/Hybrid Vehicle System repair and Replacement	
Time	Course Description
0800-1230	Practical of EV3 Inverter With Converter Assembly Remove And Replace Practical of EV3 High Voltage Battery Remove and Replace Practical of EV3 Hybrid Transaxle Overhaul INT EV3 Practical Assessment (IMI)
1230-1400	Lunch Break
1400-1700	INT EV2.2 Written Assessment (IMI)