

HRODC Postgraduate Training Institute



A Postgraduate - Only Institution



#014.M3

**Advanced Mechanical Engineering: Automotive
Fault Diagnosis and Repair**

Postgraduate Short Course

Leading To:

DIPLOMA - POSTGRADUATE IN

**Advanced Mechanical Engineering: Automotive
Fault Diagnosis and Repair, Quad-Credit, 120
Credit-Hours**

Accumulating to A

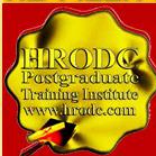
**Postgraduate Certificate,
With 60 Additional Credit-Hours, or a**

POSTGRADUATE DIPLOMA

With 240 Additional Credit-Hours

- Page 1 of 31

HRODC Postgraduate Training Institute
HQ : 122A Bhylls Lane, Castlecroft, Wolverhampton, West Midlands WV3 8DZ, UK



Prof. Dr. Ronald B. Crawford - Director

PhD (Uni London); M. Ed. M (Bristol); PGCIS (UWL); Adv. Dip. Sc. Ed (Bristol); Dip. Doc.
Res. (Uni Wlv); F.I.M.S.; HR. S. (I.M.S.); Exec. M. AOM; M. AAM; M.I.S.G.S.; M.S.C.O.S.;
M. RG. C.



HRODC POSTGRADUATE TRAINING INSTITUTE
A Postgraduate – Only Institution

Websites:
<https://www.hrodc.com/>
<https://www.hrodc.londonpostgraduateshortcourses.com/>

Email:
institute@hrodc.com
london@hrodc.com

HQ
122A Bhylls Lane
Wolverhampton WV3 8DZ
West Midlands, UK

Tel:
+44 1902 763 607
+44 7736 147 507

HRODC Postgraduate Training Institute, A Postgraduate-Only Institution


Our UK Government's Verification and Registration

Our Institute is Verified by, and Registered with, the United Kingdom (UK) Register of Learning Providers (UKRLP), of the Department for Education (DfE). Its UK Provider Reference Number (UKPRN) is: 10019585 and might be located at: <https://www.ukrlp.co.uk/>.

Course Coordinator:

Prof. Dr. R. B. Crawford is the Director of HRODC Postgraduate Training Institute, A Postgraduate-Only Institution. He has the following Qualifications and Affiliations:

- Doctor of Philosophy {(PhD) {University College London (UCL) - University of London}};
- MEd Management (University of Bath);
- Postgraduate (Advanced) Diploma Science Teacher Ed. (University of Bristol);
- Postgraduate Certificate in Information Systems (University of West London, formerly Thames Valley University);
- Diploma in Doctoral Research Supervision, (University of Wolverhampton);
- Teaching Certificate;



HRODC Postgraduate Training Institute
HQ : 122A Bhylls Lane, Castlecroft, Wolverhampton, West Midlands WV3 8DZ, UK

Prof. Dr. Ronald B. Crawford - Director

PhD (Uni London); M. Ed. M (Bristol); PGCIS (UWL); Adv. Dip. Sc. Ed (Bristol); Dip. Doc. Res. (Uni Wlv); F.I.M.S.; HR. S. (I.M.S.); Exec. M. AOM; M. AAM; M.I.S.G.S.; M.S.C.O.S.; M. RG. C.

- Fellow of the Institute of Management Specialists;
- Human Resources Specialist, of the Institute of Management Specialists;
- Member of the Asian Academy of Management (MAAM);
- Member of the International Society of Gesture Studies (MISGS);
- Member of the Standing Council for Organisational Symbolism (MSCOS);
- Member of ResearchGate;
- Executive Member of Academy of Management (AOM). There, his contribution incorporates the judging of competitions, review of journal articles, and guiding the development of conference papers. He also contributes to the Disciplines of:
 - Human Resources;
 - Organization and Management Theory;
 - Organization Development and Change;
 - Research Methods;
 - Conflict Management;
 - Organizational Behavior;
 - Management Consulting;
 - Gender & Diversity in Organizations; and
 - Critical Management Studies.

Professor Dr. Crawford has been an Academic in the following UK Universities:

- University of London (Royal Holloway), as Research Tutor;
- University of Greenwich (Business School), as Senior Lecturer (Associate Professor), in Organisational Behaviour and Human Resource Management;
- University of Wolverhampton, (Wolverhampton Business School), as Senior Lecturer (Associate Professor), in Organisational Behaviour and Human Resource Management;
- London Southbank University (Business School), as Lecturer and Unit Leader.

His responsibilities in these roles included:

- Doctoral Research Supervisor;
- Admissions Tutor;
- Postgraduate and Undergraduate Dissertation Supervisor;
- Programme Leader;
- Personal Tutor

For Whom This Course is Designed

This Course is Designed For:

- Mechanics;
- Automotive Engineers;
- Automotive Technicians;
- Electrical Engineers;
- Mechanical Engineers;
- Drivers.

Classroom-Based Duration and Cost:	
Classroom-Based Duration:	20 Days
Classroom-Based Cost:	£20,000.00 Per Delegate
Group Cost:	Varies With Group Size
Residential Group Cost:	Up To 86% Discount, Based on Numbers.
Online (Video-Enhanced) Duration and Cost	
Online Duration:	40 Days @ 3 Hours Per Day
Online Cost:	£13,400.00 Per Delegate

Classroom-Based Course and Programme Cost includes:

- Free Continuous snacks throughout the Event Days;
- Free Hot Lunch on Event Days;
- Free City Tour;
- Free Stationery;
- Free On-site Internet Access;
- Postgraduate Diploma/ Diploma – Postgraduate –or
- Certificate of Attendance and Participation – if unsuccessful on resit.

Students and Delegates will be given a Selection of our Complimentary Products, which include:

- Our Branded Leather Conference Folder;
- Our Branded Leather Conference Ring Binder/ Writing Pad;
- Our Branded Key Ring/ Chain;
- Our Branded Leather Conference (Computer – Phone) Bag – Black or Brown;
- Our Branded 8-16 GB USB Flash Memory Drive, with Course Material;
- Our Branded Metal Pen;
- Our Branded Polo Shirt.;
- Our Branded Carrier Bag.

Daily Schedule: 9:30 to 4:30 pm.

Scheduled Delivery Locations:

- Central London, UK;
- Dubai, UAE;
- Kuala Lumpur, Malaysia;
- Amsterdam, The Netherlands;
- Brussels, Belgium;
- Paris, France; and
- Durban, South Africa;

Delivery in other International Locations, on request.

Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair Course

Leading to Diploma – Postgraduate – in Automotive Fault Diagnosis and Repair, Quad-Credit, and 120 Credit-Hours, Accumulating to a Postgraduate Certificate, with 60 Additional Credit-Hours, or a Postgraduate Diploma, with 240 Additional Credit-Hours

Course Contents, Concepts, and Issues

Part 1: Overview

- Understanding Diagnosis;
- Work Safety Practices;
- Diagnostic Terminology;
- Report Writing.

Part 2: Techniques in Diagnosing (1)

- Overview;
- Diagnostic Process:
 - The Six-Stage Process;
 - The Art of Diagnostics;
 - Diagnostic Concern;
 - Cause and Correction;
 - Root Cause Analysis.
- Making Diagnosis on Paper;
- Mechanical Diagnostic Techniques:
 - Checking;
 - Noise;
 - Vibration;
 - Harshness;

- Noise Conditions;
- Vibration Conditions;
- Road Test;
- Engine Noises;
- Sources.

Part 3: Techniques in Diagnosing (2)

- Electrical Diagnostic Techniques:
 - Checking;
 - Test Lights and Analogue Meters;
 - Procedure in Electrical Testing;
 - Volt Drop Testing;
 - Short Circuit Testing;
 - Load Tests;
 - Black Box Techniques;
 - Sensor to ECU Method;
 - Flight Recorder Tests
 - Faultfinding;
 - Colour Codes and terminal Numbers;
 - Back Probing Connectors.
- Fault Codes:
 - Fast and Slow;
 - Fault Code Examples;
 - Clearing.
- Systems:
 - Systems, Defined;
 - Vehicle Systems;
 - Open-loop Systems;
 - Closed-loop Systems;
 - Block Diagrams.

- Sources of Data:
 - Autodata;
 - Bosch ESItronic.

Part 4: Automotive Tools and Equipment

- Basic Equipment:
 - Basic Hand Tools;
 - Test Equipment Accuracy;
 - Multimeters;
 - Logic Probe.
- Oscilloscopes:
 - Waveforms.
- Scanners:
 - On-board Diagnostic (OBD);
 - Serial Port Communications;
 - OBD2 Signal Protocols;
 - AutoTap OBD Scanner;
 - Bosch KTS Diagnostic Equipment;
 - Engine Analysers.
- Emission Testing:
 - Exhaust Gas Measurement;
 - Exhaust Analyser;
 - Emission Limits.
- Pressure Testing:
 - Automotive Pressure Oscilloscope Transducer.

Part 5: Using Diagnosing Sensors, Actuators and Oscilloscope

- Sensors:
 - Essentials of Sensor and Sensor Diagnostics;
 - Inductive Sensors;
 - Variable Resistance;
 - How Wire Airflow Sensor;
 - Thermistors;
 - Hall Effect Sensors;
 - Piezo Accelerometer;
 - Oxygen Sensors;
 - Pressure Sensors;
 - Variable Capacitance;
 - Optical Sensors;
 - Dynamic Position Sensors
 - Rain Sensor.
- Actuators:
 - Testing Actuators;
 - Motorised and Solenoid Actuators;
 - Solenoid Actuators;
 - Thermal Actuators.
- Engine Waveforms:
 - Primary Ignition;
 - Secondary Ignition;
 - Diesel Glow Plugs;
 - Alternator Waveform;
 - Relative Compression Petrol.
- Communication Networks:
 - CAN;
 - LIN;

- FlexRay.

Part 6: Managing On-Board Diagnostics (OBD) (1)

- Evolution:
 - Vehicle Emissions and Environmental Health;
 - The Development of the Emission and Control Legislation;
 - Vehicle Emission Control Strategies.
- Understanding On-board Diagnostics:
 - OBD Scenario;
 - Origins of OBD;
 - P-code Composition;
 - European on-board Diagnostics and Global Adoption.
- Gasoline On-Board Diagnostic Monitors:
 - Legislative Drivers;
 - Component Monitoring;
 - Rationality Testing;
 - Circuit Testing;
 - Catalyst Monitor;
 - Evaporative System Monitor;
 - Fuel System Monitor;
 - Exhaust Gas Circulation Monitor;
 - Secondary Air Monitor;
 - Monitors and Readiness Fags;

Part 7: Managing On-Board Diagnostics (OBD) (2)

- Mist Redetection:
 - Mist Remonitor;
 - Crank Speed Actuation;
 - Ionising Current Monitoring;

- Cylinder Pressure Sensing;
- Exhaust Pressure Analysis.
- OBD Summary:
 - OBD2;
 - EOBD;
 - Features and technology of Current Systems.
- Driving Cycles;
- Future Developments in Diagnostic Systems:
 - OBD3;
 - Diesel Engines;
 - Rate-Based Monitoring;
 - Model-Based Development.

Part 8: Engine System (1)

- Overview;
- Engine Operation:
 - Four-Stroke Cycle
 - Cylinder Layouts;
 - Crankshaft Drives;
 - Valve Mechanisms;
 - Valve and Ignition Timing.
- Diagnosing Engine:
 - Systematic Testing;
 - Test Equipment;
 - Test Results;
 - Engine Fault Diagnosis.
- Fuel System:
 - Carburation.
- Diagnosing Fuel System:
 - Systematic Testing;

- Test Equipment;
 - Test Results;
 - Fuel Fault Diagnosis.
- Engine Management;
- Ignition:
- Essentials of Ignition;
 - Advance Angle;
 - Electronic Ignition;
 - Hall Effect Distributor;
 - Inductive Distributor;
 - Current-limiting and Closed-loop Dwell;
 - Programmed Ignition;
 - Distributorless Ignition;
 - Direct Ignition;
 - Spark plugs.

Part 9: Engine System (2)

- Diagnosing Ignition System:
- Testing Procedure;
 - Ignition Fault Diagnostic;
 - Ignition Components and Testing;
 - DIS Diagnostics;
 - Spark Plugs.
- Emissions:
- Exhaust Gas Recirculation;
 - Catalytic Converters.
- Diagnosing Emission:
- Testing Procedure;
 - Emission Fault Diagnostic;
- Fuel Injection:

- Injection Systems;
- Fuel Injection Components;
- Fuel Mixture Calculation.
- Diagnosing Fuel Injection Systems:
 - Testing Procedure;
 - Fuel Injection Fault Diagnosis.
- Diesel Injection:
 - Electronic Control of Diesel Injection;
 - Common Rail Diesel Systems;
 - Diesel Exhaust Emissions;
 - Catalytic Converter Diesel;
 - Filters.
- Diagnosing Diesel Injection Systems:
 - Test Equipment;
 - Diesel Injection Fault Diagnosis;
 - Diesel Engine Smoke;
 - Glow Plug Circuit;
 - Diesel Systems.

Part 10: Engine System (3)

- Engine Management:
 - Closed-loop Lambda Control;
 - Engine Management Operation;
 - Gasoline Direct Injection.
- Diagnosing Combined Ignition and Fuel Systems:
 - Testing Procedure;
 - Combined Ignition and Fuel Control Fault Diagnosis Table;
 - Fuel Pump Testing;
 - Injector Testing.
- Engine Management and Fault Finding Information:

- Diagnosis Chart;
- Circuit Diagrams;
- Component Testing Data.
- Air Supply and Exhaust Systems:
 - Exhaust System;
 - Catalytic Converters;
 - Air Supply System.
- Diagnosing Exhaust and Air Supply:
 - Systematic Testing;
 - Test Results;
 - Exhaust and Air Supply Fault Diagnosis;
 - Exhaust Fault Diagnosis.
- Cooling:
 - Air-cooled System;
 - Water-cooled System;
 - Sealed and Semi-Sealed Systems.

Part 11: Engine System (4)

- Diagnosing Cooling:
 - Systematic Testing;
 - Test Equipment;
 - Test Results;
 - Cooling Fault Diagnosis.
- Lubrication:
 - Lubrication System;
 - Oil Filters;
 - Oil Pumps;
 - Crankcase Ventilation Engine Breather Systems.
- Diagnosing Lubrication:
 - Systematic Testing;

- Test Equipment;
- Test Results;
- Lubrication Fault Diagnosis.
- Batteries:
 - Safety;
 - Lead-Acid Batteries;
 - Battery Rating.
- Diagnosing Batteries:
 - Servicing Batteries;
 - Maintenance-free;
 - Charging;
 - Battery Faults;
 - Testing Batteries.

Part 12: Engine System (5)

- Starting:
 - Starter Circuit;
 - Inertia Starters;
 - Pre-engaged Starters;
 - Permanent Magnet Starters;
 - Keyless Starting System.
- Starting Diagnostics:
 - Circuit Testing Procedure;
 - Starting Fault Diagnosis.
- Charging:
 - Basic Principles;
 - Rectification of AC to DC;
 - Regulation of Output Voltage;
 - Charging Circuits.
- Charging Diagnostics:

- Testing Procedure;
- Charging Fault Diagnosis.

Part 13: Automotive Chassis Systems (1)

- Brakes:
 - Principle of Hydraulic Braking;
 - Disc and Drum Brake Systems;
 - Brake Adjustments;
 - Servo-assisted Braking.
- Diagnosing Brakes Problems:
 - Systematic Testing;
 - Test Equipment;
 - Dial gauge;
 - Test Results;
 - Brakes fault Diagnosis;
 - Brake Hydraulic Faults.
- Antilock Brakes:
 - General System Description;
 - ABS Components.
- Diagnosing Antilock Brakes Problems:
 - Systematic Testing Procedure;
 - Antilock Brakes Fault Diagnosis;
 - Bleeding Antilock Brakes.
- Traction Control:
 - Control Functions;
 - System Operation.
- Traction control:
 - Systematic Testing;
 - Traction Control Fault Diagnosis.

Part 14: Automotive Chassis Systems (2)

- Steering and Tyres:
 - Construction of a Tubeless Radial Tyre;
 - Steering Box and Rack;
 - Power Assisted Steering;
 - Steering Characteristics;
 - Camber;
 - Castor;
 - Swivel Axis Inclination;
 - Tracking;
 - Scrub Radius.
- Steering and Tyres Diagnostics:
 - Systematic Testing;
 - Test Equipment;
 - Four-Wheel Alignment;
 - Test Results;
 - Tyre Fault Diagnosis;
 - Tyre Inflation Pressures;
 - Steering Fault Diagnosis;
 - Steering, Wheels and Tyres Fault Diagnosis.

Part 15: Automotive Chassis Systems (3)

- Suspension:
 - Suspension System Layouts;
 - Front Axle Suspensions;
 - Rear Axle Suspensions;
 - Anti-Roll Bar;
 - Springs;
 - Dampers.

- Diagnosing Suspension:
 - Systematic Testing;
 - Test Equipment;
 - Test Results;
 - Suspension Fault Diagnosis.
- Active Suspension:
 - Active Suspension Operation;
 - Delphi MagneRide Case Study.
- Active Suspension Diagnostic:
 - Systematic Testing;
 - Back to the Black Box.

Part 16: Working with Electrical Systems (1)

- Electronic Components and Circuits:
 - Components;
 - Integrated Circuits;
 - Digital Circuits;
 - Electronic Component Testing.
- Multiplexing:
 - Overview;
 - Controller Area Network;
 - CAN Data Signal;
 - Local Interconnect Network;
 - FlexRay.
- Multiflexing Diagnostics;
- Lightning:
 - External lights;
 - Lightning circuits;
 - Gas Discharge Lightning;
 - LED Lighting.
- Lighting Diagnostics:

- Testing Procedure;
 - Lighting Fault Diagnostic;
 - Headlight Beam Setting.
- Auxiliaries:
- Wiper Motors and Linkages;
 - Wiper Circuits;
 - Two-Motor Wiper System;
 - Headlight Wipers and Washers;
 - Indicators and Hazard Lights;
 - Brake Lights;
 - Electric Horns;
 - Engine Cooling and Fan Motors.

Part 17: Working with Electrical Systems (2)

- Diagnosing Auxiliary:
- In-Car Entertainment;
 - Security Systems;
 - Mobile Communications.
- Diagnosing ICE, Security and Communication:
- Testing Procedure;
 - ICE, Security And Communication System Fault Diagnosis;
 - Interference Suppression.
- Body Electrical Systems:
- Electric Seat Adjustment;
 - Electric Mirrors;
 - Electric Sunroof Operation;
 - Door Locking Circuit;
 - Electric Window Operation.
- Diagnosing Body Electrical:
- Testing Procedure;

- Body Electrical Systems Fault Diagnosis;
- Circuit Systematic Testing.
- Instrumentation:
 - Gauges;
 - Digital Instrumentation;
 - Vehicle Condition Monitoring;
 - Trip Computer;
 - Displays.
- Instruments Diagnostics:
 - Testing Procedures;
 - Instrumentation Fault Diagnosis;
 - Black Box Technique.

Part 18: Working with Electrical Systems (3)

- Heating, Ventilation and Air Conditioning (HVAC):
 - Ventilation and Heating;
 - Heating System - Watercooled Engine;
 - Heater Blower Motors;
 - Electronic Heating Control;
 - Air Conditioning;
 - Automatic Temperature Control;
 - Seat Heating;
 - Screen Heating.
- Diagnosing HVAC:
 - Testing Procedure;
 - Air Conditioning Fault Diagnosis;
 - Heating And Ventilation Fault Diagnosis;
 - Air Conditioning Receiver.
- Cruise Control:
 - System Description;

- Components.
- Diagnosing Cruise Control:
 - Systematic Testing;
 - Cruise Control Fault Diagnosis.
- Airbags and Belt Tensioners:
 - Components And Circuits;
 - Seat Belt Tensioners.
- Diagnosing Airbags and Belt Tensioners:
 - Systematic Testing;
 - Airbags and Belt Tensioners Fault Diagnosis;
 - Deactivation And Activation Procedures.

Part 19: Automatic and Manual Gear Transmission Systems

- Manual Transmission:
 - Clutch;
 - Manual Gearbox;
 - Driveshafts and Wheel Bearings;
 - Final Drive and Differential;
 - Four Wheel Drive Systems.
- Diagnosing Manual Transmission:
 - Systematic Testing;
 - Test Equipment;
 - Test Results;
 - Manual Transmission Fault Diagnosis;
 - Manual Gearbox Fault Diagnosis;
 - Drive Shafts Fault Diagnosis;
 - Final Drive Fault Diagnosis.
- Automatic Transmission:
 - Torque Converter Operation;
 - Epicyclic Gearbox Operation;

- Constantly Variable Transmission;
 - Electronic Control Of Transmission;
 - Direct Shift Gearbox.
- Automatic Transmission Diagnostic:
- Systematic Testing;
 - Test Equipment;
 - Test Results;
 - Automatic Gearbox Fault Diagnosis;
 - ECAT Fault Diagnosis;
 - Automatic Transmission Stall Test.

Regulation For Postgraduate Diploma, Postgraduate Certificate, and Postgraduate Short Courses

Diploma – Postgraduate – Short Courses; Postgraduate Certificate and Postgraduate Diploma Programmes

Postgraduate Short Courses are of a minimum of five days' Classroom-Based (10 days' Video-Enhanced Online) but less than 6 weeks' Classroom-Based (less than 10 weeks' Video-Enhanced Online) duration, are referred to as Diploma – Postgraduate. This means that they are postgraduate credits, towards a Postgraduate Certificate and Postgraduate Diploma. Postgraduate Certificate and Postgraduate Diploma represent Programmes of Study, leading or accumulating to Awards bearing their title prefixes. While we, refer to our short studies, detailed above, as 'Courses', those with duration of 6 weeks or 12 weeks In-Classroom (10- and 20-weeks' Video-Enhanced Online) are labelled 'Programmes'. Nevertheless, we conform to popular usage, by often referring to all study durations as 'Courses'. A mark of distinction, though, is that participants in a short course are referred to as 'Delegates', as opposed to the ascription 'Students', which is confined to those studying a Postgraduate Programme.


In line with the above notion, a Postgraduate Certificate might be earned through a 6 weeks' Intensive Classroom-Based Study, or 10 weeks' Video-Enhanced, or Face-To-Face, Online Delivery. Similarly, a Postgraduate Diploma might be studied for 12 weeks In-classroom or 20 weeks Video-Enhanced Face-To-Face. They might also be taken through a blend of both modes, providing that a minimum of 6 and 12 Credits and 180 or 360 Credit-Hours, respectively, are earned. You might Pick and Mix Courses, to create your preferred blend of Disciplines, or follow a predesigned Specialist route. They might accumulate from our Postgraduate Short Courses, or through continuous study. These Specialisms are exemplified by the following excerpts from the document 'Postgraduate Certificate and Postgraduate Diploma Awards'.

Postgraduate Diploma and Postgraduate Certificate Specialist Award Titles	
Programme #	Award Title (Click to Download Desired Brochure)
010	Postgraduate Diploma in Human Resource Management.
010.1	Postgraduate Certificate in Human Resource Management.
014	Postgraduate Diploma in Automotive Electrical, Electronic and Mechanical Diagnostic, Maintenance and Repair
017	Postgraduate Diploma in Real Estate Management, Incorporating Property Law.
017.1	Postgraduate Certificate in Real Estate Management, Incorporating Property Law.
020	Postgraduate Diploma in Accounting and Finance.
020.1	Postgraduate Certificate in Accounting and Finance.
028	Postgraduate Certificate in Industrial Health and Safety Management, Incorporating Oil and Gas Safety.

HRODC Postgraduate Training Institute
 HQ : 122A Bhylls Lane, Castlecroft, Wolverhampton, West Midlands WV3 8DZ, UK

Prof. Dr. Ronald B. Crawford - Director

PhD (Uni London); M. Ed. M (Bristol); PGCIS (UWL); Adv. Dip. Sc. Ed (Bristol); Dip. Doc. Res. (Uni Wlv); F.I.M.S.; HR. S. (I.M.S.); Exec. M. AOM; M. AAM; M.I.S.G.S.; M.S.C.O.S.; M. RG. C.




Postgraduate Diploma and Postgraduate Certificate Specialist Award Titles	
Programme #	Award Title (Click to Download Desired Brochure)
032	Postgraduate Diploma in Executive Management
032.1	Postgraduate Certificate in Executive Management
043	Postgraduate Diploma in Communication and Information Management.
043.1	Postgraduate Certificate in Communication and Information Management.
044	Postgraduate Diploma in Women in Management.
044.1	Postgraduate Certificate in Women in Management.
061	Postgraduate Certificate in Financial Accounting and Management Accounting.
070	Postgraduate Diploma in Human Resource Training and Development Management
070.1	Postgraduate Certificate in Human Resource Training and Development Management.
079	Postgraduate Diploma in Managing National and International Economic Competition.
085	Postgraduate Diploma in Corporate Governance and Strategic Management.
085.1	Postgraduate Certificate in Corporate Governance and Strategic Management.

HIRODC Postgraduate Training Institute
 HQ : 122A Bhylls Lane, Castlecroft, Wolverhampton, West Midlands WV3 8DZ, UK

Prof. Dr. Ronald B. Crawford - Director

PhD (Uni London); M. Ed. M (Bristol); PGCIS (UWL); Adv. Dip. Sc. Ed (Bristol); Dip. Doc. Res. (Uni Wlv); F.I.M.S.; HR. S. (I.M.S.); Exec. M. AOM; M. AAM; M.I.S.G.S.; M.S.C.O.S.; M. RG. C.



Postgraduate Diploma and Postgraduate Certificate Specialist Award Titles	
Programme #	Award Title (Click to Download Desired Brochure)
086	Postgraduate Diploma in Business Administration
86.1	Postgraduate Certificate in Business Administration.
097	Postgraduate Diploma in Telecommunication Systems
097.1	Postgraduate Certificate in Telecommunication Systems
115	Postgraduate Diploma in Cost Accounting, Budgeting, Profitability Analysis, Strategy and Balanced Scorecard.
115.1	Postgraduate Certificate in Cost Accounting, Budgeting, Profitability Analysis.

Understanding Our Postgraduate Credit System


Credit-Hours and Credit-Values, in Diploma – Postgraduate - Award

Credit-Hours are the actual amount of time that a lecturer or tutor spends with his or her students or delegates, in both Classroom-based and Video-Enhanced Deliveries. Each Five-Day Classroom-Based, or a Ten-Day Video-Enhanced (3 hours per day) Course consists of 30 Credit-Hours, while a 6-Day Classroom-based (12day Video-Enhanced) course amounts to 36 Credit-Hours. Because Credit-Values are calculated in multiples of 30 Credit-Hours, 60-89 Credit-Hours have a Double-Credit (2 Credit) value, while 90 Credit-Hours earn a Triple-Credit (3 Credits).

A delegate who successfully completes a Postgraduate Short Course of 30 or more Credit-Hours, but which is less than 180 Credit-Hours (Postgraduate Certificate), is awarded a

HRODC Postgraduate Training Institute

HQ : 122A Bhylls Lane, Castlecroft, Wolverhampton, West Midlands WV3 8DZ, UK



Prof. Dr. Ronald B. Crawford - Director

PhD (Uni London); M. Ed. M (Bristol); PGCIS (UWL); Adv. Dip. Sc. Ed (Bristol); Dip. Doc. Res. (Uni Wlv); F.I.M.S.; HR. S. (I.M.S.); Exec. M. AOM; M. AAM; M.I.S.G.S.; M.S.C.O.S.; M. RG. C.

Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair Course, Leading to Diploma Postgraduate - in Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair, and 120 Credit-Hours, Accumulating to A Postgraduate Certificate, with 60 Additional Credit-Hours, a Postgraduate Diploma, with -240 Additional Credit-Hours

Diploma – Postgraduate. This Award is assigned Credit-Values and Credit-Hours, as are exemplified by the following:

1. Diploma – Postgraduate – in Organisational Change Management, 30 Credit-Hours;
2. Diploma - Postgraduate - in Trainer Training: Training for Trainers, Double-Credit, 60 Credit-Hours:
3. Conveyancing and Property Valuation: Property Law, Double-Credit, 72 Credit-Hours:
4. Diploma – Postgraduate – in University and Higher Education Administration, Triple-Credit, 90 Credit-Hours;
5. Diploma – Postgraduate – in Tourism and International Relations, Quad-Credit, 120 Credit-Hours.

As in the first example, above, where the Credit-Value is not noted in an Award, it must be assumed that it is a Single-Credit Value.

Postgraduate Diploma Award

A Postgraduate Diploma Award is achieved with a minimum of 360 Credit-Hours, through continuous study, or an accumulation of Credit-Hours.

Postgraduate Certificate Award

A Postgraduate Certificate might be gained with a minimum of 180 Credit-Hours, through continuous study or Credit-Hours' accumulation.

Cumulative Postgraduate Certificate, and Postgraduate Diploma Awards

All Postgraduate Short Courses accumulate to a Postgraduate Certificate and a Postgraduate Diploma, on a 'Pic and Mix' or Specialist basis. This means that we maintain academic records for each delegate, indicating the courses studied, with their Credit-Value and Credit-

Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair Course, Leading to Diploma Postgraduate - in Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair, and 120 Credit-Hours, Accumulating to A Postgraduate Certificate, with 60 Additional Credit-Hours, a Postgraduate Diploma, with -240 Additional Credit-Hours

Hours, as are indicated above, '**Credit-Hours and Credit-Values, in Diploma – Postgraduate – Award**'. The Credit-Hours are aggregated to accumulate to at least 180 and 360 Credit-Hours, for a Postgraduate Certificate and a Postgraduate Diploma, respectively. Each Short Course Award (below a Postgraduate Certificate) indicates both its Credit-Value and Credit-Hours, excepting for Single-Credit.

Accumulated Postgraduate Certificate, and Postgraduate Diploma Awards

All Specialist Postgraduate Certificate and Postgraduate Diploma Programmes have predetermined Award Titles. Delegates who do not follow a specialism, for accumulation to a Postgraduate Certificate and Postgraduate Diploma, receive a Generalist, rather than a Specialist, Award. However, a Specialist Award is given to delegates who studied at least seventy percent (70%) of their courses in a specialist grouping, as are exemplified above, under the heading '**Postgraduate Diploma and Postgraduate Certificate Specialist Award Titles**'.

Assessment Requirement For Postgraduate Diploma; Postgraduate Certificate; and Diploma - Postgraduate

Because of the intensive nature of our Courses and Programmes, for In-Classroom, and Video-Enhanced Online modes, assessment will take place during or at the end of the '**active teaching period**', adopting differing formats. These structures include, but are not limited to:


- In-Class Tests;
- Text-Case Analyses;
- Video-Case Analyses;
- 'Out-of-Class' Assignments;
- Individual Presentations;
- Group Presentations; and
- End of Course Examinations.

Based on these assessments, successful candidates will receive either a:

Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair Course - Page 27 of 31

HMODC Postgraduate Training Institute
HQ : 122A Bhylls Lane, Castlecroft, Wolverhampton, West Midlands WV3 8DZ, UK

Prof. Dr. Ronald B. Crawford - Director
PhD (Uni London); M. Ed. M (Bristol); PGCIS (UWL); Adv. Dip. Sc. Ed (Bristol); Dip. Doc. Res. (Uni Wlv); F.I.M.S.; HR. S. (I.M.S.); Exec. M. AOM; M. AAM; M.I.S.G.S.; M.S.C.O.S.; M. RG. C.



Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair Course, Leading to Diploma Postgraduate - in Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair, and 120 Credit-Hours, Accumulating to A Postgraduate Certificate, with 60 Additional Credit-Hours, a Postgraduate Diploma, with -240 Additional Credit-Hours

- Diploma – Postgraduate - Award;
- Postgraduate Certificate Award; or
- Postgraduate Diploma Award.

For all the above Awards, a minimum of 70% overall pass is expected. To receive the Awards of Postgraduate Certificate and Postgraduate Diploma, candidates must have accumulated at least the required minimum 'Credit-Hours', with a pass (of 70% and above) in at least 70% of the courses taken.

Delegates and students who fail to achieve the requirement for Postgraduate Certificate, Postgraduate Diploma, or Diploma - Postgraduate - will be given support for 2 re-submissions for each course. Those delegates who fail to achieve the assessment requirement for the Postgraduate Diploma or Diploma - Postgraduate - on 2 resubmissions, or those who elect not to receive them, will be awarded the Certificate of Attendance and Participation.

Application Process For Postgraduate Diploma; Postgraduate Certificate; and Diploma – Postgraduate - Short Courses

Applicants for Diploma – Postgraduate; Postgraduate Certificate; and Postgraduate Diploma are required to submit the following documents:

- Completed Postgraduate Application Form, including a passport sized picture affixed to the appropriate section;
- A copy of Issue and Photo (bio data) page/s of the applicant's current valid passport or copy of 'Photo-embedded' National Identity Card;
- Copies of credentials stated in the Application Form.

Admission and Enrolment Procedure

- On receipt of all the above documents, they will be forwarded to our 'Admissions Committee', which will assess applicants' suitability for the Course or Programme for which they have applied;

- If they are accepted on their chosen Course or Programme, they will be notified accordingly, and sent Invoices;
- Upon receipt of an applicant's payment, we will send him or her an Official Payment Receipt, and Admission Letter, bearing a copy of the Passport-Type in the respective Application Form.
- Those intending to study in a foreign country, and require a Visa, will be sent the necessary **Immigration Documentation**, to support their application;
- **Joining Instruction** will be sent to Students and Delegates, on time to prepare for their enrolment. The incorporated information include:
 - Venue Name, Location, with specific address;
 - Details of Airport Transfer, where appropriate;
 - Start date and time;
 - Registration details;
 - Daily Schedule;
 - Local Transportation Details;
 - Residential Accommodation Details;
 - Leisure and Shopping Facilities, in the area;
 - General Security Information; among others.

Our Video-Enhanced (Face-To-Face) Online Study Mode

In a move away from the traditional online courses and embracing recent developments in technology-mediated distance education, HRODC Postgraduate Training Institute has introduced a Video-Enhanced Online delivery. This Online mode of delivery is revolutionary and, at the time of writing, unique to HRODC Postgraduate Training Institute.

You are taught as individuals, on a one-to-one or one-to-small-group basis. You see the tutor face to-face, for the duration of your course. You will interact with the lecturer, ask, and address questions; sitting examinations, in his or her presence. It is as real as any face-to-face lecture and seminar can be. Choose from a wide range of Diploma – Postgraduate - Courses and an increasing number of Specialist Postgraduate Certificate and Postgraduate

Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair Course, Leading to Diploma Postgraduate - in Advanced Mechanical Engineering: Automotive Fault Diagnosis and Repair, and 120 Credit-Hours, Accumulating to A Postgraduate Certificate, with 60 Additional Credit-Hours, a Postgraduate Diploma, with -240 Additional Credit-Hours

Diploma Programmes. You might also accumulate Postgraduate Short Courses, via this mode of study, over a **12-year period**, towards a Postgraduate Certificate or Postgraduate Diploma.

Key Features of Our Online Study: Video-Enhanced Online

- The tutor meets the group and presents the course, via Video, in a similar way to its classroom-based counterpart;
- All participants can see, and interact with, each other, and with the tutor;
- They watch and discuss the various video cases and demonstrations that form an integral part of our delivery methodology;
- Their assessment is structured in the same way as it is done in a classroom setting;
- The Video-Enhanced Online mode of training usually starts on the 1st of each month, with the cut-off date being the 20th of each month, for inclusion the following month;
- Its duration is twice the duration of its classroom-based counterpart. For example, a 5-day (30 Credit Hours) classroom-based course will last 10 days, in Video-Enhanced Online mode. This calculation is based on 3 hours tuition per day, adhering to the Institute's required 30 Credit-Hours;
- The cost of the Video-Enhanced Online mode is 67% of similar classroom-based courses;
- For example, a 5-day classroom-based course, which costs Five Thousand Pounds, is only Three Thousand Three Hundred and Fifty Pounds (£3,350.00) in Video-Enhanced Online Mode.

10- Week Video-Enhanced Online Postgraduate Certificate; and 20-Week Video-Enhanced Online Postgraduate Diploma programmes

You might study an Online Postgraduate Certificate or Online Postgraduate Diploma, in 10 and 20 weeks, respectively, in the comfort of your office or homes, through HRODC Postgraduate Training Institute's Video-Enhanced Online Delivery. We will deliver the 180 Credit-Hours and 360 Credit-Hours, in line with our **Regulation**, through 'Direct-Lecturer-Contact', within the stipulated timeframe. We aim to fit the tuition around your work, family

commitment and leisure, thereby enhancing your maintenance of an effective 'work-study-life-style balance', at times convenient to you and your appointed tutor.

Service Contract, Incorporating Our Terms and Conditions

[Click, or copy and paste the URL, below, into your Web Browser, to view our Service Contract, incorporating Terms and Conditions.](https://www.hrodc.com/Service_Contract_Terms_and_Conditions_Service_Details_Delivery_Point_Period_Cancellations_Extenuating_Circumstances_Payment_Protocol_Location.htm)

https://www.hrodc.com/Service_Contract_Terms_and_Conditions_Service_Details_Delivery_Point_Period_Cancellations_Extenuating_Circumstances_Payment_Protocol_Location.htm

The submission of our application form or otherwise registration by of the submission of a course booking form or e-mail booking request is an attestation of the candidate's subscription to our Policy Terms and Conditions, which are legally binding.

Prof. Dr. Ronald B. Crawford
Director
HRODC Postgraduate Training Institute