

HRODC Postgraduate Training Institute



A Postgraduate - Only Institution



#200

Petroleum - Oil and Gas - Production Systems, Oil and Gas Reservoir Engineering, Oil and Gas Well Testing and Health and Safety in Oil and Gas Industry

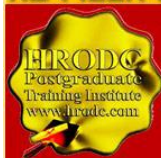
Programme

Leading To:

POSTGRADUATE DIPLOMA IN

Petroleum - Oil and Gas - Production Systems, Oil and Gas Reservoir Engineering, Oil and Gas Well Testing and Health and 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.



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Websites:
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[postgraduateshortcourses.com/](https://www.postgraduateshortcourses.com/)

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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/>.

Programme 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;

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- 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

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For Whom This Course is Designed

This Programme is Designed For:

- Pipeline designers, engineers and technicians;
- Project, field, installation and operations managers;
- Integrity and maintenance personnel;
- Employees seeking career enhancement;
- Professionals in supporting or aligned oil and gas sectors;
- Oil and Gas Safety Officials;
- Business Professionals;
- Project Leaders;
- Professional Staffs.

Classroom-Based Duration and Cost:	
Classroom-Based Duration:	12 Weeks (5 Days per Week)
Classroom-Based Cost:	£45,000.00 Per Student
Online (Video-Enhanced) Duration and Cost	
Online Duration:	20 Weeks – 3 Hours Per Day, 6 Days Per Week
Online Cost:	£30,150.00 Per Student

Classroom-Based 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.

Delivery Locations:

- 1. Central London, UK;**
- 2. Dubai, UAE;**
- 3. Kuala Lumpur, Malaysia;**
- 4. Amsterdam, The Netherlands;**
- 5. Brussels, Belgium;**
- 6. Paris, France; and**
- 7. Durban, South Africa;**
- 8. Other International Locations, on request.**

Petroleum – Oil and Gas – Production Systems, Oil and Gas Reservoir Engineering, Oil and Gas Well Testing and Health and Safety in Oil and Gas Industry

Leading to Postgraduate Diploma in Petroleum – Oil and Gas – Production Systems, Oil and Gas Reservoir Engineering, Oil and Well Testing and Health and Safety

Module Number	Pre-existing Course #	Module Title	Page #	Credit Value
1	199.M1	Petroleum - Oil and Gas - Production Systems	6	Quad
2	199.M2	Petroleum - Oil and Gas -Reservoir Engineering Practice	11	Quad
3	199.M3	Petroleum – Oil and Gas - Oil Well Testing	15	Triple
4	199.M4	Health and Safety in - Oil and Gas – Industry (Part 1)	20	Single

Petroleum – Oil and Gas – Production Systems, Oil and Gas Reservoir Engineering, Oil and Gas Well Testing and Health and Safety in Oil and Gas Industry, Programme

Leading to Postgraduate a Postgraduate Diploma in Petroleum – Oil and Gas – Production Systems, Oil and Gas Reservoir Engineering, Oil and Well Testing and Health and Safety

Programme Contents, Concepts and Issues

**Module 1
Petroleum – Oil and Gas – Production Systems**

M1 - Part 1: The Role of Petroleum – Oil and Gas – Production Engineering

- Components of the Petroleum Production System;
- Well Productivity and Production Engineering;
- Units and Conversion.

M1 - Part 2: Production from Under-saturated Oil Reservoirs

- Steady-State Well Performance;
- Transient Flow of Under-saturated Oil;
- Pseudosteady-State Flow;
- Wells Draining Irregular Patterns;
- Inflow Performance Relationship;
- Effects of Water Production, Relative Permeability;
- Single-Phase Oil Inflow Performance Relationships.

M1 - Part 3: Production from Two-Phase Reservoirs

- Properties of Saturated Oil;
- Two-Phase Flow in a Reservoir;
- Oil Inflow Performance for a Two-Phase Reservoir;
- Generalized Vogel Inflow Performance;
- Fetkovich's Approximation.

M1 - Part 4: Production from Natural Gas Reservoirs

- Correlations and Useful Calculations for Natural Gases;
- Approximation of Gas Well Deliverability;
- Gas Well Deliverability for Non-Darcy Flow;
- Transient Flow of a Gas Well.

M1 - Part 5: Production from Horizontal Wells

- Steady-State Well Performance;
- Pseudosteady-State Flow;
- Inflow Performance Relationship for Horizontal Gas Wells;
- Two-Phase Correlations for Horizontal Well Inflow;
- Multilateral Well Technology.

M1 - Part 6: The Near-Wellbore Condition and Damage Characterization; Skin Effects

- Hawkins' Formula;
- Skin Components for Vertical and Inclined Wells;
- Skin from Partial Completion and Well Deviation;
- Horizontal Well Damage Skin Effect;
- Well Completion Skin Factors;
- Formation Damage Mechanisms;
- Sources of Formation Damage During Well Operations.

M1 - Part 7: Wellbore Flow Performance

- Single-Phase Flow of an Incompressible, Newtonian Fluid;
- Single-Phase Flow of a Compressible, Newtonian Fluid;
- Multiphase Flow in Wells.

M1 - Part 8: Flow in Horizontal Wellbores, Wellheads, and Gathering Systems

- Flow in Horizontal Pipes;
- Flow through Chokes;
- Surface Gathering Systems;
- Flow in Horizontal Wellbores.

M1 - Part 9: Well Deliverability

- Combination of Inflow Performance Relationship (IPR) and Vertical Flow Performance (VFP);
- IPR and VFP of Two-Phase Reservoirs;
- IPR and VFP in Gas Reservoirs.

M1 - Part 10: Forecast of Well Production

- Transient Production Rate Forecast;
- Material Balance for an Under-saturated Reservoir and Production Forecast Under Pseudosteady-State Conditions;
- The General Material Balance for Oil Reservoirs;
- Production Forecast from a Two-Phase Reservoir: Solution Gas Drive;
- Gas Material Balance and Forecast of Gas Well Performance.

M1 - Part 11: Gas Lift

- Well Construction for Gas Lift;
- Continuous Gas-Lift Design;
- Unloading Wells with Multiple Gas-Lift Valves;
- Optimization of Gas-Lift Design;
- Gas-Lift Performance Curve;
- Gas-Lift Requirements versus Time.

M1 - Part 12: Pump-Assisted Lift

- Positive-Displacement Pumps;
- Dynamic Displacement Pumps;
- Lifting Liquids in Gas Wells; Plunger Lift.

M1 - Part 13: Well Performance Evaluation

- Open-Hole Formation Evaluation;
- Cased Hole Logs;
- Transient Well Analysis.

M1 - Part 14: Matrix Acidizing: Acid/Rock Interactions

- Acid-Mineral Reaction Stoichiometry;
- Acid-Mineral Reaction Kinetics;
- Acid Transport to the Mineral Surface;
- Precipitation of Acid Reaction Products.

M1 - Part 15: Sandstone Acidizing Design

- Acid Selection;
- Acid Volume and Injection Rate;
- Fluid Placement and Diversion;
- Preflush and Postflush Design;
- Acid Additives;
- Acidizing Treatment Operations.

M1 - Part 16: Carbonate Acidizing Design

- Wormhole Formation and Growth;
- Wormhole Propagation Models;
- Matrix Acidizing Design for Carbonates;
- Acid Fracturing;
- Acidizing of Horizontal Wells.

M1 - Part 17: Hydraulic Fracturing for Well Stimulation

- Length, Conductivity, and Equivalent Skin Effect;
- Optimal Fracture Geometry for Maximizing the Fractured Well Productivity;
- Fractured Well Behaviour in Conventional Low-Permeability Reservoirs;
- The Effect of Non-Darcy Flow on Fractured Well Performance;
- Fractured Well Performance for Unconventional Tight Sand or Shale Reservoirs;
- Choke Effect for Transverse Hydraulic Fractures.

M1 - Part 18: The Design and Execution of Hydraulic Fracturing Treatments

- The Fracturing of Reservoir Rock;
- Fracture Geometry;
- The Created Fracture Geometry and Net Pressure;
- Fracturing Fluids;
- Prop pants and Fracture Conductivity;
- Fracture Diagnostics;
- Fracturing Horizontal Wells.

M1 - Part 19: Sand Management

- Sand Flow Modelling;
- Sand Management;
- Sand Exclusion;
- Completion Failure Avoidance.

Module 2

Petroleum – Oil and Gas – Reservoir Engineering Practice

M2 - Part 1: Porosity of Reservoir Rocks

- Total Porosity and Effective Porosity;
- Sources of Porosity Data;
- Applications of Porosity Data.

M2 - Part 2: Permeability and Relative Permeability

- Sources of Permeability Data;
- Relative Permeability;
- Sources of Relative Permeability;
- Three-Phase Relative Permeability;
- Applications of Permeability and Relative Permeability.

M2 - Part 3: Reservoir Fluid Saturations

- Determination of Water Saturations;
- Determination of Reservoir Productive Intervals.

M2 - Part 4: Pressure – Volume – Temperature (PVT) Properties of Reservoir

- Gas and Gas-Condensate Properties;
- Pseudo-critical Properties of Gas Mixtures;
- Wet Gas and Gas Condensate;
- Correlations for Gas Compressibility Factor;
- Gas Formation Volume Factor (FVF);
- Gas Density;
- Gas Viscosity;

- Gas Coefficient of Isothermal Compressibility;
- Correlations for Calculation of Oil PVT Properties;
- Correlations for Calculation of Water PVT Properties.

M2 - Part 5: Reservoir Fluid Sampling and PVT Laboratory Measurements

- Overview of Reservoir Fluid Sampling;
- Reservoir Type and State;
- Well Conditioning;
- Subsurface Sampling Methods and Tools;
- Wire Line Formation Testers;
- PVT Laboratory Measurements;
- Applications of Laboratory PVT Measurements.

Typical Reservoir Fluid Study for a Black Oil Sample

- Reservoir Fluid Summary;
- Calculated Analysis of Reservoir Fluid;
- Pressure-Volume Properties at 212°F (Constant Composition Expansion);
- Differential Liberation at 212°F;
- Gas Differentially Liberated at 212°F;
- Viscosity Data at 212°F;
- Comparison of Reservoir Oil Flash Liberation Tests.

Typical Reservoir Fluid Study for a Gas Condensate Sample

- Summary of Reservoir Data and Surface Sampling Conditions;
- Chromatograph Analysis of Separator Gas at 1140 psig and 92°F;
- Chromatograph Analysis of Separator Liquid at 1140 psig and 92°F;
- Composition of Reservoir Fluid (Calculated);
- Measured Saturation Pressures from Stepwise Recombination at 267°F;
- Pressure-Volume Properties of Reservoir Fluid at 267°F (or CCE);
- Depletion Study at 267°F: Hydrocarbon Analyses of Produced Well stream (Mole %);

- Retrograde Condensation During Gas Depletion at 267°F.

M2 - Part 6: PVT Properties Predictions from Equations of State

- Historical Introduction to Equations of State;
- van der Waals (vdW) EOS;
- Soave-Redlich-Kwong (SRK) EOS;
- Peng-Robinson (PR) EOS;
- Phase Equilibrium of Mixtures;
- Roots from Cubic EOS;
- Volume Translation;
- Two-Phase Flash Calculation;
- Bubble Point and Dew Point Pressure Calculations;
- Characterization of Hydrocarbon Plus Fractions;
- Phase Equilibrium Predictions with Equations of State.

M2 - Part 7: The General Material Balance Equation

- Derivation of the General Material Balance Equation (GMBE);
- The GMBE for Gas Reservoirs;
- Discussion on the Application of the GMBE.

M2 - Part 8: Gas Reservoirs

- Volumetric Gas Reservoirs;
- Gas Reservoirs with Water Influx;
- Water Influx Models;
- Geo-pressured Gas Reservoirs;
- Case Histories of Two Gas Reservoirs;
- Correlations for Estimating Residual Gas Saturations for Gas Reservoirs under Water Influx;
- Dimensionless Pressure for Finite and Infinite Aquifers;

- Dimensionless Pressure for Infinite Aquifers.

M2 - Part 9: Oil Reservoirs

- Oil Reservoir Drive Mechanisms;
- Gravity Drainage Mechanism;
- Volumetric Under-saturated Oil Reservoirs;
- Under-saturated Oil Reservoirs with Water Influx;
- Volumetric Saturated Oil Reservoirs;
- Material Balance Approach for Saturated Oil Reservoirs with Water Influx;
- Case History of Manatee Reservoirs.

M2 - Part 10: Fluid Flow in Petroleum Reservoirs

- Fluid Types;
- Definition of Fluid Flow Regimes;
- Darcy Fluid Flow Equation;
- Radial Forms of the Darcy Equation;
- Derivation of the Continuity Equation in Radial Form;
- Derivation of Radial Diffusivity Equation for Slightly Compressible Fluids;
- Solutions of the Radial Diffusivity Equation for Slightly Compressible Fluids;
- Derivation of the Radial Diffusivity Equation for Compressible Fluids;
- Transformation of the Gas Diffusivity Equation with Real Gas Pseudo-Pressure Concept;
- The Superposition Principle;
- Well Productivity Index;
- Well Injectivity Index.

Module 3 Petroleum – Oil and Gas - Oil Well Testing

M3 - Part 1: Oil Well Testing Familiarisation

- History of Oil Well Testing;
- Role of Oil Well Tests and Information in Petroleum Industry;
- Oil Well Test Data:
 - Acquisition;
 - Analysis;
 - Management.
- Selecting Oil Wells for Optimum Stimulation Treatment;
- Reservoir System Characterization Process;
- Scope and Objective;
- Organization;
- Unit's System and Conversations.

M3 - Part 2: Reservoir Oil Flow Analysis

- Basic Fluid Flow Equations in Oil Reservoir;
- Numerical Models and their Applications;
- Unsteady-State Pressure Distribution Calculations in Directional Well.

M3 - Part 3: Transient Well Testing Methods for Horizontal Oil Wells

- Flow Equations for Horizontal Oil Wells;
- Horizontal Oil Well Performance During Transient State;
- Transient Well Testing Techniques in Horizontal Oil Wells;
- Flow Time Equations and Solutions;
- Pressure Response Equations and Methods of Analysis;
- Horizontal Well Response and Normalized Pressure Derivative;
- Effects of Wellbore Storage.

M3 - Part 4: Pressure Drawdown Testing Techniques for Oil Wells

- Pressure-Time History for Constant-Rate Drawdown Test;
- Transient Analysis:
 - Infinite-Acting Reservoirs.
- Late Transient Analysis:
 - Bounded (Developed) Reservoirs.
- Semi-Steady-State Analysis:
 - Reservoir Limit Test.
- Two-Rate Flow Test Analysis;
- Variable-Rate Flow Tests;
- Multi-Rate Flow Test Analysis;
- Drawdown Rate Normalization Methods.

M3 - Part 5: Pressure Build-Up Analysis Techniques for Oil Wells

- Ideal Pressure Build-up Test;
- Actual Build-up Test - Infinite Reservoir;
- Pressure Build-up Test Analysis in Infinite-Acting Reservoir;
- Pressure Build-up Testing Methods for Finite (Bounded) Reservoir;
- Multiphase Build-up Test Analysis;
- After Flow Analysis Using Russel's Technique;
- Pressure Build-up Tests Preceded by Two Different Flow Rates;
- Variable-Rate Pressure Build-up Analysis;
- Rate Normalization Techniques and Procedures (Pressure Build-up Data).

M3 - Part 6: Original and Average Reservoir Pressure Estimation Methods

- Original Reservoir Pressure in Infinite Reservoirs;
- Estimating Average and Initial Reservoir Pressure;
- Estimating Constant Pressure at Aquifer in Water-Drive Reservoirs.

M3 - Part 7: Well Testing Methods for Naturally Fractured Reservoirs

- Identifications of Natural Fractures;
- Characteristics of Naturally Fractured Reservoirs;
- Typical Pressure Drawdown Behaviour Curve Shapes;
- Pressure Build-up Behaviour Characteristics;
- Well Test Interpretation:
 - Methods;
 - Uses;
 - Limitations.
- Build-up Analysis Techniques for Tight Reservoir Matrix;
- Interpretation of Interference Tests in Matrix and Fractured Reservoirs;
- Horizontal Well Pressure Behaviour Curve Shapes;
- Horizontal Well Production Forecasting:
 - Dual-Porosity Reservoir.

M3 - Part 8: Type Curve Matching Methods for Oil Wells

- Application to Conventional Tests;
- Fracture Type Curve Matching Techniques;
- Type Curves:
 - Horizontal Fractured Oil Wells.

M3 - Part 9: Flow Regime Identification and Analysis Using Special Methods

- Fracture Linear Flow Period;
- Bilinear Flow;
- Formation Linear Flow;
- Pseudo-Radial Flow;
- Type Curve Matching Methods:
 - Field Case Studies.

M3 - Part 10: Application of Pressure Derivative in Oil Well Test Analysis

- Pressure Derivative Applications in Well Test Analysis;
- Pressure Derivative Analysis Methods;
- Fractured Reservoir Systems;
- Pressure Derivative Trends for Other Common Flow Regimes.

M3 - Part 11: Massive Hydraulic-Fractured Oil Well Behaviour Analysis

- Methods of Evaluating MHF Oil Wells;
- Analysing Infinite Flow Capacity Fractures;
- Analysing Finite Flow Capacity Fractures;
- Estimating Formation Characteristics of Finite Conductivity Fractures;
- Pre-treatment Testing of Hydraulically Fractured Candidate.

M3 - Part 12: Drill-Stem Testing Methods

- DST Equipment and Operational Procedures;
- Recommended Flow and Shut-In Time for Drill-Stem Tests;
- Troubleshooting DST Pressure Charts;
- Checking Validity and Consistency of Reporting DST Data;
- Estimation of Average Flow Rate;
- DST Analysis :
 - Methods;
 - Uses;
 - Limitations.
- Wire Line Formation Test Data Evaluation.

M3 - Part 13: Interference and Pulse Test Analysis Methods

- Interference Test Analysis Techniques;
- Analysis of Pulse Test Pressure Response;
- Vertical Pulse Test Design and Analysis Methods;
- Design and Analysis of Unequal Pulses.

M3 - Part 14: Injection Well Transient Testing Analysis

- Injectivity Test Analysis Methods;
- Pressure Fall-Off Test Analysis Methods;
- Two-Rate Injectivity Test Analysis;
- Step-Rate Injectivity Testing Technique.

M3 - Part 15: Well Testing Methods in Multi-layered Oil Reservoir Systems

- Identification of Layered Oil Reservoir Systems;
- Analyzing Pressure Behaviour in Multilayered Systems;
- Concept of Reservoir Layer Fracture Conductivity;
- Pressure Production Performance Response Equations;
- Investigating Degree of Communication and Type of Crossflow;
- Pressure Build-up Characteristics in Layered Reservoir Systems;
- Pressure Analysis Methods for Oil Well Producing Commingled Zones;
- Factors Affecting Multilayered Reservoir Performance;
- Economic Aspects of Interlayer Crossflow.

M3 - Part 16: Pressure Analysis Methods in Heterogeneous Oil Reservoir Systems

- Effect of Pressure on Rock Properties;
- Major Causes of Heterogeneities;
- Pressure Responses Near No Flow Boundaries;
- Effect of Hydraulic Diffusivity on Reservoir Behaviour;
- Simple Procedures and Guidelines to Estimate Reservoir Heterogeneity properties;
- General Approach to Estimate Fracture Trends or Heterogeneity;
- Determination of Reservoir Parameter and Fracture Orientations;
- Defining Reservoir Heterogeneity by Multiple-Well Tests;
- Method for Calculating Fracture Orientation;
- Estimating Two-Dimensional Permeability with Vertical Interference Testing;
- Application of Pulse Tests to Describe Reservoir Heterogeneity;
- Validity of Various Models and Steps Used to Obtain Reservoir Description.

Module 4

Health and Safety in the Petroleum – Oil and Gas – Industry (Part 1)

Prioritising Workers' Health and Safety Interest While in the Workplace

M4 - Part 1: Health and Toxic Substances

- Baseline Examinations;
- Toxic Substances;
- Measures of Exposure;
- Standards Completion Project;
- Detecting Contaminants.

M4 - Part 2: Environmental Control and Noise

- Ventilation;
- ASHRAE Standards and Indoor Air Quality;
- Industrial Noise;
- Radiation.

M4 - Part 3: Flammable and Explosive Materials

- Flammable Liquids;
- Sources of Ignition;
- Standards Compliance;
- Combustible Liquids;
- Spray Finishing;
- Dip Tanks;
- Explosives;
- Liquefied Petroleum Gas.

M4 - Part 4: Personal Protection and First Aid

- Protection Need Assessment;
- Personal Protective Equipment (PPE) Training;
- Hearing Protection;
- Eye and Face Protection;
- Respiratory Protection;
- Confined Space Entry;
- Head Protection;
- Miscellaneous Personal Protective Equipment;
- First Aid.

Safety Precautions and Emergency Incident Risk Management

M4 - Part 5: Fire Protection

- Mechanics of Fire;
- Industrial Fires;
- Fire Prevention;
- Dust Explosions;
- Emergency Evacuation;
- Fire Brigades;
- Fire Extinguishers;
- Standpipe and Hose Systems;
- Automatic Sprinkler Systems;
- Fixed Extinguishing Systems.

M4 - Part 6: Materials Handling and Storage

- Materials Storage;
- Industrial Trucks;
- Passengers;
- Cranes;
- Slings;
- Conveyors;
- Lifting.

M4 - Part 7: Machine Guarding

- General Machine Guarding
- Safeguarding the Point of Operation
- Power Presses
- Heat Processes
- Grinding Machines

- Saws
- Miscellaneous Machine Guarding
- Miscellaneous Machines and Processes
- Industrial Robots
- Introduction to Risk Management
- Risk Retention
- Risk Identification
- Risk Evaluation
- Risk Control Techniques
- Risk Assumption and Risk Financing

Postgraduate Diploma, Postgraduate Certificate, and Diploma – Postgraduate - Short Course Regulation

Postgraduate Certificate, Postgraduate Diploma, and Diploma – Postgraduate: Their Distinction, Credit Value and Award Title


Postgraduate Short Courses of a minimum of five days' 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 to Awards bearing their title prefixes. While we refer to our short studies, of 5 days to five weeks, as 'Courses', those with duration of 6 weeks and more are labelled 'Programmes'. Nevertheless, in line with popular usage, we often refer to all study durations as 'Courses'. Another mark of distinction, in this regard, is that participants in a short course are referred to as 'Delegates', as opposed to the term 'Students', which is confined to those studying a Postgraduate Programme.

Courses are of varying Credit-Values; some being Single-Credit, Double-Credit, Triple-Credit, Quad-Credit, 5-Credit, etc. These short courses accumulate to Postgraduate Certificate, with a total of 180 Credit-Hours (= 6 X 5-Day Courses or 3 X 10-Day Courses), or Postgraduate Diploma, with a total of 360 Credit-Hours (= 12 X 5-Day Courses or 6 X 10-Day Courses).

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Delegates studying courses of 5-7 days' duration, equivalent to 30-42 Credit-Hours (Direct Lecturer Contact), will, on successful assessment, receive the Diploma – Postgraduate Award. This represents a single credit at Postgraduate Level. While 6-day and 7-day courses also lead to a Diploma – Postgraduate, they accumulate 36 and 42 Credit Hours, respectively.

Postgraduate Certificate, Postgraduate Diploma, and Diploma – Postgraduate Assessment Requirement

Because of the intensive nature of our courses and programmes, assessment will largely be in-course, adopting differing formats. These assessment formats include, but not limited to, in-class tests, assignments, end of course examinations. Based on these assessments, successful candidates will receive the Diploma – Postgraduate, Postgraduate Certificate, or Postgraduate Diploma, as appropriate.

In the case of Diploma – Postgraduate, a minimum of 70% overall pass is expected. In order 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.

Diploma – Postgraduate, Postgraduate Certificate, and Postgraduate Diploma Application Requirements

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 form;
- A copy of Issue and Photo (bio data) page of the applicant's current valid passport or copy of his or her Photo-embedded National Identity Card;
- Copies of credentials mentioned in the application form.

Admission and Enrolment Procedure

- On receipt of all the above documents we 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 Admission Letters and Invoices;
- One week after the receipt of an applicant's payment or official payment notification, the relevant Course or Programme Tutor will contact him or her, by e-mail or telephone, welcoming him or her to HRODC Postgraduate Training Institute;
- Those intending to study in a foreign country, and require a Visa, will be sent the necessary immigration documentation, to support their application;
- Applicants will be notified of the dates, location and venue of enrolment and orientation, where appropriate.

Modes of Study and Duration of Postgraduate Certificate and Postgraduate Diploma Programmes

There are two delivery formats for Postgraduate Certificate and Postgraduate Diploma Programmes, as follows:

1. Intensive Full-time (Classroom-Based) Mode, lasting 3 months for Postgraduate Diploma, and 6 weeks for Postgraduate Certificate. These durations are based on six hours' lecturer-contact per day, five days (30 hours) per week, for Postgraduate Diploma;
2. Video-Enhanced On-Line Mode. This interactive online mode lasts twenty (20) weeks, for Postgraduate Diploma, and ten (10) weeks for Postgraduate Certificate. Our calculation is based on three hours per day, six days per week.

Whichever study mode is selected, the aggregate of 360 Credit Hours must be achieved.

Introducing Our Video-Enhanced 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 tutor, ask and address questions; sit examinations in the presence of the tutor. 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 Diploma Programmes. You might also accumulate Postgraduate Short Courses, via this mode of study, over a 6-year period, towards a Postgraduate Certificate or Postgraduate Diploma.

Key Features of Our Online Study: Video-Enhanced Online Mode

- The tutor meets the group and presents the course, via Video, in a similar way to its classroom-based counterpart;
- All participants are able to 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 as long as 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

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.

Cumulative Postgraduate Certificate and Postgraduate Diploma Courses

All short courses can accumulate to the required number of Credit-Hours, for the Postgraduate Certificate and Postgraduate Diploma, over a six-year period from first registration and applies to both general and specialist groupings. In this regard, it is important to note that short courses vary in length, the minimum being 5 days (Diploma – Postgraduate) – equivalent to 30 Credit Hours, representing one credit, as is tabulated below.

On this basis, the definitive calculation on the Award requirement is based on the number of hours studied (aggregate credit-value), rather than merely the number of credits achieved. This approach is particularly useful when a student or delegate studies a mixture of courses of different credit-values.

For those delegates choosing the accumulative route, it is advisable that at least one or two credits be attempted each year. This will ensure that the required 180 Credit-Hours and 360 Credit-Hours, for the Postgraduate Certificate and Postgraduate Diploma, respectively, are achieved, within the designated period. These Credit-Values, awards and their accumulation are exemplified below.

Examples of Postgraduate Course Credits: Their Value, Award Prefix & Suffix – Based on 5-Day Multiples		
Credit Value	Credit Hours	Award Title Prefix (& Suffix)
Single-Credit	30-54	Diploma - Postgraduate
Double-Credit	60-84	Diploma – Postgraduate (Double-Credit)
Triple-Credit	90-114	Diploma – Postgraduate (Triple-Credit)
Quad-Credit	120-144	Diploma – Postgraduate (Quad-Credit)
5-Credit	150-174	Diploma – Postgraduate (5-Credit)
6-Credit	180-204	Postgraduate Certificate
7-Credit	210-234	Postgraduate Certificate (+ 1 Credit)
8-Credit	240-264	Postgraduate Certificate (+2 Credits)

Examples of Postgraduate Course Credits: Their Value, Award Prefix & Suffix – Based on 5-Day Multiples		
Credit Value	Credit Hours	Award Title Prefix (& Suffix)
9-Credit	270-294	Postgraduate Certificate (+3 Credits)
10-Credit	300-324	Postgraduate Certificate (+ 4 Credits)
11-Credit	330-354	Postgraduate Certificate (+5 Credits)
12-Credit	360	Postgraduate Diploma
360 Credit-Hours = Postgraduate Diploma		
12 X 5-Day Courses = 360 Credit-Hours = Postgraduate Diploma		
10 X 6-Day Courses = 360 Credit-Hours = Postgraduate Diploma		

Exemplification of Accumulated Postgraduate Certificate and Postgraduate Diploma Award Titles


All Specialist Postgraduate Certificate and Postgraduate Diploma Programmes have their predetermined Award Titles. Where delegates do not follow a Specialism, for accumulation to a Postgraduate Diploma, they will normally be Awarded a General Award, without any Specialist Award Title. However, a Specialist Award will be given, where a delegate studies at least seventy percent (70%) of his or her courses in a specialist grouping. These are exemplified below:

- 1. Postgraduate Diploma in Accounting and Finance;**
- 2. Postgraduate Certificate in Accounting and Finance;**
- 3. Postgraduate Certificate in Aviation Management;**
- 4. Postgraduate Diploma in Aviation Management;**
- 5. Postgraduate Certificate in Industrial Health and Safety Management, Incorporating Oil and Gas Safety;**
- 6. Postgraduate Diploma in Industrial Health and Safety Management, Incorporating Oil and Gas Safety;**
- 7. Postgraduate Certificate in Business Communication;**
- 8. Postgraduate Diploma in Business Communication;**

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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.



9. **Postgraduate Certificate in Corporate Governance;**
10. **Postgraduate Diploma in Corporate Governance;**
11. **Postgraduate Certificate in Costing and Budgeting;**
12. **Postgraduate Diploma in Costing and Budgeting;**
13. **Postgraduate Certificate in Client or Customer Relations;**
14. **Postgraduate Diploma in Client or Customer Relations;**
15. **Postgraduate Certificate in Engineering and Technical Skills;**
16. **Postgraduate Diploma in Engineering and Technical Skills;**
17. **Postgraduate Certificate in Events Management;**
18. **Postgraduate Diploma in Events Management;**
19. **Postgraduate Certificate in Health and Safety Management;**
20. **Postgraduate Diploma in Health and Safety Management;**
21. **Postgraduate Certificate in Health Care Management;**
22. **Postgraduate Diploma in Health Care Management;**
23. **Postgraduate Certificate in Human Resource Development;**
24. **Postgraduate Diploma in Human Resource Development;**
25. **Postgraduate Certificate in Human Resource Management;**
26. **Postgraduate Diploma in Human Resource Management;**
27. **Postgraduate Certificate in Information and Communications Technology (ICT);**
28. **Postgraduate Diploma in Information and Communications Technology (ICT);**
29. **Postgraduate Certificate in Leadership Skills;**
30. **Postgraduate Diploma in Leadership Skills;**
31. **Postgraduate Certificate in Law – International and National;**
32. **Postgraduate Diploma in Law – International and National;**
33. **Postgraduate Certificate in Logistics and Supply Chain Management;**
34. **Postgraduate Diploma in Logistics and Supply Chain Management;**
35. **Postgraduate Certificate in Management Skills;**
36. **Postgraduate Diploma in Management Skills;**

- 37. Postgraduate Certificate in Maritime Studies;**
- 38. Postgraduate Diploma in Maritime Studies;**
- 39. Postgraduate Certificate in Oil and Gas Operation;**
- 40. Postgraduate Diploma in Oil and Gas Operation;**
- 41. Postgraduate Certificate in Oil and Gas Accounting;**
- 42. Postgraduate Diploma in Oil and Gas Accounting;**
- 43. Postgraduate Certificate in Politics and Economic Development;**
- 44. Postgraduate Diploma in Politics and Economic Development;**
- 45. Postgraduate Certificate in Procurement Management;**
- 46. Postgraduate Diploma in Procurement Management;**
- 47. Postgraduate Certificate in Project Management;**
- 48. Postgraduate Diploma in Project Management;**
- 49. Postgraduate Certificate in Public Administration;**
- 50. Postgraduate Diploma in Public Administration;**
- 51. Postgraduate Certificate in Quality Management;**
- 52. Postgraduate Diploma in Quality Management;**
- 53. Postgraduate Certificate in Real Estate Management;**
- 54. Postgraduate Diploma in Real Estate Management;**
- 55. Postgraduate Certificate in Research Methods;**
- 56. Postgraduate Diploma in Research Methods;**
- 57. Postgraduate Certificate in Risk Management;**
- 58. Postgraduate Diploma in Risk Management;**
- 59. Postgraduate Certificate in Sales and Marketing;**
- 60. Postgraduate Diploma in Sales and Marketing;**
- 61. Postgraduate Certificate in Travel, Tourism and International Relations;**
- 62. Postgraduate Diploma in Travel, Tourism and International Relations.**

The actual courses studied will be detailed in a student or delegate's Transcript.

Service Contract, incorporating 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_Extinuating_Circumstances_Payment_Protocol_Location.htm)

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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