HRODC Postgraduate Training Institute

A Postgraduate-Only Institution

#236

Modern Electrical Engineering

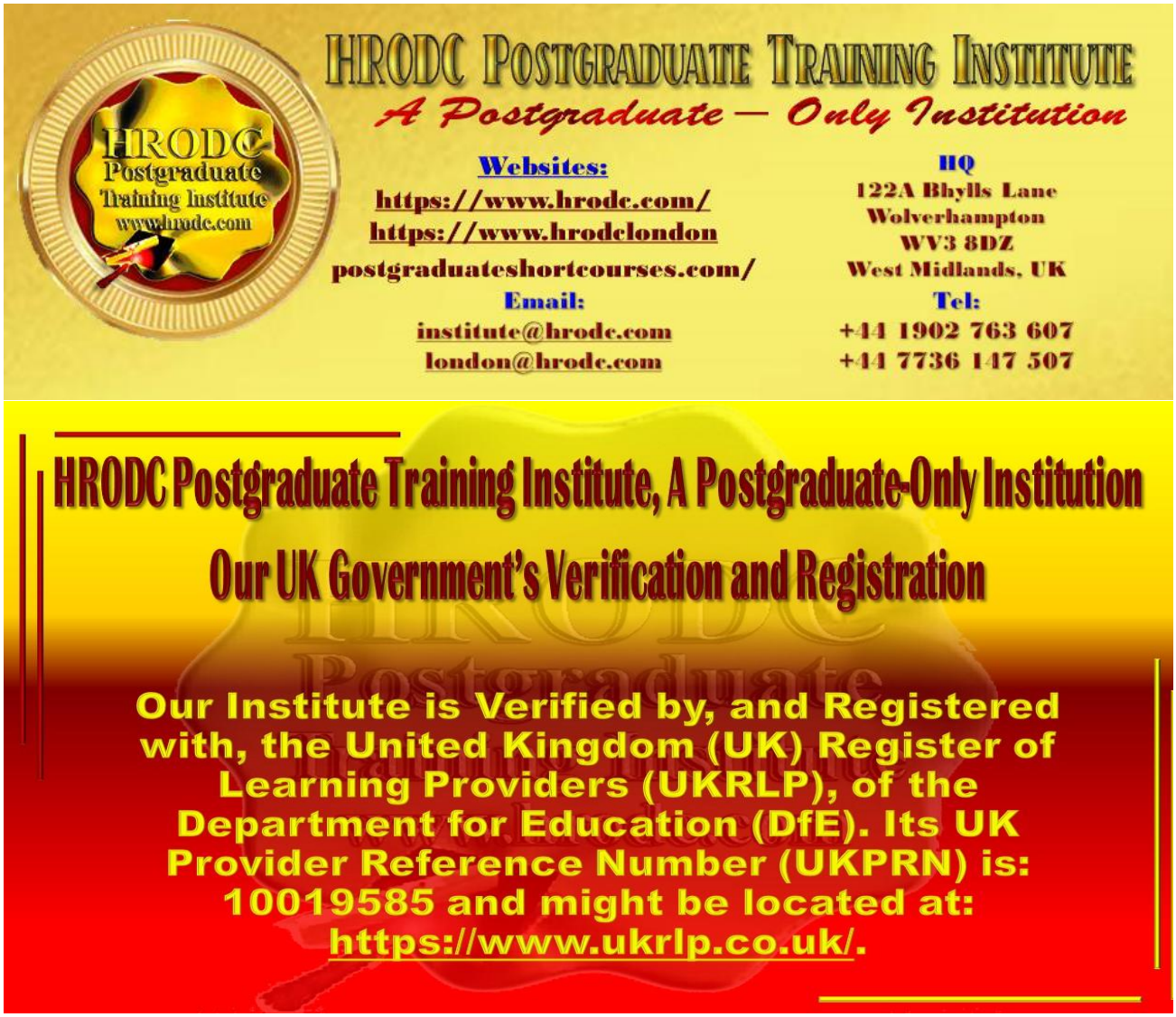
Programme

Leading To:

POSTGRADUATE DIPLOMA IN

Electrical Engineering

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.



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;

- 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

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.

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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.**

Programme for Modern Electrical Engineering Leading to Postgraduate Diploma in Electrical Engineering				
Module Number	**Pre-existing Course #**	**Module Title**	**Page #**	**Credit Value**
1	236.M1	**Essentials of Electrical Engineering and Resistive Circuits**	6	Single
2	236.M2	**Capacitance and Inductance**	8	Single
3	236.M3	**Transient Analysis**	8	Single
4	236.M4	**Steady-State AC Analysis**	9	Single
5	236.M5	**Frequency Analysis**	10	Single
6	236.M6	**Electronic Circuits**	10	Single
7	236.M7	**Power Systems and Transmission Lines**	11	Single
8	236.M8	**Logic Circuits**	12	Single
9	236.M9	**Computer-Based Instrumentation Systems**	13	Single
10	236.M10	**Principles of Electromechanics**	13	Single
11	236.M11	**Electric Machines**	14	Single
12	236.M12	**Electrical Measurement Instruments and Electrical Safety**	15	Single

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Programme for Modern Electrical Engineering Programme

Leading to Postgraduate a Postgraduate Diploma in Electrical Engineering

Programme Contents, Concepts and Issues

Module 1
Essentials of Electrical Engineering and Resistive Circuits

M1 - Part 1: Essentials of Electrical Engineering

- Introduction to Electrical Engineering;
- Charge and Current;
- Voltage;
- Respective Direction of Voltage and Current;
- Kirchhoff's Current Law;
- Kirchhoff's Voltage Law;
- Ohm's Law and Resistors:
  - Resistivity of a Resistor;
  - Nonlinear Resistors;
  - Time-Varying Resistors.
- Power and Energy:
  - Resistor-Consumed Power.
- Independent and Dependent Sources;
- Analysis of Circuits Using PSpice;
- Bias Point Analysis;
- Transient Analysis.

M1 - Part 2: Resistive Circuits

- Introduction to Resistive Circuits;
- Resistors in Parallel and Series and Equivalent Resistance;
- Voltage and Current Division/Divider Rules:
  - Voltage Division;
  - Current Division.
- Nodal and Mesh Analysis:
  - Nodal Analysis;
  - Mesh Analysis.
- Special Conditions: Super Node;
- Thevenin/Norton Equivalent Circuits:
  - Source Transformation.
- Superposition Principle;
- Maximum Power Transfer;
- Circuits Analysis.

Module 2 (Double Credit)
Electrical Engineering: Capacitance and Inductance

- Introduction to Capacitance and Inductance;
- Capacitors:
  - The Relationship Between Charge, Voltage, and Current;
  - Power;
  - Energy.
- Capacitors in Series and Parallel:
  - Series Capacitors;
  - Parallel Capacitance.
- Inductors:
  - The Relationship Between Voltage and Current;
  - Power and Stored Energy.

- Inductors in Series and Parallel:
  - Inductors in Series;
  - Inductors in Parallel.
- Applications of Capacitors and Inductors:
  - Fuel Sensors.
- Vibration Sensors.

Module 3
Electrical Engineering: Transient Analysis

- Introduction to Transient Analysis;
- First-Order Circuits;
- Resistor-Capacitor (RC) Circuits;
- Resistor-Inductor (RL) Circuits;
- Direct Current (DC) Steady State;
- Direct Current (DC) Steady State for Capacitive–Inductive Circuits;
- Second-Order Circuits:
  - Series Resistor-Inductor-Capacitor (RLC) Circuits with a Direct Current (DC) Voltage Source;
  - Parallel Resistor-Inductor-Capacitor (RLC) Circuits with a Direct Current (DC) Voltage Source.
- Transient Analysis with Sinusoid Forcing Functions.

Module 4
Electrical Engineering: Steady-State AC Analysis

- Introduction: Sinusoidal Voltages and Currents 215:
  - Root-Mean-Square (RMS) Values;
  - Instantaneous and Average Power.
- Phasors:
  - Phasors in Additive or (Subtractive) Sinusoids.
- Complex Impedances:

- The Impedance of a Resistor;
- The Impedance of an Inductor;
- The Impedance of a Capacitor;
- Series Connection of Impedances;
- Parallel Connection of Impedances.

➢ Steady-State Circuit Analysis Using Phasors;

➢ Thevenin and Norton Equivalent Circuits with Phasors:

- Thevenin Equivalent Circuits with Phasors;
- Norton Equivalent Circuits with Phasors.

➢ Alternating Current (AC) Steady-State Power:

- Average Power;
- Power Factor;
- Reactive Power;
- Complex Power;
- Apparent Power;
- Maximum Average Power Transfer;
- Power Factor Correction.

Module 5
Electrical Engineering: Frequency Analysis

➢ Introduction to Frequency Analysis;

➢ First-Order Filters:

- Transfer Functions.

➢ Low-Pass Filters:

- Magnitude and Phase Plots;
- Decibels;
- Bode Plot.

➢ High-Pass Filters:

- Cascaded Networks.

➢ Second-Order Filters:

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- Band-Pass Filters;
- Band-Stop Filters.

Module 6 (Double Credit)
Electrical Engineering: Electronic Circuits

- Introduction to Electronic Circuits;
- P-Type and N-Type Semiconductors;
- Diodes:
  - Diode Applications;
  - Different Types of Diodes;
  - Alternating Current (AC) to Direct Current (DC) Converter.
- Transistors:
  - Bipolar Junction Transistor;
  - Transistor as an Amplifier;
  - Transistors as Switches;
  - Field-Effect Transistors;
  - Design of NOT Gates or Inverter Using N-type metal-oxide-semiconductor (NMOS) Only for High-Density Integration;
  - Design of a Logic Gate Using Complementary Metal-Oxide Semiconductor (CMOS).
- Operational Amplifiers.

Module 7
Electrical Engineering: Power Systems and Transmission Lines

- Introduction to Power Systems and Transmission Lines;
- Three-Phase Systems:
  - Introduction;
  - Phase Sequence;
  - Y-Connected Generators;

- Y-Connected Loads;
- -Connected Loads;
- -Star and Star- Transformations;
- Power in Three-Phase Systems;
- Advantages of Three-Phase Systems.

➢ Transmission Lines:

- Introduction;
- Resistance (R);
- Different Types of Conductors;
- Inductance (L);
- Capacitance.

Transmission Line Equivalent Circuits

Module 8
Electrical Engineering: Logic Circuits

➢ Introduction to Logic Circuits;

➢ Number Systems:

- Binary Numbers;
- Hexadecimal Numbers;
- Octal Numbers.

➢ Boolean Algebra:

- Boolean Inversion;
- Boolean AND Operation;
- Boolean OR Operation;
- Boolean NAND Operation;
- Boolean NOR Operation;
- Boolean XOR Operation;
- Summary of Boolean Operations;

- Rules Used in Boolean Algebra;
- De Morgan's Theorems;
- Commutativity Rule;
- Associativity Rule;
- Distributivity Rule 454.

➢ Basic Logic Gates:

- The NOT Gate;
- The AND Gate;
- The OR Gate;
- The NAND Gate
- The NOR Gate
- The XOR Gate
- The XNOR Gate

➢ Sequential Logic Circuits

- Flip-Flops
- Counter

Module 9
Electrical Engineering: Computer-Based Instrumentation Systems

➢ Introduction to Computer-Based Instrumentation Systems;

➢ Sensors:

- Pressure Sensors;
- Temperature Sensors;
- Accelerometers;
- Strain-Gauges/Load Cells;
- Acoustic Sensors;
- Linear Variable Differential Transformers (LVDT).

➢ Signal Conditioniner;

➢ Analog-to-Digital Conversion;

➢ Grounding Issues:

- Ground Loops.

Module 10
Electrical Engineering: Principles of Electromechanics

- Introduction to Principles of Electromechanics;
- Magnetic Fields:
  - Magnetic Flux and Flux Intensity;
  - Magnetic Field Intensity;
  - The Right-Hand Rule;
  - Forces on Charges by Magnetic Fields;
  - Forces on Current-Carrying Wires;
  - Flux Linkages;
  - Faraday's Law and Lenz's Law.
- Magnetic Circuits:
  - Magnetomotive Force;
  - Reluctance.
- Mutual Inductance and Transformers:
  - Mutual Inductance 539;
  - Transformers.
- Different Types of Transformers.

Module 11
Electrical Engineering: Electric Machines

- Introduction to Electric Machines:
  - Features of Electric Machines;
  - Classification of Motors.
- Direct Current (DC) Motors:
  - Principle of Operation;

- Assembly of a Typical Direct Current (DC) Motor;
- Operation of a Direct Current (DC) Motor;
- Losses in Direct Current (DC) Machines.

➢ Different Types of Direct Current (DC) Motors:

- Analysis of a Direct Current (DC) Motor;
- Shunt-Connected Direct Current (DC) Motor;
- Separately Excited Direct Current (DC) Motors;
- Permanent Magnet (PM) Direct Current (DC) Motor;
- Series-Connected Direct Current (DC) Motor;
- Summary of Direct Current (DC) Motors.

➢ Speed Control Methods:

- Speed Control by Varying the Field Current;
- Speed Control by Varying the Armature Current.

➢ DC Generators:

- The Architecture and Principle of Operation of a DC Generator;
- Electromagnetic Force (EMF) Equation.

➢ Different Types of Direct Current (DC) Generators:

- Load Regulation Characteristics of DC Generators;
- Separately Excited DC Generator;
- Shunt-Connected DC Generator.

➢ AC Motors:

- Three-Phase Synchronous Motors;
- Three-Phase Induction Motor;
- Losses in AC Machines;
- Power Flow Diagram for an AC Motor;

➢ AC Generators

- Construction and Working
- Winding Terminologies for the Alternator
- The emf Equation of an Alternator

➢ Special Types of Motors

- Single-Phase Induction Motors
- Stepper Motors

- Brushless DC Motors
- Universal Motors

➢ How Is the Most Suitable Motor Selected?

Module 12
Electrical Engineering: Electric Measurement Instrument and Electrical Safety

M12 - Part 1: Electrical Measurement Instrument

➢ Introduction to Electrical Measurement Instrument?;

➢ Measurement Errors;

➢ Basic Measurement Instruments:

- An Ammeter Built Using a Galvanometer;
- A Voltmeter Built Using a Galvanometer;
- An Ohmmeter Built Using a Galvanometer;
- Multi-Meters.

➢ Time Domain and Frequency Domain:

- The Time Domain;
- The Frequency Domain;
- Time Domain Versus Frequency Domain.

➢ The Oscilloscope;

➢ The Spectrum Analyzer:

- Adjusting the Spectrum Analyzer's Display Window.

➢ The Function Generator.

M12 - Part 2: Electrical Safety

➢ Introduction to Electrical Safety;

➢ Electric Shock:

- Shock Effects;

- Shock Prevention.

➢ Electromagnetic Hazards:

- High-Frequency Hazards;
- Low-Frequency Hazards;
- Avoiding Radio Frequency Hazards.

➢ Arcs and Explosions:

- Arcs;
- Blasts;
- Explosion Prevention.

➢ The National Electric Code:

- Shock Prevention;
- Fire Prevention.

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

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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).

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.

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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.

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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.

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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)

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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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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;**

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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 n 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.

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