

HRODC Postgraduate Training Institute

A Postgraduate-Only Institution

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Petroleum - Oil and Gas - Engineering:
Oil and Gas Operation, Pipeline Engineering
Non-Destructive Testing (NDT), Health, Safety, Project Management and
Business Report Writing

Programme

Leading To:

**DIPLOMA – POSTGRADUATE IN
International Petroleum - Oil and Gas –
Engineering and Business Management**

**Progressing To A Msc
International Petroleum - Oil and Gas –
Engineering and Business Management**

Programme Coordinator:

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

- Doctor of Philosophy {(PhD) (University of London)};
- MEd. Management (University of Bath);
- Advanced Dip. 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 Academy of Management (MAoM), within the following Management Disciplines:
 - 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.
- 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);
- Life Member of Malaysian Institute of Human Resource Management (LMIHRM);
- Member of ResearchGate Community;
- Member of Convocation, University of London;
- Professor HRODC Postgraduate Training Institute.

Prof. Crawford was an Academic at:

- University of London (UK);
- London South Bank University (UK);

- University of Greenwich (UK); and
- University of Wolverhampton (UK).

For Whom This Programme 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.

Duration:

3 Months Intensive Full-Time (5 Days Per Week) or
6 Months Full-Time (2-2.5 Days Per Week)

Cost:£45,000.00Per Delegate

Please Note:

- V.A.T. (Government Tax) does not apply to Corporate Sponsored Individuals, taking Programmes or Courses in any location - within or outside the UK.
- It applies only to Individuals and Corporations based in the UK and to Non-UK Individual Residents taking courses in the UK.

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 in International Petroleum – Oil and Gas – Engineering and Business Management;** or
- Certificate of Attendance and Participation – if unsuccessful on resit.

HRODC Postgraduate Training Institute's Complimentary Products include:

1. HRODC Postgraduate Training Institute's **Leather Conference Folder**;
2. HRODC Postgraduate Training Institute's **Leather Conference Ring Binder/ Writing Pad**;
3. HRODC Postgraduate Training Institute's **Key Ring/ Chain**;
4. HRODC Postgraduate Training Institute's **Leather Conference (Computer – Phone) Bag** – Black or Brown;
5. HRODC Postgraduate Training Institute's **8GB USB Flash Memory Drive**, with Programme Material;
6. HRODC Postgraduate Training Institute's **Metal Pen**;
7. HRODC Postgraduate Training Institute's **Polo Shirt**, at Programme Start and End.

Please see product images, as a separate file - Complimentary Products For Students and Delegates, from HRODC Postgraduate Training Institute.

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

Location: Central London and International Locations

Programme for Petroleum – Oil and Gas – Engineering: Oil and Gas Operation, Pipeline Engineering, Non-Destructive Testing (NDT), Health, Safety, Project Management and Business Report Writing Leading to Postgraduate Diploma and MSc International Petroleum – Oil and Gas – Engineering and Business Management

Module Number	Pre-existing Course #	Module Title	Page #	Credit Value
1	090	Oil and Gas Operation	10	Double
2		Advanced Project Management For Oil and Gas Operation	27	Single
3	199 m7 & 8	Health and Safety in the Oil and Gas Industry	30	Double
4	171	Business Report Writing	35	Double
5	197	Petroleum - Oil and Gas - Pipeline Engineering	39	Quad
6	198	Non-Destructive Testing (NDT)	44	Single

Programme Objectives

By the conclusion of the specified learning and development activities, delegates will be able to:

- Determine the importance of 3D and 4D seismic in locating oil and gas reserves;
- Understand the basic of joint venture contract;
- Differentiate upstream, midstream and downstream oil and gas industry;
- Identify what constitute horizontal, vertical and full integration activities;
- Know the procedures involved in oil and gas exploration and production;
- Enumerate the different downstream activities;
- Specify the advantages and disadvantages of exploring vertical integration;
- Ascertain the factors favouring horizontal integration;
- Establish the governing policy among the parties in oil well lease;
- Describe the nature of long-term explicit contracts;
- Learn the basic of franchise agreement in the oil and gas sector;
- Realise the importance of joint ventures in the oil and gas exploration and production;

Programme Contents, Concepts and Issues

Module 1 Oil and Gas Operation

M1 - Part 1: Oil and Gas Conceptual and Contextual Exploration (1)

- 3-D Seismic
- 4-D Seismic
- Acidizing a well
- AFE (Authorization For Expenditure)
- Annular space

M1 - Part 2: Oil and Gas Conceptual and Contextual Exploration (2)

- Biomass

- Bleeding core
- Blind pool
- Blowout

M1 - Part 3: Oil and Gas Conceptual and Contextual Exploration (3)

- Capital asset
- Capital costs (Oil & Gas Tax Usage)
- Capital expenditure
- Capitalization

M1 - Part 4: Oil and Gas Conceptual and Contextual Exploration (4)

- Coal gasification
- Coal liquefaction
- Cogeneration
- Commissions
- Diesel oil

M1 - Part 5: Oil and Gas Conceptual and Contextual Exploration (5)

- Domestic production
- Down hole
- Downstream
- Drill bit
- Drill string

Module 2 Advanced Project Management: The Planning Process

M2 – Part 1: Project Management: Overview (1)

- Project Defined;
- Distinction between Project and Task;
- Project Classification;
- Pre-Project Commissioning;

M2 - Part 2: Project Initiation

- Pre-feasibility and Feasibility Studies;
- Pre-Project Commissioning;
- Basic Steps of the Project Initiation Phase;
- Using Project Selection Models/Methods:

M2 - Part 3: Project Planning Process (1)

- Defining the Project Scope;
- Project Priority;
- The Triple Constraints;

Module 3

Health and Safety in Petroleum – Oil and Gas – Industry

Prioritising Workers' Health and Safety Interest While in the Workplace

M3. Part 1: Health and Toxic Substances

- Baseline Examinations;
- Toxic Substances;
- Measures of Exposure;

M3. Part 2: Environmental Control and Noise

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

M3. Part 3: Flammable and Explosive Materials

- Flammable Liquids;
- Sources of Ignition;
- Standards Compliance;

M3. Part 4: Personal Protection and First Aid

- Protection Need Assessment;
- Personal Protective Equipment (PPE) Training;
- Hearing Protection;

Safety Precautions and Emergency Incident Risk Management

Module 4 Business Report Writing

M4 - Part 1: A Style Guide to Good Report Writing

- Report style;
- Achieving an Appropriate and Effective Style;
- Choice of Words and Phrases;

M4 - Part 2: Report Characteristics and Organisation

- Components of an Effective Report;
- Agreeing Collaborative Objectives;
- Techniques in Ordering Report Information;
- Purpose of an Executive Summary;

M4 - Part 3: Empirical Research for Business Reports

- Surveys;
- Participant Observation;
- Conversation Analysis;

M4 - Part 4: Information Sources for Business Reports

- Sources of Information;
- Reviewing Literature;
- Choosing The Methodology;

Module 5 Petroleum – Oil and Gas – Pipeline Engineering

M5 - Part 1: PIPE FLOWS (1)

Pipelines

- Definition and Scope;
- Brief History of Pipelines;
- Existing Major Pipelines;

M5 - Part 2: PIPE FLOWS (2)

Single-Phase Incompressible Newtonian Fluid

- Flow Regimes;
- Local Mean Velocity and Its Distribution (Velocity Profile);
- Flow Equations for One-Dimensional Analysis;

M5 - Part 3: PIPE FLOWS (3)

Single-Phase Compressible Flow in Pipe

- Flow Analysis for Ideal Gas;
- Flow Analysis for Real (Non-Ideal) Gas;
- Work, Energy and Power Required for Compression of Gas.

Non-Newtonian Fluids

- Classification of Non-Newtonian Fluids;
- Rheological Properties and Laws of Non-Newtonian Fluids;
- Non-Newtonian Pipe Flow: Laminar;
- Non-Newtonian Pipe Flow: Turbulent.

Module 6 Non-Destructive Testing (NDT)

M6 - Part 1: Non-Destructive Testing (NDT)

- Defining Non-Destructive Testing (NDT);
- Importance and Applications of Non-Destructive Testing;
- Non-Destructive Testing Techniques;

M6 - Part 2: Principles of Ultrasonic Testing

- Understanding the Frequency of Ultrasonic Waves;
- Generation of Ultrasonic Waves;
- Piezo-electric Materials for Ultrasonic Transducers;

M6 - Part 3: EDDY Current Testing

- Electrical Properties of Carbon Fibre Reinforced Plastics;
- Principle of Eddy-current Testing;
- Application of Eddy-current testing;

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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_Extinguishing_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. R. B. Crawford - Director HRODC Postgraduate Training Institute