HRODC Postgraduate Training Institute

A Postgraduate-Only Institution

245

Advanced Legal – Dynamic Metrology: NIST,NCWM, EURAMET, WELMEC, and NPL Compliant

Programme

Leading To:

DIPLOMA – POSTGRADUATE IN

Advanced Legal – Dynamic Metrology

Progressing To *MSc*

For Whom This Programme is Designed

This Programme is Designed For:

- Aviation Maintenance Engineers;
- Department of Trade Technical Team Members;
- Design Engineers;
- Dynamic Metrology.
- Engineering Managers;
- Instrumentation and Control Engineers;
- International Laboratory Standard Setters;
- Legal Metrologists;
- Legal Metrology Enforcement Officers;
- Machine Operators;
- Machinists;
- Manufacturing Engineers;
- Measurement Specialists;
- Mechanical Engineers;
- Metrologists, Generally;
- Metrology Technicians;
- National Air Force Technical Training Managers;
- National Metrology Laboratory Co-ordinators;
- National Physics Laboratory Employees;
- Officials of Department of Commerce;
- Physics Laboratory Metrologists;
- Precision Engineers;
- Process Engineers;
- Quality Control Inspectors;
- Quality Specialists;
- Trading Standards Enforcers;
- Quality Inspectors;
- Weights and Measures Inspectors;
- Quality Engineers and Technicians;
- Quality Managers;
- Regional Metrology Laboratory Directors;
- Scientific Laboratory Assistants;

- Scientific Laboratory Directors;
- Technology Educators;
- Testers;
- Weights and Measures Specialists;
- All others desirous of enhancing their knowledge, skills and expertise in Legal-Metrology.

Programme Co-ordinator:
Prof. Dr. B. Crawford - Director HRODC Postgraduate Training Institute

- PhD (University of London),
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- MEd. M. (University of Bath),
- Adv. Dip. Ed. (University of Bristol),
- PGCIS (Thames Valley University),
- ITC (UWI),
- Member of the Standing Council of Organisational Symbolism (MSCOS);
- Member of the Asian Academy of Management (MAAM);
- Member of the International Society of Gesture Studies (MISGS);
- Member of the Academy of Management (MAOM);
- LESAN;
- Professor, HRODC Postgraduate Training Institute;
- Visiting Professor, Polytechnic University of the Philippines (PUP)

Duration:

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

Cost: £45,000.00 per Student

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 Advanced Legal-Dynamic Metrology**; 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.

Location: Central London – UK and International Locations

Advanced Legal-Dynamic Metrology: NIST, NCWM, EURAMET, WELMEC, and NPL Compliant Programme
Leading to Postgraduate Diploma in Advanced Legal-Dynamic Metrology

Programme Contents, Concepts and Issues

Module 1 (Double Credit)

Legal, Dynamic and Deterministic Metrology: Metrology with ISO 9000 Conformity, Leading to Diploma – Postgraduate in

Legal, Dynamic and Deterministic Metrology: Metrology with ISO 9000 Conformity (Double Credit)

M1 - Part 1 – Requirements of ISO 9000 Standards for Test and Measuring Equipment

Introduction to, and Relevance of, Metrology

Exploring Fundamental Concepts of Metrology

ISO 9000

M1 - Part 2 – Exploring Fundamental Concept of Metrology

M1 - Part 3 – Linear and Angular Measurements

Length Measurement

Calibration of Dimensional Standards and Measuring Instruments

Angular Measurement

M1 - Part 4 – Mass Measurements (1)

Mass Measurements

Types and Classes of Mass Measurements

M1 - Part 5 – Mass Measurements (2)

Industrial Weighing Systems

Calibration of Balances

M1 - Part 6 – Pressure Measurements

Introduction to Pressure Measurements

Pressure Measuring Instruments

Calibration of Pressure Standards and Instruments

M1 - Part 7 – Measurement of Force

Introduction to Measurement of Force

Force Measuring Instruments

Calibration of Force Standards and Test Instruments

M1 - Part 8 – Measurement of Temperature

Introduction to Measurement of Temperature

Calibration of a Multifunction Calibrator

M1 - Part 9 – Electrical Measurement Standards

M1 - Part 10 – Uncertainty of Measurements

Module 2
Accelerometers: Their Design, Function and Calibration Course, Leading to Diploma – Postgraduate – in Design, Function and Calibration of Accelerometers

M2 – Part 1: Accelerometers: Their Design Principles and Application (1)

M2 – Part 2: Accelerometers: Their Design Principles and Application (2)

M2 – Part 2: Development and Types of Accelerometers

M2 – Part 3: Calibrating Accelerometers

M2 – Part 4: The Use of Shakers in the Calibration of Accelerometers

M2 – Part 5: Errors and Error-Minimisation in Accelerometers

Module 3
Advanced Specifications and Tolerances of Standards, and Weights and Measures Program Requirements and Assessment

M3 – Part 1: Advanced Specifications and Tolerances of Standards (1)

M3 – Part 2: Advanced Specifications and Tolerances of Standards (2)

M3 – Part 3: Weights and Measures Program Requirements and Assessment (1)

- The Commercial Measurement System;
- Weights and Measures Laws and Regulations;
- The Regulatory Function of Weights and Measures;

M3 – Part 4: Weights and Measures Program Requirements and Assessment (2)

- Type Evaluation Program;
- Weighmaster Law;

Module 4

The Role of the Metrology Laboratory in Maintaining Standard

M4 – Part 1 –Standards and Roles

M4 – Part 2 –General Laboratory Operation and Management

M4 – Part 3 –Managing the Regulatory Environment

M4 – Part 4 –Reviewing Exemplars of Instruments and Evidence (1)

M4 – Part 5 – Reviewing Exemplars of Instruments and Evidence (2)

M4 – Part 6: Some International and National Metrology Laboratoriesand Their Contribution to Legal Metrology Standards

Module 5

Specifications and Tolerances for Reference Standards and Field Standard Weights and Measures: National Institute of Standards and Metrology (NIST) and National Conference on Weights and Measures (NCWM) Compliant

M6 – Part 1: Preliminary Issues

M6 – Part 2: Terminology and General Specifications (1)

M6 – Part 3: Terminology and General Specifications (2)

M6 – Part 4: Understanding and Using Tolerances

M6. Part 5: Uncertainties and User Requirements

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

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