



HARNESS THE POWER  
OF KNOWLEDGE

**Comprehensive Training Program  
on Legal Metrology in  
Hydrocarbon Metering**

**TRAIN**



## Introduction

Legal metrology plays a crucial role in ensuring the accuracy, fairness, and transparency of hydrocarbon metering measurements

This comprehensive 5-day training program, delivered by Global Business Minds, will equip participants with in-depth knowledge and practical skills to effectively apply legal metrology principles in hydrocarbon metering systems

### Day 1: Fundamentals of Legal Metrology in Hydrocarbon Metering

- Overview of legal metrology and its significance in hydrocarbon metering
- Understanding the principles of measurement accuracy, uncertainty, and traceability
- Familiarization with legal metrology regulations, standards, and guidelines applicable to hydrocarbon metering
- Exploration of the legal metrology framework for hydrocarbon metering devices and systems

### Day 2: Hydrocarbon Metering Technologies and Legal Metrology Considerations

- In-depth analysis of various hydrocarbon metering technologies, including positive displacement meters, mass flowmeters, and ultrasonic flowmeters
- Examination of the legal metrology requirements and considerations for each type of hydrocarbon metering technology
- Assessment of the impact of operating conditions, environmental factors, and fluid properties on metering accuracy
- Familiarization with calibration procedures and techniques for hydrocarbon metering devices

### Day 3: Legal Metrology Compliance in Hydrocarbon Metering Operations

- Implementing legal metrology compliance procedures and practices in hydrocarbon metering operations
- Developing and maintaining a comprehensive legal metrology management system
- Conducting regular audits and inspections to ensure compliance with legal metrology requirements
- Addressing legal metrology non-conformities and implementing corrective actions

### Day 4: Legal Metrology Documentation and Recordkeeping in Hydrocarbon Metering

- Maintaining accurate and comprehensive records of hydrocarbon metering activities
- Creating and managing legal metrology documentation, including calibration certificates, inspection reports, and maintenance records
- Understanding the importance of data integrity and traceability in legal metrology
- Applying legal metrology documentation and recordkeeping practices to ensure compliance and facilitate traceability

### Day 5: Advanced Topics in Legal Metrology in Hydrocarbon Metering

- Exploring emerging trends and advancements in legal metrology for hydrocarbon metering
- Addressing legal metrology challenges in unconventional hydrocarbon applications, such as liquefied natural gas (LNG) and shale gas
- Staying up-to-date with the latest legal metrology regulations, standards, and guidelines
- Discussing best practices for continuous improvement and innovation in legal metrology for hydrocarbon metering

## Target Audience

This training program is designed for engineers, technicians, and professionals involved in hydrocarbon metering operations, including:

- Oil and gas production companies
- Pipeline operators
- Metering station operators
- Regulatory authorities
- Independent testing and calibration laboratories

- Equipment manufacturers

### Learning Outcomes

Upon completion of this training program, participants will be able to:

- Demonstrate in-depth knowledge of legal metrology principles and their application to hydrocarbon metering
- Identify and apply legal metrology requirements and considerations for different hydrocarbon metering technologies
- Implement legal metrology compliance procedures and practices in hydrocarbon metering operations
- Maintain accurate and comprehensive legal metrology documentation and records
- Stay up-to-date with the latest advancements and best practices in legal metrology for hydrocarbon metering

Certificate Delivered by Global Business Minds:

- Certificate of Completion in Legal Metrology in Hydrocarbon Metering

### Additional Notes

- This detailed professional training program can be tailored to specific industry requirements and application needs
  
- Hands-on exercises and case studies can be customized to reflect real-world challenges and scenarios faced by participants
  
- The training can be delivered in a blended format, combining in-person sessions with online modules for flexibility and accessibility
  
- Global Business Minds can provide ongoing support and resources to participants to ensure their continued success in applying legal metrology in hydrocarbon metering