This course uses a variety of rich multi-media techniques to provide learners with an underpinning knowledge of P&IDs. It examines process flow schemes, process flow diagrams, and piping and instrument drawings. It also examines reading process diagrams, process systems and instrument systems.

Learning Methods

- e-learning

Course Duration

90 minutes

Targeted Participants

Seawater and Firewater

Business Benefits of E-learning

Our e-learning courses will not only improve your business efficiency and employee performance, but will also reduce training costs and down time compared to traditional learning, whilst improving knowledge retention and compliance.

Features

- Capability for individual companies to add plant-specific materials (video clips / presentations / web-links / pdfs etc.)
- E-learning modules tie into paper-based modules covering mathematics, communications and IT skills
- Bookmarking allows learners to leave the course and rejoin at the same point

- SCORM™ 1.2 compliant
- Leads to a BTEC Advanced Award in Oil and Gas Extraction Theory
- Continuous and final assessment
- Interactive 3D models as well as consistent use of detailed animated graphics to represent the concepts being discussed
- Technical content geared for the target audience and presented in a clear and concise manner
- Fully accessible glossary that can be accessed at any point throughout the course
- Modules can be purchased independently, or as a complete package
- Integrated trainee results management system
- Courses have been produced in collaboration with a recognised training leader in the field of Oil and Gas

Course Content

- Module 1: Introduction to P&IDs
- Module 2: Process Flow Schemes
- Module 3: Process flow Diagrams
- Module 4: Piping and Instrument Drawings
- Module 5: Reading Process Diagrams
- Module 6: Process Systems
- Module 7: Instrument Systems

Learning Objectives

- Identify the three main drawing types used by process operations personnel in the Oil and Gas Industry
- Explain why drawings use standardised codes and symbols
- Identify the purpose of symbols
- Identify the purpose of codes
- Describe standards with regard to codes and symbols
- Explain why Legend Sheets are required
- Illustrate the layout of a sample Legend Sheet
- Explain when a Process Flow Scheme is required
- Describe the layout of a typical Process Flow Scheme
- Identify when a Process Flow Diagram is required
- Describe the layout of a Process Flow Diagram
- Outline the design and creation of a typical Process Flow Diagram
- Identify the four key sections of a Process Flow Diagram
Process and Instrument Diagrams

- Identify the principle use of a Process Flow Diagram and how changes are marked on this diagram.
- Identify when a Piping and Instrument Diagram is required.
- Identify the three key sections of the P&ID.
- Describe the Engineering Flow Diagram section of the P&ID.
- Describe the Specific Notes Section of the P&ID.
- Describe the drawing history and identification section of the P&ID.
- Explain the design and creation of a typical P&ID.
- Identify the different processes used onsite by line recognition.
- Explain the importance of numbering equipment and the different types of number classification systems that are used on P&IDs.
- Explain the importance of using abbreviations on P&IDs.
- Explain that P&IDs are constructed as line drawings and the importance of being able to identify the common line symbols used.
- Explain how valves are displayed on P&IDs.
- Identify how some smaller pieces of equipment are represented on P&IDs.
- Explain how common pumps and other equipment symbols are displayed on P&IDs.
- Explain how Fire Protection Systems are displayed on P&IDs.
- Explain how Instrument Systems are displayed on P&IDs and recognise where to find further information on the instrumentation symbols.
- Define the term Level Control and explain how it is displayed on P&IDs.
- Define the term Pressure Control and explain how it is displayed on P&IDs.
- Define the term Flow Control and explain how it is displayed on P&IDs.
- Define the term Temperature Control and explain how it is displayed on P&IDs.
- Define the term Flow Control and explain how it is displayed on P&IDs.