



## **EL504 Drawing Interpretation Online Course**

### **Module 1**

- Drawing Interpretation Introduction
  - Draw production
  - Standards
  - Design
  - Inspection

### **Module 2**

- Drawing Layout
  - Parts of two-dimensional drawings
  - Sizes and codes

### **Module 3**

- Part Views
  - View projection
  - Projection systems
  - Surface types
  - Line types
  - Multiview drawing visualization
  - Exercises

### **Module 4**

- Auxiliary Views
  - Define and recognize auxiliary views
  - Successive auxiliary views
  - Partial Views
  - Secondary auxiliary view
  - Exercise

### **Module 5**

- Isometric and Oblique Views
  - Pictorial Views
    - ASME Y14.4 Pictorial Drawings standard/ ASME Y14.41 Digital Product Definition Data Practices standard
  - Axonometric Projection
  - Oblique Projection
  - Exercises

## Module 6

- Module 6: Section Views
  - Section line patterns
  - Section types
  - Exercises
  - Quiz

## Module 7

- General Dimensioning
  - ASME Y14.5-2009 Dimensioning and Tolerancing standard
  - Feature types
  - Dimension elements
  - Dimension construction
  - General dimensions
  - Exercises
  - Quiz

## Module 8

- Tolerances
  - Size Features
  - Dimension Expression
  - Terminology
  - Envelope Principle
  - Dimensioning Rules
  - Tolerance Allocation
  - Exercises
  - Quiz

## Module 9

- Surface Texture
  - Surface Texture Symbols and Characteristics
  - Proper placement of surface characteristics on a surface texture symbol
  - Exercises
  - Quiz



## **Module 10**

- Fasteners
  - Thread Characteristics
  - Thread Notes
  - Thread Drawing Appearance
  - Pipe Threads
  - Thread Uses
  - Washers
  - Nuts
  - Other Threaded Fastener Factors
  - Keys
  - Splines, Gears and Serrations
  - Pins
  - Retaining rings
  - Springs
  - Cams
  - Exercises
  - Quiz

## **Module 11**

- Welding
  - Common weld joints
  - Common weld type symbols
  - Parts of the weld symbol
  - Quiz
- Final Exam