

Technical Bridging Course

Overview

Our Technical Bridging Course is tailored for those who do not have any knowledge or background in technical drawing but wishes to enrol for our Multi-Disciplinary Draughting National Certificate. Completing this 5 day course will bridge the gap for someone with no technical drawing experience into the exciting and broad world of design Draughting.

Features and Benefits

1. You do not need any drawing experience to do this course.
2. Get your foundation right by learning the fundamentals of technical drawings before you launch your career as a draughtsman.
3. No equipment needed, you will get everything you need in your study kit. This will include a notepad, sketchpad, A3 drawing board, eraser, pencils, compass and scale ruler.

Admission Requirements

No admission requirements.

Articulation Options

On successful completion of this qualification, you can articulate into the following:

- Direct access into the Multi-Disciplinary Draughting National Certificate at second year level.

Mode of Delivery

Full Time / Online

Included in Price

- Drawing for Engineering Manual
- Basic Drawing equipment
- Automatic acceptance for the MDDOP Draughting course

Salaries & Skills

SALARIES (ANNUAL)



SA

Draughtsman R77,872 - R359,566

Draughtsperson R82,122 - R359,569

Building Information Modeling (BIM) Manager R222,910 - R790,666



UK

Draughtsman £14,725 - £33,848

Draughtsperson £18,620 - £33,535

Building Information Modeling (BIM) Manager £28,115 - £56,149

Duration:

5 Days

(done 1 week prior to the Multi-Disciplinary Draughting National Certificate)



Curriculum

Drawing Equipment

- Introduction
- Drawing Equipment
 - Drawing paper and its application
 - Drawing board and its application
 - T-Square
 - Set squares or triangles and their application
 - Masking tape
 - Pencils and their application
 - Eraser (rubber)
 - Erasing shield
 - Adjustable compass or large bowl and its application
 - Sandpaper pad or file
 - Dust cloth or brush
 - Other instruments
 - Scale rulers (metric)
- Essentials do's and don'ts of neatness in drawing

Application of the alphabet of lines

- Introduction
- Application of the alphabet of lines adding linear dimensions
 - Outlines or object lines (line type A)
 - Centre lines (line type G1)
 - Dimension lines (line type B2)
 - Extension lines for dimensions (line type B3)
 - Leader lines (line type B4)
 - Construction lines (line type BB1)
 - Projection lines (line type B)
 - Guide lines (line type BB2)
 - Dashed lines to show hidden details (hidden detail lines – line type E and F)
 - Hatched lines or section lines (line type B5)
 - Other lines

Lettering, figuring and dimensioning

- Introduction
- Lettering figuring and dimensioning in drawing
 - Preparation of the drawing sheet
 - Lettering and figuring
 - Positions of the title and scale relative to each other
 - Positioning of the title and scale on the drawing sheet
 - Dimensioning on a working drawing
 - Different types of dimensions on a working drawing
 - Tolerance dimensions
 - Dimensioning keyways
 - Leaders
 - Machining symbols

Freehand sketching

- Introduction
- Real-life (field) sketching and design sketching
 - Freehand sketching
 - Sketching horizontal lines
 - Sketching vertical lines
 - Sketching slanted lines
 - Sketching curved figures and geometric shapes
 - Sketching irregular shapes
 - Isometric sketching
 - Oblique sketching

Constructions

- Introduction
- Geometrical constructions
 - Bisecting lines and angles

- Perpendiculars
- Parallel lines
- Setting out angles with the aid of set squares
- Hexagons (Six-sided figures)
- Octagons (Eight-sided figures)
- Joining straight lines with arcs using a compass
- An ellipse

Layout of drawings

- Introduction
- Layout of drawings
 - First-angle orthographic projection
 - Third-angle orthographic projection
 - Projecting a third view
 - Drawing step-method for laying out drawings
 - Isometric drawings
 - Oblique drawings
 - Projections of prisms and pyramids
 - Developments
 - Interpenetrations

Sectioning

- Introduction
- Sectioning
 - Terminology
 - Sectional cutting planes
 - Various aspects of sectioning
 - How to draw a sectional view
 - Sectional detail drawings

Conventional representations

- Introduction
- Holes and fasteners
 - Representation of a drilled hole
 - Representation of a tapped hole (threaded hole)
 - Construction of a hexagonal nut
 - Representation of a hexagonal head bolt
 - Representation of a stud
 - Representation of a stud assembly
- Springs
 - Representation of springs
- Breaks
- Welded joints
 - Types of welded joints
 - Supplementary symbols

Fasteners

- Introduction
- Types of threaded fasteners
 - Bolt heads
 - Screw heads
- Locking devices
- Riveted joints
- Single or double rivet joints

Assembly drawings

- Introduction
- Hatching sectional drawings
- Sections of sectional drawings
- A typical assembly drawing
- Item numbers
- Parts list
- How to start an assembly drawing

Pipe drawings (chemical)

- Introduction
- Kinds of piping
- Pipe joints and fittings
- Pipe drawings
- Pipe drawing symbols

Career Options

Anyone that would like to pursue a career as the following:

- Potential draughtsman with a valid Grade 12 certificate. No drawing experience needed.

Study Kit

Your study kit is included in your fees and will contain:

- Free WIFI (10GB/Month, On Campus only).
- Drawing equipment including, Blue Folder, Notepad, Sketchpad, A3 Drawing Board, Eraser, Pencils, Compass and Scale Ruler.
- Electronic study guides and Textbook.
- Orientation kit including: Student Card, Welcome Letter, and Getting Started Guide.
- Access to our myAcademy student portal and student support team via phone, email and tickets.

 myAcademy STUDENT PORTAL



Regulatory Information

AIE (Academic Institute of Excellence) has been granted provisional registration as a private college in terms of Section 31(3) of the CET Act and Regulation 12(4), with registration number 2018/FE07/003 for a period of three years.

For more information, please contact a student advisor:
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