

Drawing: Complex 2D and 3D shapes

Technical Graphics

Statement Code 11

Student:

Class:

At Junior Certificate Level the student can:

Use basic drawing instruments to demonstrate the skills of drawing and the knowledge of more complex 2D shapes and basic 3D shapes

Date Commenced: / /

Date Awarded: / /

Learning targets—This has been demonstrated by your ability to:

- | | |
|--|--|
| 1. Copy to given dimensions, a drawing containing rectangles, squares and circles from printed materials | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 2. Recognise and understand the line types: centre line, hidden detail and construction lines | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 3. Draw octagons and hexagons in a circle using compass, T square and set squares only | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4. Measure given angles using a protractor | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 5. Construct and explain a variety of acute and obtuse angles using set squares | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 6. Use drawing instruments to construct pictorial views of basic 3D shapes | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 7. Draw triangles using ruler, compass and protractor | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 8. Draw octagon, hexagon and pentagon of given dimension, using ruler, compass and protractor | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 9. Construct basic geometrical 3D shapes (e.g. cube, rectangular prism and cylinder) to given measurements in oblique projection | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 10. Construct basic 3D geometrical shapes (e.g. cube and rectangular prism) to given measurements in isometric projection | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 11. Draw a cube using 2 point perspective drawing | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 12. Enhance 3D images through the use of colour and shade | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

Work begun ☐ ☐ ☐ | Work in progress ☐ ☐ ☐ | Work completed ☐ ☐ ☐