

Mechanical Design 2

(2018): Course Codes: 6173

DEMONSTRATE SKILLS AND KNOWLEDGE REQUIRED TO PRODUCE TECHNICAL ILLUSTRATIONS (STANDARD AND METRIC) MD.K

- 1 Draw an isometric projection. MD.K.1
- 2 Draw an isometric section. MD.K.2
- 3 Draw an oblique projection. MD.K.3

DEMONSTRATE KNOWLEDGE AND SKILLS REQUIRED TO PRODUCE SECTIONAL VIEWS AND APPLYING STANDARD CONVENTIONAL DESIGN PRACTICES MD.L

- 1 Demonstrate section line and symbol techniques. MD.L.1
- 2 Identify various types of sectional views. MD.L.2
- 3 Draw half and full sections. MD.L.3
- 4 Draw broken-out sections. MD.L.4

DEMONSTRATE KNOWLEDGE AND SKILLS REQUIRED TO PRODUCE AUXILIARY VIEWS MD.M

- 1 Demonstrate the ability to rotate a point, a line, and a surface. MD.M.1
- 2 Demonstrate the ability to determine the true length of a line. MD.M.2
- 3 Draw a primary auxiliary view. MD.M.3

DEMONSTRATE KNOWLEDGE AND SKILLS REQUIRED TO PRODUCE DETAILED MACHINE DRAWINGS MD.N

- 1 Identify use and applications of threads and fasteners. MD.N.1
- 2 Draw bolt, nut, and thread styles. MD.N.2
- 3 Draw screws, screw heads, pins, and keys. MD.N.3
- 4 Identify a fillet and a round, and tell where and why each is used. MD.N.4
- 5 Produce a set of detail drawings applying standard machine fits, finishes, and tolerances. MD.N.5
- 6 Create a detailed parts list. MD.N.6
- 7 Select appropriate drawing layout and scale. MD.N.7

8 Extract attribute data. MD.N.8

9 Produce a machine assembly drawing. MD.N.9

10 Identify various manufacturing processes. MD.N.10

**DEMONSTRATING BASIC
SKILLS TO PRODUCE 3-D
DRAWINGS** MD.O

1 Create solid models. MD.O.1

2 Modify solid models. MD.O.2

3 Produce 2-D projections from 3-D models. MD.O.3
