

# 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

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**8 Extract attribute data.** MD.N.8

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

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**10 Identify various manufacturing processes.** MD.N.10

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

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**1 Create solid models.** MD.O.1

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**2 Modify solid models.** MD.O.2

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

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