

The following learning targets represent the major concepts studied and assessed in this course. This course is an extension of Mechanical Drafting and Machine Drafting and while the concepts are the same the curriculum is more challenging. Updated 2022 - 2023

Semester 1

Unit 1: Engineering Careers and Lettering:

- Careers in Engineering
- Conducting Research and Compare Data
- Engineering Lettering

Unit 2: Hand Sketching:

- Hand Sketching
- Scaling Drawings
- Isometric Drawing

Unit 3: Multiview Drawings:

- Multiview Drawings

Unit 4: AutoCAD Drawing:

- Autodesk Inventor

Semester 2

Unit 5: Multiview Projects in AutoCAD and Inventor:

- Semester AutoCAD/ Inventor Project

Unit 6: Dimensioned Sheet Drawings:

- Basic Dimensioning
- Inventor Title Blocks
- Sheet Drawings

Unit 7-8: Auxiliary and Section Views:

- Creating Auxiliary Views
- Creating Section Views
- Printing Auxiliary and Section Views in Inventor

Unit 9: 3D Priming:

- Creating Solutions to Problems
- 3D Printing using Inventor

Unit 10: Working Drawings:

- Explosion Views
- Mechanical Assemblies
- Complete Working Drawings
- Design Challenges