

Expectations and Outcomes

Grade Level/Course: 10-12

Content Area: Tech Ed

Unit Title	Guarantees
Unit 1 - Measurement Systems	<ul style="list-style-type: none"> • Fraction addition and subtraction • Metric and Standard Systems • Converting units
Unit 2 - Orthographic Views & Scales	<ul style="list-style-type: none"> • Geometric Terms • Mechanical & Engineering Scales • Drafting Tools
Unit 3 - Hand Drafting	<ul style="list-style-type: none"> • Applied knowledge of hand drafting • Accurate Dimensioning
Unit 4 - CAD Sketching & Constraints	<ul style="list-style-type: none"> • CAD interface • 2D sketches • Geometric tolerances
Unit 5 - CAD Creating & Editing Sketched Features	<ul style="list-style-type: none"> • Design Process • 3 Dimensional object creation • Battle tops - spinning tops
Unit 6 - CAD Placed Features & Documentation	<ul style="list-style-type: none"> • Mechanical features such as holes, chamfers, threading, and repetitive features. • Create 2D working drawings plan
Unit 7 - CAD/CAM/CNC	<ul style="list-style-type: none"> • Intro to Metal CNC Mill & CNC Router equipment.