

	TECH 2	MARLBORO CENTRAL SCHOOL DISTRICT-CURRICULUM MAP	Grade 10	
Title or Topics (Unit organizing idea)	Concepts (understandings)	Skills (What students actually do)	Major Assessments (Tests, projects, etc.)	Time Frame (Number of weeks)
Intro to AutoCAD Inventor	NYSED Standard 1 - Engineering Design NYSED Standard 3 - Computer Technology NYSED Standard 4 - Technological Systems	Learn basic AutoCAD controls and features -Pull Down Menus -Command Bar terminology -Mouse controls -Creating Files Create Surface and Solid Models -Create 2D Designs -Create 3D Designs	AutoCAD Terminology Quiz Design Project 1-3	2 Weeks
Parametric Modeling Constructive Solid Geometry Model History Tree	NYSED Standard 1 - Engineering Design NYSED Standard 3 - Computer Technology NYSED Standard 4 - Technological Systems	Practice using geometric constraints Applying Dimensions to drawings Using the extruding feature to create 3D Models Practice using various geometry commands Studying Coordinate Systems Adding multiple drawings to create a single design	AutoCAD Terminology Quiz\ Design Project 4-6	3-5 Weeks
Parametric Constraints Geometric Construction Part Drawings	NYSED Standard 1 - Engineering Design NYSED Standard 3 - Computer Technology NYSED Standard 4 - Technological Systems	Apply and understand dimensional constraints Create a solid model from scratch Practice using the commands Cut and Drill Manipulating Drawing Sheets for production Adjusting view scales and positions in final design presentations	AutoCAD Terminology Quiz Design Project 7-9	3-5 Weeks

<p>Auxiliary Views</p> <p>Symmetrical Features</p> <p>Assembly Modeling</p>	<p>NYSED Standard 1 - Engineering Design</p> <p>NYSED Standard 3 - Computer Technology</p> <p>NYSED Standard 4 - Technological Systems</p>	<p>Continue working with more complex models and designs</p> <p>Creating Angles Work Planes</p> <p>Adding Auxiliary and Isometric Views</p> <p>Using Center Cuts and Construction lines</p> <p>Creating Title Blocks</p>	<p>AutoCAD Terminology Quiz</p> <p>Design Project 10-12</p>	<p>3- 5 Weeks</p>
<p>Advanced 3D Construction</p>	<p>NYSED Standard 1 - Engineering Design</p> <p>NYSED Standard 3 - Computer Technology</p> <p>NYSED Standard 4 - Technological Systems</p>	<p>Learn and Practice the use of Fillet and Round commands</p> <p>Defining Work Planes and Profile Sketches</p> <p>Building a nozzle</p> <p>Creating a Grill Pattern</p> <p>Creating a Sweep Feature</p>	<p>AutoCAD Terminology Quiz</p> <p>Final Design Project</p>	<p>3-5 Weeks</p>
<p>Model House Construction</p>	<p>NYSED Standard 2 - Tech Tools and Resources</p>	<p>Create 2 Model Houses</p> <ul style="list-style-type: none"> - Using Blueprints for accurate construction - Creating a model garage - Creating a model A-Frame building - Designing and building wall frames - Designing and building roof trusses 	<p>Garage Assessment Final</p> <p>House Assessment Final</p>	<p>8 – 12 Weeks</p>

<p>Intro to AutoCAD REVIT</p>	<p>NYSED Standard 3 - Computer Technology</p> <p>NYSED Standard 4 - Technological Systems</p> <p>NYSED Standard 1 - Engineering Design</p>	<p>REVIT Basic Features</p> <ul style="list-style-type: none"> - Commands and navigation - Learning wall, component, and design features - Designing a small building - Designing a large complex structure 	<p>AutoCAD Terminology Quiz</p>	<p>3- 5 Weeks</p>
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