Elizabethtown Area School District
Scope & Sequence - Quick Reference

Department: Applied Engineering & Technology Education

Course: Creative Technology

Grade Level(s): 9 - 12

Unit Title	*General Topic(s)*	*Pacing*
1. Creative Mindset	● Increasing the Dots to Connect ● How to Be Creative ● Introductory Creative Design Project ● Creative Design Intro Level Tools and Techniques	1.5 Weeks
2. Graphics	● Copyright and Fair Use ● Vector and Raster Graphics	.5 Weeks
3. Creative Design - Visual Communication	● Fundamental Principles of Design ● Layout and Composition ● Design Techniques ○ Creating Vector Art ● Creative Design Projects - Visual Communication	3 Weeks
4. Creative Design - Advertising and Promotion	● Branding and Identity ● Typography ● Color ● Design Techniques ○ Typography ○ Raster Image Editing ● Creative Design Projects - Advertising and Promotion	2 Weeks

5. Creative Design - Vinyl Sticker Design and Fabrication	● Introduction ● Material Properties ● Design Tools & Techniques ○ Vinyl Specific Design ○ Cut Paths ● Design Preparation ● Vinyl Cutter Operation ○ Machine Controls ● Application ○ Weeding ○ Transfer ● Troubleshooting & Refinement	1 Week
6. Creative Design - Laser Fabrication	● Technology and Engineering Design Processes ● Laser Engraving and Cutting Technology - How it Works ● Material Properties ● Design Techniques ○ Laser Specific Design ○ Engraving ○ Cut Paths ● Laser Engraver Operation ○ Safety ○ Dashboard Controls ○ Machine Controls ● Creative Design Projects - Laser Fabricated Products ● Documenting the Design Process - Project Portfolio	4 Weeks
7. Creative Design - 3D Modeling and Printing	● Orthographic Projection ● 3D Printing - How it Works ○ 3D Modeling ○ 3D File Types ○ Slicing Software ○ GCODE ○ Servo Motors ● 3D Printing Filaments ○ ABS	4 Weeks

	○ PLA ● Creative Design Project - Functional 3D Printed Product ● Documenting the Design Process - Project Portfolio	
8. Creative Design - Transfer Printing	● Transfer Printing Methods ○ Screen Printing ○ Dye Sublimation ○ DTG ○ Heat Transfer ● Materials ○ Organic ○ Synthetic ○ Polymers ● Creative Design Projects - Dye Sublimation ● Documenting the Design Process - Project Portfolio	3 Weeks