

Grade 7 Technology Education (Scope and Sequence)

Topic		Topic	
Unit 1: Safety	Approximate Duration: 5 days	Unit 2: Elements and Principles of Design	Approximate Duration: 5 days
Activity		Activity	
Instructions and safety quizzes. All students will demonstrate proficiency before utilizing any tool or machine.		All students will study design as it relates to the form and function of a product or graphic. Knowing that some products and graphics are designed better than others, students will select and evaluate designs and ultimately create their own.	

Topic		Topic	
Unit 3: Advanced Visual Modeling and Prototyping	Approximate Duration: 15 days	Unit 4: Manufacturing Techniques and Production Systems	Approximate Duration: 15 days
Activity		Activity	
Students will utilize the design process to document, communicate, and create a solution to a real-world design problem. Students will utilize sketching, technical drawing, rendering, and computer-aided design to enhance ideation and creativity throughout this process. The unit culminates with students fabricating an original design solution in the form of a prototype. This prototype will focus on environment and sustainability in design and production.		In this unit, students will experience and demonstrate multiple methods of production ranging from standard assembly line production to the most innovative and environmentally conscious techniques applied in manufacturing today. Using tools and machines, students will create a product that demonstrates these types of production and will be able to evaluate them to determine economic and environmental feasibility.	