

Grade 8 Technology Education (Scope and Sequence)

Topic		Topic	
Unit 1: Safety	Approximate Duration: 5 days	Unit 2: Construction Technology Systems	Approximate Duration: 10 days
Activity		Activity	
All students will receive instruction on each tool or machine they use. Students will receive information through demonstrations by the teacher, safety handouts, manufacturer's instructions and safety quizzes. All students will demonstrate proficiency before utilizing any tool or machine.		In this unit, students will become familiar with key concepts and examples of construction technology related to modern infrastructure and the techniques and processes utilized by professionals in the field to ensure safe and effective products and problem solutions in construction fields. Students will translate their understandings into their own structural designs, where they apply content learned to develop designs, models, and, ultimately, prototypes of bridges of other construction technology examples on a manageable scale for the classroom.	

Topic		Topic	
Unit 3: Control technology systems	Approximate Duration: 15 days	Unit 4: Manufacturing Techniques and Production Systems	Approximate Duration: 15 days
Activity		Activity	
In this unit, students will explore various control systems that impact the world around them. Focusing on electronic and robotic systems, students will learn about basic circuitry building and how to apply robotic controls to solve real-world problems.		In this unit, students will be designing and building a complex system to solve a real-world solution. This system will have multiple sub-systems that must work interdependently, requiring students to troubleshoot and analyze malfunctioning components.	