

Content	Domain	Strand	Topic	Grade	Statement
ONLS	Mathematics		Operations and Algebraic Thinking	5	Write and interpret numerical expressions.
ONLS	Mathematics		Measurement and Data	5	Convert like measurement units within a given measurement system.
OTACS	Ohio Technology Academic Content Standards	Nature of Technology	Processes	5	Select and use tools to design, make, modify, and assess technology.
OTACS	Ohio Technology Academic Content Standards	Nature of Technology	Processes	5	Demonstrate how tools and machines extend human capabilities.
ONLS	Mathematics		Expressions and Equations	6	Reason about and solve one-variable equations and inequalities.
ONLS	Mathematics		Geometry	6	Solve real-world and mathematical problems involving area, surface area, and volume.
OTACS	Ohio Technology Academic Content Standards	Nature of Technology	Systems	6	Describe the relationship among input, process, output, and feedback and components of a system.
OTACS	Ohio Technology Academic Content Standards	Technology for Productivity Applications	Research Tools	6	Use content-specific tools, software, and simulations to support learning and research.
OTACS	Ohio Technology Academic Content Standards	Technology for Productivity Applications	Understanding Operations	6	Explain the purpose of software programs.
ONLS	Mathematics		Expressions and Equations	7	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
ONLS	Mathematics		Geometry	7	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.
OTACS	Ohio Technology Academic Content Standards	Nature of Technology	Technology Development	7	Develop technological solutions to problems.
OTACS	Ohio Technology Academic Content Standards	Nature of Technology	Technology Development	7	Discuss ways that technology is linked to creativity and innovation
OTACS	Ohio Technology Academic Content Standards	Technology for Productivity Applications	Research Tools	7	Use content-specific tools, software, and simulations to support learning and research to create educational projects.
OTACS	Ohio Technology Academic Content Standards	Technology for Productivity Applications	Problem-Solving	7	Solve problems using all available technologies for inquiry, investigation, analysis, and presenting conclusions.
OTACS	Ohio Technology Academic Content Standards	Nature of Technology	Technology Development	8	Interpret the interrelationship between technology, creativity, and innovation.
OTACS	Ohio Technology Academic Content Standards	Nature of Technology	Controls	8	Utilize controls to make changes in a system resulting in a desired outcome.
OTACS	Ohio Technology Academic Content Standards	Technology for Productivity Applications	Research Tools	8	Use content-specific tools, software, and simulations to support learning and research societal and educational problems.
ISTE	National Technology Standards		Creativity and Innovation	5–12	Apply existing knowledge to generate new ideas, products, or processes.

ISTE	National Technology Standards		Creativity and Innovation	5–12	Use models and simulations to explore complex systems and issues.
ISTE	National Technology Standards		Communication and Collaboration	5–12	Contribute to project teams to produce original works or solve problems.
ISTE	National Technology Standards		Critical Thinking, Problem Solving, and Decision Making	5–12	Identify and define authentic problems and significant questions for investigation.
ISTE	National Technology Standards		Critical Thinking, Problem Solving, and Decision Making	5–12	Plan and manage activities to develop a solution or complete a project.
ISTE	National Technology Standards		Critical Thinking, Problem Solving, and Decision Making	5–12	Use multiple processes and diverse perspectives to explore alternative solutions.
ISTE	National Technology Standards		Digital Citizenship	5–12	Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
ISTE	National Technology Standards		Digital Citizenship	5–12	Demonstrate personal responsibility for lifelong learning.
ISTE	National Technology Standards		Technology Operations and Concepts	5–12	Understand and use technology systems.
ISTE	National Technology Standards		Technology Operations and Concepts	5–12	Select and use applications effectively and productively.
ISTE	National Technology Standards		Technology Operations and Concepts	5–12	Troubleshoot systems and applications.
ISTE	National Technology Standards		Technology Operations and Concepts	5–12	Transfer current knowledge to learning of new technologies.
Ohio Career Tech Standards	Engineering and Science Technologies Career Field Content Standards	Electrical / Electronics	Robotics	9 –12+	Identify the components of a robot system and explain their roles in the robot's operation cycle.
Ohio Career Tech Standards	Engineering and Science Technologies Career Field Content Standards	Electrical / Electronics	Robotics	9 –12+	Use job specifications to create programs for robot operations, sensors, and feeder systems.
Ohio Career Tech Standards	Engineering and Science Technologies Career Field Content Standards	Electrical / Electronics	Robotics	9 –12+	Plan, program, and test a robotic work cell using teach pendant and simulation software.
Ohio Career Tech Standards	Engineering and Science Technologies Career Field Content Standards	Electrical / Electronics	Robotics	9 –12+	Use robot speed specifications to calculate estimated cycle times for sample tasks.