Nebraska CTE

Advanced Robotics

Apply safety principles, practices, philosophy, and guidelines to the work environment. STS.HS.5.1	**a** Complete applicable safety assessment with 100% accuracy. STS.HS.5.1.A
	b Employ eye protection in compliance with Neb. Rev. Statute 79–715. STS.HS.5.1.B
	c Employ appropriate Personal Protective Equipment (PPE) while in the lab setting. STS.HS.5.1.C
	d Employ the safe application of tools and machines. STS.HS.5.1.D
	e Explain the main hazards that are possible in the lab setting. STS.HS.5.1.E
	f Demonstrate proper handling and storing of materials. STS.HS.5.1.F
Identify careers in robotics. STS.HS.5.2	**a** Identify robotics industry vocabulary. STS.HS.5.2.A
	b Identify the responsibilities of robotics professionals. STS.HS.5.2.B
	c Identify the education, certification, or licensure required in a robotics-related career. STS.HS.5.2.C
Create a robotic solution (physical or simulated), using a formal engineering design process, to solve an existing problem. STS.HS.5.3	**a** Demonstrate authentic engineering methods and documentation. STS.HS.5.3.A
	b Apply task-specific mathematical concepts. STS.HS.5.3.B
	c Apply task-specific scientific concepts. STS.HS.5.3.C
	d Explain each step of the design process. STS.HS.5.3.D