

Advanced Electronics

Apply safety principles, practices, philosophy and guidelines to the work environment. [STS.HS.1.1](#)

- a** Complete applicable safety assessment with 100% accuracy. [STS.HS.1.1.A](#)
- b** Employ appropriate Personal Protective Equipment (PPE) while in the lab setting. [STS.HS.1.1.B](#)
- c** Employ eye protection in compliance with Neb. Rev. Statute 79-715. [STS.HS.1.1.C](#)
- d** Carry out the safe application of tools and machines. [STS.HS.1.1.D](#)
- e** Explain the main hazards that are possible in the lab setting. [STS.HS.1.1.E](#)
- f** Demonstrate proper handling and storing of materials. [STS.HS.1.1.F](#)

Investigate career opportunities in the electronics industry. [STS.HS.1.2](#)

- a** Identify responsibilities and characteristics of professionals in industry. [STS.HS.1.2.A](#)
- b** Describe work behaviors needed to be employable. [STS.HS.1.2.B](#)
- c** Identify the training, education, certification, and licensing requirements for various careers in the electronics industry. [STS.HS.1.2.C](#)
- d** Identify high-wage, high-demand, and high-skill electronics careers. [STS.HS.1.2.D](#)

Employ electronic terminology, symbols, laws, and equipment. [STS.HS.1.3](#)

- a** Identify proper electronic terminology and symbols. [STS.HS.1.3.A](#)
- b** Compute and manipulate the Laws of Electronics (i.e., Ohms, Watts, Kirchhoff's). [STS.HS.1.3.B](#)
- c** Identify and operate all basic electronic equipment. [STS.HS.1.3.C](#)

Construct electronic circuits. [STS.HS.1.4](#)

- a** Interpret, design, and synthesize electronic circuits. [STS.HS.1.4.A](#)
- b** Explain the characteristics of AC Electricity and its components. [STS.HS.1.4.B](#)
- c** Explain basic solid state fundamentals. [STS.HS.1.4.C](#)
- d** Explain logic gate circuits. [STS.HS.1.4.D](#)
- e** Troubleshoot and analyze electronic circuits. [STS.HS.1.4.E](#)