Nebraska CTE

Architectural Design 1

Apply safety principles, practices, philosophy, and guidelines to the work environment. STS.HS.6.1	**a** Employ eye protection in compliance with Neb. Rev. Statute 79-715. STS.HS.6.1.A
	b Identify office safety hazards. STS.HS.6.1.B
	c Employ appropriate Personal Protective Equipment (PPE). STS.HS.6.1.C
	d Employ proper ergonomics. STS.HS.6.1.D
	e Complete applicable safety assessment with 100% accuracy. STS.HS.6.1.E
Identify architectural career opportunities. STS.HS.6.2	**a** Identify the primary duties and attributes of an architect or architectural technician. STS.HS.6.2.A
	b Describe the various careers within the architectural profession (i.e., drafting technician, designer, project manager, architect, landscape architect, and interior designer) and the training and certification needed for each. STS.HS.6.2.B
	c Identify the relationships between all stakeholders involved in a construction project. STS.HS.6.2.C
	d Identify positive work behaviors and personal qualities needed to be employable. STS.HS.6.2.D
Apply math terminology, functions, and formulas to architectural design. STS.HS.6.3	**a** Identify whole numbers, decimals, fractions, and complex numbers. STS.HS.6.3.A
	b Apply arithmetic operations. STS.HS.6.3.B
	c Solve decimal/fraction conversions. STS.HS.6.3.C
	d Apply algebraic skills to solve problems involving area, volume, and angles. STS.HS.6.3.D
	e Explain scale using architect or engineer scales. STS.HS.6.3.E
Utilize drafting and design technology. STS.HS.6.4	**a** Employ the appropriate technology tools (i.e., CAD, SolidWorks, Fusion 360, Inventor, etc.) for conveying information, solving problems, and expediting workplace processes. STS.HS.6.4.A
	b Employ basic computer and information technology skills used in the drafting industry. STS.HS.6.4.B

Skip to main content

	c Employ ethical digital citizenship. STS.HS.6.4.C
Analyze architectural styles across time. STS.HS.6.5	**a** Identify design principles, elements, and architectural styles. STS.HS.6.5.A
	b Identify the building materials, locations, and design that have historically influenced architecture. STS.HS.6.5.B
	c Identify the influence that historical buildings have on today's architecture. STS.HS.6.5.C
Identify typical building design and construction methods and practices. STS.HS.6.6	**a** Identify terms and definitions commonly used in the architectural profession. STS.HS.6.6.A
	b Identify various digital drafting and modeling options (i.e., CAD/BIM). STS.HS.6.6.B
	c Identify the types of materials, their properties, and applications used in building construction. STS.HS.6.6.C
	d Identify different types of fasteners, adhesives, and finishes. STS.HS.6.6.D
Communicate design solutions. STS.HS.6.7	**a** Identify common line types, symbols, and components that comprise architectural construction working drawings. STS.HS.6.7.A
	b Identify dimensions on working drawing. STS.HS.6.7.B
	c Create multi-page working drawings. STS.HS.6.7.C
	d Employ correct annotation of line type, section line labels, and dimensions. STS.HS.6.7.D
	e Create shaded and rendered presentation drawings. STS.HS.6.7.E