

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

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
