Nebraska CTE

Drafting and Design

Apply safety principles, practice, philosophy, and guidelines to the work environment. STS.HS.13.1	**a** Employ eye protection in compliance with Neb. Rev. Statute 79-715. STS.HS.13.1.A
	b Identify office safety hazards. STS.HS.13.1.B
	c Employ appropriate Personal Protective Equipment (PPE). STS.HS.13.1.C
	d Employ proper ergonomics. STS.HS.13.1.D
	e Complete applicable safety assessment with 100% accuracy. STS.HS.13.1.E
Identify career opportunities in the drafting industry. STS.HS.13.2	**a** Identify the various careers, primary duties, and attributes of a drafting technician or a design engineer. STS.HS.13.2.A
	b Identify the training, education, certification and licensing requirements for various careers of a drafting technician or design engineer. STS.HS.13.2.B
	c Identify the relationships between stakeholders involved in a manufacturing project. STS.HS.13.2.C
	d Identify positive work behaviors and personal qualities needed to be employable. STS.HS.13.2.D
	e Identify high-wage, high-demand, and high-skill drafting careers. STS.HS.13.2.E
Apply math terminology, functions, and formulas to mechanical drafting. STS.HS.13.3	**a** Identify whole numbers, decimals, fractions, and complex numbers. STS.HS.13.3.A
	b Apply arithmetic operations. STS.HS.13.3.B
	c Solve decimal/fraction conversions. STS.HS.13.3.C
	d Explain scale using architect or engineer scales. STS.HS.13.3.D
Apply conventional drafting standards used in mechanical drafting. STS.HS.13.4	**a** Identify terms and definitions commonly used in the mechanical drafting profession. STS.HS.13.4.A
	b Employ multiple sketching methods such as oblique, isometric and/or orthographic projection. STS.HS.13.4.B

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	c Apply dimensional information and general notes in mechanical plans. STS.HS.13.4.C
Utilize drafting and design technology. STS.HS.13.5	**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.13.5.A
	b Employ basic computer and information technology skills used in the drafting industry. STS.HS.13.5.B
	c Employ ethical digital citizenship. STS.HS.13.5.C
Produce a multiview working drawing. STS.HS.13.6	**a** Explain working drawings. STS.HS.13.6.A
	b Determine types of materials, fasteners, adhesives, and finishes needed to build a product. STS.HS.13.6.B
	c Produce applicable drawing views, schedules, notes, and index tables. STS.HS.13.6.C
	d Produce and label section lines. STS.HS.13.6.D
	e Produce and label detail drawings. STS.HS.13.6.E
	f Produce dimensions. STS.HS.13.6.F