

SOESD Architectural Design Assessment 2011

This assessment contains 85 items, but only 85 are used at one time.

Architectural Design

Number of Correlations	Standard Type	Standard
0	Program	1) Architectural Design
0	Duty	1) Ac MNZ01.01 Use mathematics in the manufacturing process.
0	Standard	1) MNZ01.01.01.01 Add, subtract and divide numbers. Beginning High School
0	Standard	2) MNZ01.01.01.02 Use percentages in order to make adjustments. Advanced High School
0	Standard	3) MNZ01.01.01.03 Make calculations to calibrate equipment. Advanced High School
0	Standard	4) MNZ01.01.01.04 Calculate scrap or waste materials. Advanced High School
0	Standard	5) MNZ01.01.03.01 Identify material cost to produce new part. Advanced High School
0	Standard	6) MNZ01.01.05.01 Understand geometry in order to interpret blueprints. Advanced High School
0	Standard	7) MNZ01.01.06.01 Measure product against specifications for quality assurance. (Tolerances) Beginning High School
0	Duty	2) Bc MNZ01.02 Understand the application of the principles of science used in manufacturing.
0	Standard	1) MNZ01.02.01.03 Describe appropriate disposal of chemicals Beginning High School
0	Standard	2) MNZ01.02.01.04 Identify potential chemical hazards Post-Secondary
0	Standard	3) MNZ01.02.02.05 Recognize how the principles of simple machines are being used in manufacturing equipment. Advanced High School
0	Standard	4) MNZ01.02.02.06 Apply principles of physics to new equipment Post-Secondary
0	Standard	5) MNZ01.02.02.07 Understand the mechanical principles of machinery Advanced High School
0	Duty	3) Cc MNZ05.01 Summarize and explain how manufacturing businesses operate to demonstrate an understanding of key functions within organizations in the industry.

0	Standard	1) MNZ05.01.05.02 Identify the mission, major internal functions and structure of manufacturing businesses. Advanced High School
0	Standard	2) MNZ05.01.05.03 Identify the customers, suppliers, and stakeholders of manufacturing businesses, their roles, and how they relate. Beginning High School
0	Standard	3) MNZ05.01.05.04 Explain the major competitive challenges faced by the manufacturing businesses. Advanced High School
0	Standard	4) MNZ05.01.05.06 Analyze current trends in manufacturing systems. Post-Secondary
0	Standard	5) MNZ05.01.05.07 Describe how manufacturing businesses measure or gauge business performance. Beginning High School
0	Duty	4) Dc MNZ05.02 Analyze and summarize how manufacturing businesses improve performance to demonstrate an understanding of various methods for enhancing production. Technical Content Skill
0	Standard	1) MNZ05.02.05.01 Identify needs and requirements of internal and external customers. Advanced High School
0	Standard	2) MNZ05.02.05.02 Describe customer satisfaction and fulfillment of customer requirements. Advanced High School
0	Standard	3) MNZ05.02.05.06 Explain how plans and budgets are revised to meet goals and objectives. Advanced High School
0	Duty	5) Ec MNZ06.01 Maintain safe and healthful working conditions and environment to ensure employee safety. Basic Career Related Learning Skill
0	Standard	1) MNZ06.01.05.01 Identify the types of risk of injury/illness at work. Beginning High School
0	Standard	2) MNZ06.01.05.02 Identify those who are susceptible to risk of injury/illness at work. Beginning High School
0	Standard	3) MNZ06.01.05.03 Describe ways to positively impact occupational safety and health. Beginning High School
0	Standard	4) MNZ06.02.05.01 Identify key rights of employees related to occupational safety and

0	Standard	health. Beginning High School 5) MNZ06.02.05.02 Identify the responsibilities of employers related to occupational safety and health. Advanced High School
0	Standard	6) MNZ06.02.05.03 Explain the role of government agencies in providing a safe workplace. Advanced High School
0	Duty	6) Fc MNZ06.03 Assess types and sources of workplace hazards in order to maintain safe working conditions in a manufacturing business environment.
0	Standard	1) MNZ06.03.05.01 Identify and describe common hazards in the workplace. Beginning High School
0	Standard	2) MNZ06.03.05.03 Identify sources of combustible/flammable materials, fire and emergencies to establish a fire safe environment. Beginning High School
0	Duty	7) Gc MNZ06.04 Control workplace hazards in order to maintain safe working conditions in a manufacturing business environment.
0	Standard	1) MNZ06.04.05.01 Identify procedures necessary for maintaining a safe work area. Beginning High School
0	Standard	2) MNZ06.04.05.02 Identify methods to correct common hazards. Beginning High School
0	Standard	3) MNZ06.04.05.03 Identify methods for disposing of hazardous materials. Beginning High School
0	Standard	4) MNZ06.04.05.04 Demonstrate principals of safe physical movement to avoid slips, trips, and spills. Beginning High School
0	Standard	5) MNZ06.04.05.05 Inspect and use protective equipment (PPE). Beginning High School
0	Duty	8) Hc MNZ08.01 Summarize safety, health, and environmental management systems to build an understanding of compliance with governmental policies and procedures for manufacturing businesses.
0	Standard	1) MNZ08.01.05.08 Follow organizational policies and procedures. Advanced High School
0	Standard	2) MNZ08.01.05.09 Educate and orient other workers. Advanced High School

0	Standard	3) MNZ08.01.05.10 Maintain a safe work area. Beginning High School
0	Standard	4) MNZ08.01.05.11 Identify, describe, and report workplace hazards. Beginning High School
0	Duty	9) Ic MNZ10.01 Describe and employ technical skills and knowledge required for careers in manufacturing in order to perform basic workplace activities common to manufacturing. Technical Content Skill
0	Standard	1) MNZ10.01.05.01 Demonstrate the planning and layout processes (e.g., designing, print reading, measuring) used in manufacturing. Beginning High School
0	Standard	2) MNZ10.01.05.02 Read prints and use the information to play, lay out, and produce parts or products. Beginning High School
0	Standard	3) MNZ10.01.05.03 Summarize how materials can be processed using tools and machines. Beginning High School
0	Standard	4) MNZ10.01.05.04 Use tools and the processes of cutting, shaping, combining, forming, etc., of materials to manufacture a part or product. Beginning High School
0	Standard	5) MNZ10.01.05.05 Describe various types of assembling processes (e.g., mechanical fastening, mechanical force, joining, fusion bonding, adhesive bonding) used in manufacturing. Beginning High School
0	Standard	6) MNZ10.01.05.06 Apply appropriate fastening or joining procedure to the design and production of a manufactured part or product. Beginning High School
0	Standard	7) MNZ10.01.05.07 Explain finishing processes (e.g., types of finishing materials, surface preparation, methods of application) used in manufacturing. Advanced High School
0	Standard	8) MNZ10.01.05.08 Select a finishing process for a product appropriate to the job it must perform environment in which it functions, and its aesthetic appeal. Advanced High School
0	Standard	9) MNZ10.01.05.09 Explain the processes of inspection and quality control used in manufacturing. Beginning High School

0	Standard	10) MNZ10.01.05.10 Perform continuous on line inspections to ensure that parts or products meet design specifications. Beginning High School
0	Duty	10) UNIT A: PERFORMING WORK SAFETY PRACTICES
0	Standard	1) 1. Apply safety policies and procedures.
0	Standard	2) 2. Maintain a clean, orderly, safe work area.
0	Standard	3) 3. Operate a fire extinguisher.
0	Duty	11) UNIT B: DEMONSTRATING FREEHAND SKETCHING SKILLS
2	Standard	1) 1. Sketch straight lines.
0	Standard	2) 2. Sketch circles and arcs.
1	Standard	3) 3. Sketch curved lines.
0	Standard	4) 4. Sketch multi-view drawings.
0	Standard	5) 5. Sketch pictorial drawings.
4	Standard	6) 6. Draw freehand technical lettering.
4	Standard	7) 7. Indicate overall dimensions.
0	Duty	12) UNIT C: DEMONSTRATING BASIC DESIGN TECHNIQUES (STANDARD AND METRIC)
0	Standard	1) 1. Select proper drawing equipment to complement the design media.
3	Standard	2) 2. Measure using standard scales/measuring devices.
0	Standard	3) 3. Draw straight lines and angles.
0	Standard	4) 4. Draw circles and arcs.
0	Standard	5) 5. Draw irregular curved lines.
0	Standard	6) 6. Demonstrate proper use, care, and adjustment of design equipment.
2	Standard	7) 7. Draw line symbols using alphabet of lines.
0	Standard	8) 8. Draw geometric figures using straight and curved lines.
1	Standard	9) 9. Draw borderlines and title block.
0	Standard	10) 10. Perform drawing setup to applicable standards (e.g., setting layers, line type, and width).
0	Standard	11) 11. Identify and use view and display commands (e.g., zoom, pan, viewports, and rotation).
1	Standard	12) 12. Format, enter, and edit text on a drawing.

0	Standard	13) 13. Edit, copy, and manipulate drawing entities (e.g., properties, stretch, trimming, and scaling).
0	Duty	13) UNIT D: DEMONSTRATING PRELIMINARY FREEHAND LAYOUT SKILLS
2	Standard	1) 1. Sketch preliminary floor plans.
1	Standard	2) 2. Sketch preliminary elevation views.
0	Standard	3) 3. Sketch preliminary sections.
1	Standard	4) 4. Hand-letter drawings (letters and numbers).
0	Duty	14) UNIT E: DEMONSTRATING ARCHITECTURAL DESIGN SKILLS
10	Standard	1) 1. Draw floor plans.
1	Standard	2) 2. Draw foundation plans.
0	Standard	3) 3. Set and control dimensioning styles.
8	Standard	4) 4. Dimension various types of architectural plans and details.
4	Standard	5) 5. Prepare a window, door, and finish schedule.
4	Standard	6) 6. Draw exterior elevations.
1	Standard	7) 7. Draw interior elevations.
3	Standard	8) 8. Draw roof plans.
3	Standard	9) 9. Draw related architectural plans (e.g., mechanical, electrical, or civil).
3	Standard	10) 10. Draw foundation sections.
0	Standard	11) 11. Draw floor sections.
10	Standard	12) 12. Draw wall sections.
2	Standard	13) 13. Draw stair sections.
0	Standard	14) 14. Dimension section drawings.
0	Standard	15) 15. Locate section views on drawings.
0	Standard	16) 16. Create a site plan.
5	Standard	17) 17. Apply standard building codes to architectural plans.
2	Standard	18) 18. Prepare presentation drawings.
0	Duty	15) UNIT F: COMPUTER LITERACY
0	Standard	1) 1. Identify hardware components of a CAD computer system.
1	Standard	2) 2. Format disks and copy, delete, rename, save, and back up files and folders.
0	Standard	3) 3. Identify, create, and use folders and directory structures.
0	Standard	4) 4. Identify various file formats (e.g., .wmf,

		.bmp, and .jpeg).
0	Standard	5) 5. Import and export data files between formats (e.g., IGES and DXF).
0	Standard	6) 6. Use software help features.
0	Duty	16) UNIT G: DEMONSTRATING CAD-SPECIFIC SKILLS
0	Standard	1) 1. Use the graphical user interface.
3	Standard	2) 2. Create, retrieve, edit, and use symbol libraries.
1	Standard	3) 3. Use inquiry commands to extract drawing data (list distance and area).
0	Standard	4) 4. Control entity properties.
0	Standard	5) 5. Plot/Print drawing to appropriate scale.
0	Duty	17) UNIT H: DEMONSTRATING BASIC SKILLS TO PRODUCE 3-D DRAWINGS
0	Standard	1) 1. Create 3-D architectural drawings.
2	Standard	2) 2. Create 3-D architectural renderings.
85	Correlations	
85	Total Correlations	