



Architectural Design 2018-19 State Results

Statistics data includes students taking exams in the original testing period and includes students retaking exams. The Score Distribution and Standards performance tables show results for original testing period only for accurate evaluation of live testing performance.

Statistics

Categories	Performance
Participants	70
Pass Rate	56
Pass Percentage	80.0%
Average Score	76.4
Cut Score	69

Score Distribution

% Range	# Scores in Range
0-19	0
19-29	0
29-39	0
39-49	2
49-59	2
59-69	8
69-79	17
79-89	19
89-99	11
99-100	0

Architectural Design

1) CONTENT STANDARD 1:APPLY FUNDAMENTAL ARCHITECTURAL SKILLS

1) Performance Standard 1.1 : Demonstrate Print Reading Practices

1) 1.1.1 Interpret basic elements of an architectural drawing (e.g., title block information, dimensions, annotations, line types, and schedules)

2) 1.1.2 Identify industry standard architectural symbols

3) 1.1.3 Describe various types of drawing views (i.e., plan, elevation, section, detail, pictorial)

4) 1.1.4 Identify drawing sheet classifications (e.g., architectural, civil, electrical, landscape, and mechanical)

2) Performance Standard 1.2 : Utilize Mathematical Operations and Measuring Techniques

1) 1.2.1 Identify industry standard units of measure

2) 1.2.2 Determine appropriate architectural and engineering scales

5) 1.2.5 Measure and calculate distance, object size, area, and volume

3) Performance Standard 1.3 : Demonstrate Sketching Techniques

1) 1.3.1 Prepare sketches using appropriate scale and proportions

3) CONTENT STANDARD 3: APPLY DESIGN CONCEPTS

1) Performance Standard 3.1 : Utilize Elements of Design

1) 3.1.1 Identify the elements of design (e.g., line, shape, space, form, texture, value, and color)

2) 3.1.2 Demonstrate the elements of design through various drawing techniques

2) Performance Standard 3.2 : Utilize Principles of Design

1) 3.2.1 Identify the principles of design (e.g., balance, contrast, rhythm, repetition, movement, harmony, emphasis, unity, proportion, and variety)

3) Performance Standard 3.3 : Apply the Design Process

1) 3.3.1 Define the design process

4) CONTENT STANDARD 4:UTILIZE DIGITAL DRAFTING TECHNIQUES

1) Performance Standard 4.1 : Utilize Basic Computer and IT Skills

2) 4.1.2 Use computer hardware and input/output devices to solve drafting problems

2) Performance Standard 4.2 : Utilize the Cartesian Coordinate System

1) 4.2.1 Describe and utilize the Cartesian Coordinate System to create geometric shapes and objects

82.08%

89.18%

92.37%

85.88%

87.8%

92.66%

73.73%

77.97%

70.34%

72.88%

61.02%

61.02%

76.27%

86.86%

85.59%

88.14%

65.54%

65.54%

66.1%

66.1%

76.01%

62.71%

62.71%

83.05%

72.88%

4) 4.2.4 Utilize appropriate coordinate entry methods (i.e., absolute, relative, and polar)	93.22%
3) Performance Standard 4.3 : Create Geometric Constructions	75.59%
2) 4.3.2 Use lines, circles, and arcs to construct regular and irregular geometric shapes	72.32%
3) 4.3.3 Construct angles, to include acute, obtuse, and right angles	78.81%
5) 4.3.5 Construct tangent, concentric, and perpendicular geometric relationships	81.36%
6) 4.3.6 Calculate area, perimeter, and volume of geometric shapes to include circle, square, rectangle, and triangle	72.88%
4) Performance Standard 4.4 : Create and Modify Drawings and Models	77.02%
1) 4.4.1 Utilize templates	72.03%
4) 4.4.4 Utilize geometric relationships to ensure accuracy (e.g., endpoint, midpoint, and center)	72.03%
5) 4.4.5 Create and modify objects using CADD/BIM commands	86.44%
6) 4.4.6 Assign properties to objects (e.g., line weight, line types, scale factors, and colors)	72.03%
7) 4.4.7 Produce drawings from sketches	87.29%
5) Performance Standard 4.5 : Create Drawings Using Orthographic Projection	78.74%
2) 4.5.2 Project from an existing view to create additional views	69.92%
3) 4.5.3 Identify, create, and arrange the six standard views (using properties of similarities of right angles)	79.66%
4) 4.5.4 Identify, create, and arrange sectional views	93.22%
5) 4.5.5 Identify, create, and arrange primary auxiliary views	88.14%
6) 4.5.6 Apply appropriate measurement units	81.92%
6) Performance Standard 4.6 : Utilize Symbols and Libraries	57.63%
1) 4.6.1 Describe the use of symbols	57.63%
7) Performance Standard 4.7 : Apply Dimensions and Annotations	66.1%
1) 4.7.1 Differentiate appropriate dimension standards (i.e., ANSI and ISO)	47.46%
4) 4.7.4 Place dimensions and annotations using appropriate standards (i.e., ANSI and ISO)	75.42%
8) Performance Standard 4.8 : Create Pictorial Drawings	77.97%
2) 4.8.2 Create isometric drawings	77.97%
9) Performance Standard 4.9 : Prepare Architectural Construction Drawings	81.98%

1) 4.9.1 Transcribe a floor plan from an existing plan	74.01%
2) 4.9.2 Transcribe a site plan from an existing plan using geographic data (e.g., GIS, maps, and aerials)	69.49%
3) 4.9.3 Draw an exterior elevation utilizing an existing plan	78.81%
4) 4.9.4 Draw a roof plan utilizing an existing plan	86.02%
5) 4.9.5 Draw interior elevations utilizing an existing plan	91.53%
6) 4.9.6 Draw building sections and details utilizing an existing plan	89.83%
7) 4.9.7 Draw an electrical plan utilizing an existing plan	81.36%
8) 4.9.8 Prepare and draft schedules (e.g., window, door, and room)	86.44%
10) Performance Standard 4.10 : Utilize Output Methods	64.6%
1) 4.10.1 Identify and select appropriate drafting media	60.17%
3) 4.10.3 Scale sheets/layout views for plotting/printing	70.34%
7) 4.10.7 Plot drawings to proper scale	64.41%
8) 4.10.8 Plot drawings to various output media (i.e., paper and electronic)	40.68%
10) 4.10.10 Transmit files electronically	86.44%
5) CONTENT STANDARD 5: APPLY ARCHITECTURAL DESIGN SKILLS	76.27%
2) Performance Standard 5.2 : Identify Building Materials	77.97%
3) 5.2.3 Discuss the environmental impact of material usage	77.97%
3) Performance Standard 5.3 : Utilize Building Codes and Regulations	68.93%
1) 5.3.1 Identify various building codes and regulations (e.g., ICC, IBC, IRC, ADA, and NEC)	59.32%
3) 5.3.3 Explain the purpose of building codes and regulations	84.75%
4) 5.3.4 Describe how building codes and regulations affect the design process	62.71%
4) Performance Standard 5.4 : Investigate Green Building Strategies	96.61%
6) 5.4.6 Research sustainable design practices	96.61%