

# Program Learning Outcomes

## A.A. Degree – Articulated Pre-Major: Architecture

EDUCATION.



Division of Architecture,  
Engineering, and Technology

**LEGEND:**

△ = Objective introduced

□ = Part of course content

■ = Featured course content

▲ = Primary assessment; mastery of objective

### Learning Outcomes

*Upon graduation a student will be able to:*

### Courses



**Gen. Ed. Courses:**

ENC1101/1102 Composition  
MAC1140/1114 Algebra/ Trig  
SPC1600 Speech, POS 2041 Govt  
PHY1053C Physics, Science EL.  
HUM Elect., Soc. Sci. Elective

ARC1301 Arch. Design 1

ARC1302 Arch. Design 2

ARC1201 Theory of Arch.

ARC1701 History of Arch. 1

ARC2702 History of Arch. 2

Electives

ARC2303 Arch. Design 3

ARC2304 Arch. Design 4

1. Demonstrate effective written, oral and visual/graphic communication skills	△	□	□	■	■	■	□	□	▲
2. Demonstrate mastery and usage of discipline specific vocabulary.		△	■	■	■	■	□	■	▲
3. Demonstrate proficiency in constructing critical solutions to issues of space-making through the use of three-dimensional media including, but not limited to, drawing and modeling		△	■	□	□	□	□	■	▲
4. Demonstrate knowledge of architectural precedents before and concurrent to contemporary practice		△	□	■	□	□	□	□	▲
5. Demonstrate an advanced knowledge of technical facts and problem solving procedures relevant to contemporary architectural practice		△	■	□			■	■	▲
6. Synthesize data in written and graphic form to effectively communicate in-depth spatial concepts and historical facts		△	□	■	■	■	□	■	▲

**Program Learning Outcomes, AA Architecture**

**LEGEND: Δ = Objective introduced, □ = Part of course content, ■ = Featured course content, ▲ = Primary assessment; mastery of objective**

**ARC 1301= Arch. Design 1, ARC 1302= Arch. Design 2, ARC 1201= Arch. Theory 1, ARC 1701= Arch. History 1, ARC 2702= Arch. History 2, ARC 2303= Arch. Design 3, ARC 2304= Arch. Design 4**

<b>COURSES:</b>	<b>Gen. ED.</b>	<b>ARC 1301</b>	<b>ARC 1302</b>	<b>ARC 1201</b>	<b>ARC 1701</b>	<b>ARC 2702</b>	<b>ELECTIVES</b>	<b>ARC 2303</b>	<b>ARC 2304</b>
1. Demonstrate effective written, oral and visual/graphic communication skills.	Δ	□	□	■	■	■	□	□	▲
2. Demonstrate mastery and usage of discipline specific vocabulary.		Δ	■	■	■	■	□	■	▲
3. Demonstrate proficiency in constructing critical solutions to issues of space-making through the use of three-dimensional media including, but not limited to, drawing and modeling.		Δ	■	□	□	□	□	■	▲
4. Demonstrate knowledge of architectural precedents before and concurrent to contemporary practice.		Δ	□	■	□	□	□	□	▲
5. Demonstrate an advanced knowledge of technical facts and problem solving procedures relevant to contemporary architectural practice.		Δ	■	□				■	▲
6. Synthesize data in written and graphic form to effectively communicate in-depth spatial concepts and historical facts.		Δ	□	■	■	■	□	■	▲

**Architectural Design 4 (Catalogue Description):** This course addresses the issues of functional relationships, spatial composition and the site constraints, as well as selection and detailing of building materials. A sequence of design exercises and projects with a high degree of complexity will explore the three-dimensional nature of architectural forms and spaces. Models are primary in this studio, with drawing exercises supplementing each project to develop, refine, and communicate design ideas.

**Rubric Scale:**

Exceptional: Clear and complete understanding of goal. Project exceeds desired objective.

(4 pts.)

Above Average: Sound understanding of the goal. Project meets desired objective in a consistently professional manner utilizing multiple critical, project-specific solutions.

(3 pts.)

Acceptable: Project meets the desired objectives of the goal. Multiple solutions and process to the stated goals are singular.

(2 pts.)

Unacceptable: Serious deficiencies in understanding and presenting a solution to the stated goal. Multiple solutions and process are not available.

(1 pts.)

Missing: Required evidence is not available and/ or presented.

(0 pts.)

**Grading Scale:**

0=F, .99-1.99=D, 2.00-2.75=C, 2.76-3.49=B, 3.50-4.00=A

**1. Demonstrate effective written, oral and visual/graphic communication skills.**

Prior to your final presentation, you submitted a written outline detailing all topics covered in your project. The outline was type written and adhered to the sample outline distributed in class two weeks prior to the final presentation.

0      1      2      3      4

Your oral presentation is clear; all main topics are addressed in your presentation and you describe the spatial concepts around which your project was based. When speaking, your voice is at a consistently audible level and you respectfully answer/respond to any questions pose to you by the guest critic(s), peers, and / or professor(s).

0      1      2      3      4

The entire project, including but not limited to photographs, sketches, process models, final drawings and final models, is arranged on the wall in a professional manner consistent with previous in-class presentations. The layout compliments the oral presentation and all facets of the project are easily viewable by the guest critic(s), peers, and / or professor(s).

0      1      2      3      4

**Demonstrate mastery and usage of discipline specific vocabulary.**

Oral presentation and written outline include discipline specific vocabulary words augmenting the concepts explored in your project. Furthermore, you are able to explain your project clearly and explain concepts and ideas clearly when you are asked for clarification.

0      1      2      3      4

**Demonstrate proficiency in constructing critical solutions to issues of space-making through the use of three-dimensional media including, but not limited to, drawing and modeling.**

Is (Are) the spatial intent(s) of the model(s) defined through the application of material and the process of construction? Are spatial systems hierarchical with regards to their purpose and programmatic intent? Do material and spatial systems engage in systemic conversations? Is the stated thesis of the analysis apparent in the tactile and spatial construction of the model?

0      1      2      3      4

0      1      2      3      4

Is the final model constructed such that it is stable (i.e., no loose pieces, it can be picked up and moved without compromising its integrity)? Are the components of the model neatly cut (no jagged edges) and is the model free of glue stains or other accidental discolorations of the materials? Furthermore, are all members of the model deliberate (i.e., orthogonal pieces are at right angles, curved components are precisely articulated, Plexi-Glass is articulated through scoring and precise frosting utilizing both sides of the material)? Have you manipulated and critically determined the material palette with which you've worked (i.e, Plexi-Glass is scored and frosted and store-bought thicknesses of materials are superseded by the construction (determined thickness) of planes? Can the model sit squarely in a specific orientation yet still be comprehended on all of its faces? If present, is the soldering well crafted and used systemically?

0      1      2      3      4

Are drawings clean and free of smudge marks and the individual lines of the drawing drawn entirely with an intentional line weight? Are the angles contained in the drawing correct per the assignment? Is the surface of the drawing media(s) free of careless wrinkles or creases? Mediums such as water color, collage, charcoal, etc. are present and well crafted (in the "flat" constructions). Furthermore, they are intentional and complementary of broader ideas explored within the project. Are paints used as tonal qualities as opposed to indiscriminate colors? Where it applies, drawings are presented in the prescribed orientation and centered upon the medium.

0      1      2      3      4

Are drawings process-based constructions conveying the progression of space, clearly capturing the goals of the assignment as well as the student-based intentions? The spaces are drawn (constructed) systemically and moments of intensity and pause indicate spatial and / or systemic transitions. Furthermore, the spaces constructed with lines that indicate their relative hierarchy with regards to other spaces in the drawing?

**2. Demonstrate knowledge of architectural precedents before and concurrent to contemporary practice.**

Proper scales are utilized on the drawings and models correlating with the breadth of the specific moment depicted and/or constructed. Computer programs including but not limited to Photoshop, Sketch-up, and Rhino are employed to augment the ideas and presentation of the project.

0      1      2      3      4

**3. Demonstrate an advanced knowledge of technical facts and problem solving procedures relevant to contemporary architectural practice.**

The requirements of program, site, and other topics discovered in the course of the project are incorporated and successfully reconciled in the work. Evolution of concepts can be traced from inception to completion through the inclusion of process models and "sketch" drawings.

0      1      2      3      4

The thesis of the project is apparent in the tactile and spatial construction of the model.

0      1      2      3      4

Prescribed deadlines were consistently met throughout the course of the project.

0      1      2      3      4

**Synthesize data in written and graphic form to effectively communicate in-depth spatial concepts and historical facts.**

The written outline, verbal presentation, models, drawings, and project layout contribute to the clarification of project goals as well as student generated ideas manifested throughout the course of the semester.

0      1      2      3      4



## Progress Update: **Program Learning Outcomes**

Division of Architecture, Engineering, and Technology  
*Valencia Community College*

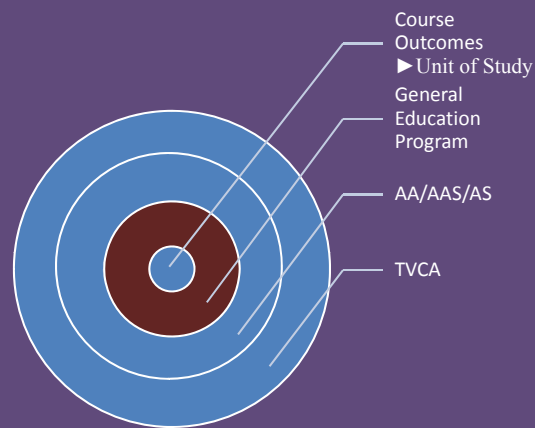
## Learning Outcome Standards

*(from Karen)*

- The outcome describes a **learning result** rather than a teaching process.
- The outcome describes what the student will be able to **demonstrate**.
- The outcome is **measurable**.
- The outcome is **specific**.
- The outcome addresses no more than a **single result**.
- The outcome uses **action verbs** that specify definite, observable behaviors.
- The outcome is **clear**: faculty, students, administrators, and people outside the unit are able to understand it.
- The outcome is **validated** by departmental colleagues.
- The outcome is **reasonable**, given the ability of the students.



## Integration of Outcomes



## Procedure (to date)

- Downloaded and studied State framework for A.S. Degree program.
- Determined commonalities with Valencia course and program content
- Developed Matrix format and first DRAFT of Program Course Outline

<h2 style="text-align: center;">Program Learning Outcomes</h2> <h3 style="text-align: center;">Technical Certificate– Building Construction Specialist</h3>		<div style="text-align: right;"> <b>EDUCATION</b>  <b>VALENCIA</b>                      Division of Architecture,                      Engineering, and Technology                 </div>										
<b>Learning Outcomes</b> Upon certificate completion, a student will be able to:	Courses	MTB2321 Technical Math	ETC1251 Engineering Materials & Processes OR ARC2461 Materials and Methods of Construction	BCT2770 Building Construction Estimating	BCN1721 Construction Planning and Control	BUILDING CONSTRUCTION ELECTIVES:	BCN1272 Construction Blueprint Reading	BCN2563 Building Service Systems	BCN2941 Internship Exploration in Construction OR BCN2942 Internship in Building Construction	BCT1705 Contracts, Codes & Specifications	SUR1101C Basic Surveying & Measurements	
	LEGEND: Δ = Objective introduced □ = Part of course content ■ = Featured course content ▲ = Primary assessment; mastery of objective											
1. Demonstrate effective written, oral and visual/graphic communication skills.		Δ	▲	■	■		■	■	■	■	■	□
2. Solve mathematical problems and equations utilizing algebraic and trigonometric functions.		▲		■	■		□	□				■
3. Demonstrate fundamental knowledge of construction materials and industry terminology, and describe how various building systems are constructed.		□	▲	■	■		■	■	□	□	□	□
4. Estimate the costs for labor, materials, and equipment for a construction project using industry-standard software and procedures.		Δ		▲	■		□		□			■
5. Develop a schedule of activities for a construction project, determine the critical path, and identify methods of compressing the completion time.		Δ		■	▲		□		□			■

<h2 style="text-align: center;">Program Learning Outcomes</h2> <h3 style="text-align: center;">A.S. Degree – Building Construction Technology</h3>		<div style="text-align: right;"> <b>EDUCATION</b>  <b>VALENCIA</b>                      Division of Architecture,                      Engineering, and Technology                 </div>																
<b>Learning Outcomes</b> Upon graduation a student will be able to:	Courses	General Education Courses	ETD1031 Intro to Const/Drafting	MTB2321 Technical Math	ETC1251 or ARC2461 Engineering Materials	ETD1100C Engin. Drawing	ETD1320 Intro to CADD	Electives	ETD1340 Advanced CADD	TAR1120C Architectural Drawing	BCN2405 Statics and Strengths	SUR1101C Basic Surveying & Measurement	BCN1721 Const. Planning and Control	BCN2563 Bldg. Service Systems	BCT1705 Contracts, Codes & Specifications	BCT2770 Bldg. Const. Estimating	TAR2033C Architectural Design	
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2. Solve mathematical problems and equations utilizing algebraic and trigonometric functions.		Δ	□	▲	□						■	■	□	□		□	□	□
3. Demonstrate fundamental knowledge of construction materials and industry terminology, and describe how various building systems are constructed.			Δ	□	▲	□	□	□	□	■	□	□	■	□	□	■	■	■
4. Demonstrate basic drafting proficiency, including the ability to use industry-standard computer software to generate 2D and 3D drawings.						Δ	■	■	■		■							▲
5. Demonstrate basic competency in the use of surveying data collectors, calculating angles, and field book procedures, and describe their importance in construction reconnaissance.				Δ					□	□		▲						
6. Estimate the costs for labor, materials, and equipment for a construction project using industry-standard software and procedures.			Δ					□		□			■				▲	■
7. Develop a schedule of activities for a construction project, determine the critical path, and identify methods of compressing the completion time.			Δ					□		□			▲				■	■
8. Work in a team environment to analyze existing building types, develop a list of programmatic requirements, sketch a schematic design, and use this information to develop drawings and models sufficient to present a competent architectural design solution.					Δ	■	□	□	■		□	■	■	■	■	■	■	▲

<h1 style="margin: 0;">Program Learning Outcomes</h1> <h2 style="margin: 0;">A.A. Degree – Articulated Pre-Major: Architecture</h2>		<b>EDUCATION</b> <b>VALENCIA</b> Division of Architecture, Engineering, and Technology								
<b>Learning Outcomes</b> <i>Upon graduation a student will be able to:</i>	<b>Courses</b>	Gen. Ed. Courses: ENC1101/1102 Composition MAC1140/1114 Algebra/Trig SFC1600 Speech, POS 2041 Govt PHY1063C Physics, Science EL HUM Elect., Soc. Sci. Elective	ARC1301 Arch. Design 1	ARC1302 Arch. Design 2	ARC1201 Theory of Arch.	ARC1701 History of Arch.1	ARC2702 History of Arch.2	Electives	ARC2303 Arch. Design 3	ARC2304 Arch. Design 4
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2. Demonstrate mastery and usage of discipline specific vocabulary.		Δ	■	■	■	■	■	□	■	▲
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5. Demonstrate an advanced knowledge of technical facts and problem solving procedures relevant to contemporary architectural practice		Δ	■	□	□	□	□	■	■	▲
6. Synthesize data in written and graphic form to effectively communicate in-depth spatial concepts and historical facts		Δ	□	■	■	■	■	□	■	▲