

# ARCHITECTURAL DESIGN, CERTIFICATE OF ACHIEVEMENT

The Certificate of Achievement in Architectural Design provides a balance of architectural, technical design and lower division courses to provide students with a diverse foundation of knowledge in the fields of architecture, landscape architecture, and urban planning which prepares them for careers in a wide range of design fields. The program is designed to prepare students to work as architectural technicians or designers in an architectural, engineering, or development office.

The curriculum visualizes architecture as a cultural, creative, and technical practice and discipline with direct social impact. The program provides preparation for the baccalaureate degree and beyond and/or the training for professional careers while providing a technical associate degree.

This program offers students study and job-related experience in architectural drafting, construction techniques, design, rendering, and energy systems, as well as opportunities to develop skills necessary for employment in the professional field of architecture.

Course ID	Title	Units/ Hours
<b>Required Courses</b>		
ARCH V10	Introduction to Architectural Design	2
ARCH V21	Architectural Graphics I	3
ARCH V22	Architectural Graphics II	3
ARCH V40	Architectural Design I	3
ARCH V41	Architectural Design II	3
Units from List A		3-5
Units from List B		4-5
<b>Total Units</b>		<b>21-24</b>

Course ID	Title	Units/ Hours
<b>List A</b>		
MATH V05	Plane Trigonometry	3
MATH V20	Precalculus Mathematics	5
MATH V21A	Calculus with Analytic Geometry I	5
MATH V46	Applied Calculus	4

Course ID	Title	Units/ Hours
<b>List B</b>		
PHYS V01	Elementary Physics	5
PHYS V02A	General Physics I: Algebra/Trigonometry-Based	4
PHYS V03A	General Physics I: Calculus-Based	4
PHYS V04	Mechanics for Scientists and Engineers	4

## Recommended Courses

In addition to the required courses listed above, it is recommended that students who seek to obtain additional insight into the field of study consider taking one or more of the following courses: ARCH V11

Blueprint Reading: Architectural/Construction (Units: 3), ARCH V15 Design and Model Construction (Units: 2), ARCH V23 Introduction to AutoCAD (Units: 2), ARCH V24 Advanced Operations of AutoCAD (Units: 2), ARCH V25 Digital Tools for Architecture (Units: 3), ARCH V31 Revit Practice I (Units: 3), ARCH V32 Revit Practice II (Units: 3), ARCH V33 Computer Applications in Architecture (Units: 3), ARCH V60 Simplified Engineering for Building Construction (Units: 3), ARCH V64 Building Construction: Materials and Methods (Units: 3), ARCH V95 Architecture Internship I (Units: 1-4), ARCH V96 Architecture Internship II (Units: 1-4); CT V20 Blueprint Reading: Architectural/Construction (Units: 3), CT V60 Simplified Engineering for Building Construction (Units: 3), CT V64 Building Construction: Materials and Methods (Units: 3), DRFT V02B Blueprint Reading: Architectural/Construction (Units: 3), DRFT V05A Introduction to AutoCAD (Units: 2), DRFT V05B Advanced Operations of AutoCAD (Units: 2). Although these supplemental courses may be of value to the student, please note that they do **not** satisfy the requirements for this degree.

Upon successful completion of this program, students will be able to:

- Students will recognize and critically analyze the elements and principles of architectural design and construction
- Students will develop critical understanding of the practice of architecture and its components.
- Students will have the ability to recognize and execute cognitive, cultural, physical, social and sustainable factors in planning construction and the execution of architectural designs.
- Students will display competency with graphic communication of ideas.