

# ARCHITECTURE, Associate in Applied Science Degree - 4476

## Engineering & Technology Department

The Architecture AAS degree prepares students for both employment in an architecture, engineering, or construction (AEC) professional's office and to transfer to a four-year institution to obtain a Bachelor's degree. This program introduces students to the art and science of architecture and explores aesthetics, architectural design, the creation of presentation drawings, and the development of architectural working drawings utilizing Computer Aided Drafting (CAD) and Building Information Modeling (BIM). Technical issues relating to materials, building codes, structural systems, and environmental systems are covered, as well as an introduction to sustainable architecture.

Students should be aware that the minimum educational requirement to become a Registered Architect in the Commonwealth of Pennsylvania is a Bachelor of Architecture degree. Since the requirements of senior institutions vary widely, it is essential that students choose their intended transfer institution as soon as possible and carefully follow the program requirements outlined in that institution's catalog. In addition to the educational requirement to become a Registered Architect, there is also an experience or internship requirement, which occurs primarily in an architectural office. Many architecture schools are now integrating internships into their curricula. HACC's Architecture AAS program provides transfer students with the skills they need to qualify for internships in architectural firms. The complete program is only available at the Harrisburg Campus.

### Career Opportunities

Graduates secure positions as CAD/BIM operators preparing construction documents for a wide variety of building types. Employment opportunities exist in architecture, design-build, construction and interior design firms, including positions such as drafters, modelers, code researchers, detailers, construction supervisors, facility planners, and interior designers.

### Competency Profile

This curriculum is designed to prepare students to:

- Conceptualize the technical requirements of an architectural project and prepare preliminary construction documents using CAD and BIM software
- Explain environmental and structural systems and their integration into the building process
- Explain construction materials, systems, and methods used in architectural construction
- Assist in building code research and analysis
- Explain the principles of sustainable architecture and integrate these concepts into drawings
- Recognize architecture as both a cultural phenomenon and an artistic and technological achievement involving social, economic, environmental, material, and aesthetic elements
- Identify basic design principles through visual analysis
- Develop a philosophy and process for preparing architectural designs
- Produce design solutions and utilize hand-drawing, constructed models, and digital methods of representation
- Prepare presentation graphics using a variety of software tools
- Articulate ideas using technical and formal vocabulary of architecture and construction
- Transfer into an architecture, landscape architecture, facilities management, interior design, technical leadership or other program at a four-year institution
- Work at a computer in the office of an architecture, engineering, or construction professional

## PROGRAM REQUIREMENTS (TOTAL CREDITS = 60)

General Education		Major Requirements		Other Required Courses	
ENGL 101 English Composition I	3	ARCH 101 Architectural Design	3	Program Electives*	9
COMM 101 Effective Speaking (or)	3	ARCH 102 Architectural Design II	3		
COMM 203 Interpersonal Communication	(3)	ARCH 110 Construction Print Reading	3		
Humanities & Arts Elective - HUM 115, 117 or 118	3	ARCH 112 Architectural Working Drawings I	3		
Mathematics or Science Elective - MATH 103 or 121	3 or 4	ARCH 130 Construction Materials & Methods	3		
Social & Behavioral Science Elective	3	ARCH 135 Codes, Specifications and Safety	3		
First-Year Seminar Elective - ARCH 111	3	ARCH 211 Architectural Graphics II	3		
Wellness	1	ARCH 212 Architectural Working Drawings II	4		
	19	ARCH 233 Renovation/Detailing	4		
		ARCH 253 Sustainable Architecture	3		
			32		

\*Students are to select from the following courses: ARCH 201, 202, 214, 251, 261, 291, 295; BCT 211; PHYS 201.

## **RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS**

Part-time students can complete this program by taking one or more courses each semester.

<b>Fall Semester I</b>		<b>Spring Semester I</b>		<b>Fall Semester II</b>		<b>Spring Semester II</b>	
ARCH 101	3	ARCH 102	3	ARCH 212	4	ARCH 233	4
ARCH 110	3	ARCH 112	3	ARCH 253	3	COMM 101 <b>or</b> 203	3
ARCH 111	3	ARCH 130	3	HUM 115, 117 <b>or</b> 118	3	Program Electives	6
ENGL 101	3	ARCH 135	3	Program Elective	3	Wellness	1
MATH 103 <b>or</b> 121	3 <b>or</b> 4	ARCH 211	3	Social/Behavioral Science Elective	3		