



PROGRAMS OF **study**

ARCHITECTURAL & ENGINEERING DESIGN

ASSOCIATE IN APPLIED SCIENCE



Program Description

The Architectural and Engineering Design Degree curriculum provides a broad-based education for employment in a variety of design disciplines. Students learn Computer Aided Design (CAD) and 3D printing, engineering standards and design concepts, fabrication and construction processes, structural mechanics and material properties, and measurements and mathematics as they relate to the design process. Courses are designed to develop problem solving, critical thinking, communication and technical skills. The program prepares students for advanced CAD applications emerging in the fields of architecture, engineering, graphics, and design.

Program Learning Outcomes

Students who successfully complete the Associates in Applied Science degree in Architectural Design will be able to:

- Interpret and illustrate a creative vision in the development of architectural plans.
- Create and manipulate architectural models and plans using CAD software.
- Describe and explain the relationship between spatial design, culture and technology.
- Create and present architectural plans that comply with industry standards and building codes.
- Translate vision and ideas through the use of quantitative data and visual aids such as drawings and 2D and 3D models.
- Investigate contemporary societal and environmental issues in designing and building structures in an ethical manner.
- Recognize the value of diversity in opinions, values, abilities and cultures in the business environment.
- Operate both independently and as a team member in collaborative projects.



Career Opportunities

The Architectural & Engineering Design Degree prepares students for positions as a CAD designer or drafter in a variety of design professions with architectural, engineering, and manufacturing firms. The program utilizes the latest Autodesk and SolidWorks CAD/CAM software, allowing students to graduate with leading edge skills. Graduates develop skills that can be applied in manufacturing and fabrication, woodworking, building and construction, and mechanical design industries.

ARCHITECTURAL & ENGINEERING DESIGN, A.A.S. ASSOCIATE IN APPLIED SCIENCE

The sequencing of courses in this program begins in the fall semester.

Students entering in the spring or summer will likely take longer than two years to complete the program.

Curriculum Requirements: 61 credits	Credits	Grade	Semester
First Year, Fall Semester (15 credits)			
ARC 106 Introduction to Architecture	3		
CAD 102 Intro to CAD	3		
CAD 115 Blueprint Reading	3		
ENG 101 College Composition	3		
MAT 127 College Algebra	3		
First Year, Spring Semester (15 credits)			
ARC 202 Building Information Modeling	3		
CAD 107 Solid Modeling I	3		
CAD 210 Computer Aided Drafting II	3		
MAT 220 Trigonometry	3		
General Education Core I	3		
Second Year, Fall Semester (16 credits)			
CAD 204 Solid Modeling II	3		
PHY 151 General Physics	4		
General Education Core II	3		
General Education Core III	3		
Program Elective	3		
Second Year, Spring Semester (15 credits)			
CAD 251 3D Presentation	3		
CAD 220 CAD Management	3		
Open Elective	3		
Program Elective	3		
Program Elective	3		

*Articulation agreements exist between York County Community College and various colleges and universities.
Please, contact Career and Transfer Services for information regarding these agreements.*

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