



ARCHITECTURAL & ENGINEERING DESIGN

Associate in Applied Science

Curriculum Requirements: 61 Credits

START HERE

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SEMESTER 1 - FALL	Credits	Milestone	Completed
ARC 106 Introduction to Architecture	3	★	<input type="checkbox"/>
CAD 102 Introduction to AutoCAD	3	★	<input type="checkbox"/>
CAD 115 Mechanical Drafting Standards and Procedures	3	★	<input type="checkbox"/>
ENG 101 College Composition	3		<input type="checkbox"/>
MAT 126 Trigonometry	3		<input type="checkbox"/>
			<input type="checkbox"/>
Total Credits	15		

2

SEMESTER 2 - SPRING	Credits	Milestone	Completed
ARC 107 Introduction to Sustainable Design	3	★	<input type="checkbox"/>
ARC 202 Revit: Building Information Modeling	3	★	<input type="checkbox"/>
CAD 210 AutoCAD II	3	★	<input type="checkbox"/>
PHY 151 General Physics	4		<input type="checkbox"/>
General Education Core I	3		<input type="checkbox"/>
Total Credits	16		

3

SEMESTER 3 - FALL	Credits	Milestone	Completed
ARC 204 Energy Systems	3	★	<input type="checkbox"/>
CAD 107 SolidWorks I	3	★	<input type="checkbox"/>
General Education Core II	3		<input type="checkbox"/>
General Education Core III	3		<input type="checkbox"/>
Program Elective	3		<input type="checkbox"/>
Total Credits	15		

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SEMESTER 4 - SPRING	Credits	Milestone	Completed
ARC 207 Construction Documents	3	★	<input type="checkbox"/>
CAD 251 3D Presentation	3	★	<input type="checkbox"/>
General Education Core I-IV	3		<input type="checkbox"/>
Program Elective	3		<input type="checkbox"/>
Open Elective	3		<input type="checkbox"/>
Total Credits	15		

YOU'VE FINISHED!



Program Milestones

Program milestone courses should be taken in the term and order noted.

General Advising Notes

- English and Math courses should be taken in your first term, if possible, or first year.
- Core I courses have the following prefixes: ENG, SPE.
- Core II courses have the following prefixes: ART, COM, ENG, HIS.
- Core III courses have the following prefixes: ECO, POS, PSY, SOC.
- Core IV courses have the following prefixes: BIO, CHM, MAT, PHY, SCI.
- Program Electives - Any ARC, CAD, or PMT.

If you plan to continue your education work closely with your faculty advisor and Success Coach to make sure your courses transfer smoothly.

❖ A certificate in Mechanical Drafting & Design is embedded in this degree program. This credential will be awarded upon successful completion of the certificate's required coursework.

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 and Engineering Design will be able to:

- Interpret and illustrate abstract concepts in the pre-development stages of the design process.
- Create and manipulate architectural models and plans using CAD software.
- Describe and explain the relationship between spatial design, culture and technology.
- Create and present technical drawings 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 involved in the design process 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 and 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 software, allowing students to graduate with leading edge skills. Graduates develop skills that can be applied in building and construction, manufacturing and fabrication, woodworking, and mechanical design industries.

*Articulation agreements exist between York County Community College and various colleges and universities.
Please work with your advisor for information regarding these agreements.*

DISCLAIMER

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