

# Associate of Applied Science in Architectural and Engineering Technology

The Associate of Applied Science (AAS) in Architectural and Engineering Technology prepares students to work as support personnel in the Architecture, Engineering, and Construction (AEC) industry. The program emphasizes the development of creative design thinking skills and digital software skills needed to solve challenges confronted by architects, engineers, and constructors.

The program is based on curriculum used in accredited architecture programs and may qualify as transfer credit for students interested in pursuing architectural licensure. Please go to UAA's Authorization by State (<https://www.uaa.alaska.edu/academics/office-of-academic-affairs/uaa-state-authorization/authorization.cshml/>) website for information about licensure or certification in a state other than Alaska.

## Admission Requirements

- Complete the Admission Requirements for Associate Degrees (<http://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/undergraduate/>).

## Graduation Requirements

- Complete the General University Requirements for Associate of Applied Science Degrees (<http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements/>).
- Complete the General Education Requirements for Associate of Applied Science Degrees (<http://catalog.uaa.alaska.edu/undergraduateprograms/aasrequirements/generaleducationrequirements/>).
- Complete the following major requirements with a minimum grade of C:

Code	Title	Credits
AET A101	Fundamentals of Construction Documents	3
AET A102	Methods and Materials of Building Construction	3
AET A123	Codes and Standards	3
AET A181	Fundamentals of Building Information Modeling (BIM)	3
AET A213	Fundamentals of Civil Construction	4
AET A242	Mechanical, Electrical and Plumbing Systems	4
AET A285	Design Project 1	5
AET A286	Design Project 2	5
ART A105	Beginning Drawing	3

ART A160	Art Appreciation	3
ART A261	History of Western Art I	3
or ART A262	History of Western Art II	
CM A232	Statics and Strength of Materials	3
CM A422	Sustainability in the Built Environment	3
<b>Total</b>		<b>45</b>

**A minimum of 60 credits is required for the degree.**

## Program Student Learning Outcomes

Students graduating with an Associate of Applied Science in Architectural and Engineering Technology will be able to:

- Demonstrate skill and proficiency in computer-aided drafting and design (CADD) and 3-D modeling
- Demonstrate knowledge of drawing conventions including symbols, line types, line weights, and dimension styles as applicable to the design discipline
- Visualize and translate drawing information to actual physical objects and completed construction components
- Demonstrate an understanding of the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public
- Demonstrate an understanding of the role, duties, and responsibilities of design team members
- Demonstrate an understanding of the elements of the construction document set and the role of construction documents as communication tools for the construction contract
- Demonstrate an understanding of the construction process from the transformation of an idea or need into a completed project
- Demonstrate communication skills to be successful in the employment environment
- Demonstrate critical thinking and problem-solving skills in the employment environment