Academic Plan: Associate of Applied Science - Architectural Studies Pre-Architecture

**Catalog Year: 2020/2021**

**Total Credits: 61**

The Associates of Applied Science of Architectural Studies at Arapahoe Community College offers two concentrations:

Pre-Architecture - For students interested in licensure and continuing their education

Architecture Technician - For students wishing to enter the profession upon graduation from this program

Students will be introduced to a wide range of architectural and construction topics such as design and modeling concepts, structural analysis, building service systems, and sustainability.

The Architectural Engineering degree provides a foundation for transfer to university or, in combination with out internship and certificate programs, will help facilitate entry into or continuing education for the profession.

# Required Courses

## General Education Courses

* ART 110 - Art Appreciation OR ART 111 - Art History Ancient to Medieval, OR ART 112 - Art History Renaissance to Modern: GT-AH1\*; Available all semesters; 3 Credits
* ART 121 - Drawing I; Available all semesters; 3 Credits
* ENG 121 - English Composition I: GT-CO1\*; Available all semesters; 3 Credits
* ENG 122 - English Composition II: GT-CO2; Available all semesters; 3 Credits
* ENV 110 - Natural Disasters: GT-SC2\*; Available Fall and Spring semesters; 3 Credits
* GEO 105 - World Regional Geography OR GEO 106 - Human Geography (GT-SS2)\*; Available all semesters; 3 Credits
* HIS 101 - Western Civilization: Antiquity-1650 OR HIS 102 - Western Civilization: 1650-Present\*; Available all semesters; 3 Credits
* HUM 121 - Humanities: Early Civilizations, HUM 122 - Humanities: Medieval to Modern, OR HUM 123 - Humanities: The Modern World (GT-AH2)\* ; Available all semesters; 3 Credits
* MAT 121 - College Algebra: GT-MA1\*; Available all semesters; 4 Credits
* MAT 122 - College Trigonometry: GT-MA1; Available all semesters; 3 Credits
* PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1\*; Available Fall and Spring semesters; 5 Credits
* SOC 101 - Introduction to Sociology I, SOC 102 - Introduction to Sociology II OR SOC 207 - Environmental Sociology (GT-SS3)\*; Available all semesters; 3 Credits

## Major Courses

* AEC 100 - Introduction to Design Theory\*; Available all semesters; 3 Credits
* AEC 110 - Architectural Design & Modeling\*; Available Fall and Spring semesters; 4 Credits
* AEC 116 - Building Materials\*; Available Fall and Spring semesters; 3 Credits
* AEC 206 - Applied Structure Analysis\*; Available Spring semesters; 3 Credits
* AEC 208 - Building Environmental Systems I; Available Spring semesters; 3 Credits
* AEC 236 - International Building Codes\*; Available Spring semesters; 3 Credits
* CAD 224 - Revit Architecture; Available all semesters; 3 Credits

# Pre-Requisites, Co-Requisites, and Recommendations (grade C or better required)

Where requirements are listed as course categories (e.g. Electives, Arts/Humanities) rather than as specific courses, please note that depending upon course choice, pre-requisites may be required.

* AEC 206 - Applied Structure Analysis\*
  + Pre-Requisite: MAT 121 - College Algebra: GT-MA1 or higher
* ENG 121 – English composition I: GT-CO1\*
  + Co-Requisite: CCR 094 – Studio 121
* ENG 122 - English Composition II: GT-CO2
  + Pre-Requisite: ENG 121 - English Composition I OR ENG 131 - Technical Writing I
* MAT 122 - College Trigonometry: GT-MA1
  + Pre-Requisite: MAT 121 - College Algebra or Higher
* PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1\*
  + Pre-Requisite: MAT 121 - College Algebra or Higher
* AEC 208 - Building Environmental Systems I
  + Pre-Requisite: AEC 116 - Building Materials\*
  + Pre-Requisite: MAT 121 - College Algebra: GT-MA1\*
  + Pre-Requisite: OR Instructor's permission

**Program Outcomes**

* Define and differentiate various building materials.
* Locate, explain, and apply building codes.
* Demonstrate the ability to Print Read.
* Design digital graphics.

**Notes**

* \*This course requires college level readiness as measured by Accuplacer, ACT, or SAT scores; approved high school course work that is less than five years old; or successful completion of appropriate college-readiness course.
* AAA 101 – College 101: Student Experience is required for all new college students seeking degrees or transfer.
* Course availability is subject to change.
* Recommended courses may be listed above for certain electives; consult with the Academic Advising Office (advising@arapahoe.edu or 303.797.5664) for additional elective recommendations.
* Refer to 20/21 catalog for specific requirements and important information about this degree.

**Graduation Requirements**

To graduate, students must apply for graduation [here](http://www.arapahoe.edu/departments-and-programs/graduation) by the deadline and meet all degree requirements.

# RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

## Year 1: Fall

* AEC 100 - Introduction to Design Theory (3 Credits)
* AEC 116 - Building Materials (3 Credits)
* ART 110 - Art Appreciation OR ART 111 - Art History Ancient to Medieval, OR ART 112 - Art History Renaissance to Modern: GT-AH1\* (3 Credits)
* ART 121 - Drawing I (3 Credits)
* ENG 121 - English Composition I: GT-CO1 (3 Credits)

## Year 1: Spring

* AEC 110 - Architectural Design & Modeling (4 Credits)
* ENG 122 - English Composition II: GT-CO2 (3 Credits)
* ENV 110 - Natural Disasters: GT-SC2 (3 Credits)
* HIS 101 - Western Civilization: Antiquity-1650 OR HIS 102 - Western Civilization: 1650-Present (3 Credits)
* MAT 121 - College Algebra: GT-MA1 (4 Credits)

## Year 2: Fall

* CAD 224 - Revit Architecture (3 Credits)
* HUM 121 - Humanities: Early Civilizations, HUM 122 - Humanities: Medieval to Modern, OR HUM 123 - Humanities: The Modern World (GT-AH2) (3 Credits)
* MAT 122 - College Trigonometry: GT-MA1 (3 Credits)
* PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1 (5 Credits)

## Year 2: Spring

* AEC 206 - Applied Structure Analysis (3 Credits)
* AEC 208 - Building Environmental Systems I (3 Credits)
* AEC 236 - International Building Codes (3 Credits)
* GEO 105 - World Regional Geography OR GEO 106 - Human Geography (GT-SS2) (3 Credits)
* SOC 101 - Introduction to Sociology I, SOC 102 - Introduction to Sociology II OR SOC 207 - Environmental Sociology (GT-SS3) (3 Credits)

# RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

## Year 1: Fall

* AEC 100 - Introduction to Design Theory (3 Credits)
* ART 121 - Drawing I (3 Credits)
* ENG 121 - English Composition I: GT-CO1 (3 Credits)

## Year 1: Spring

* AEC 116 - Building Materials (3 Credits)
* ENG 122 - English Composition II: GT-CO2 (3 Credits)
* MAT 121 - College Algebra: GT-MA1 (4 Credits)

## Year 1: Summer

* ART 110 - Art Appreciation OR ART 111 - Art History Ancient to Medieval, OR ART 112 - Art History Renaissance to Modern: GT-AH1\* (3 Credits)
* MAT 122 - College Trigonometry: GT-MA1 (3 Credits)

## Year 2: Fall

* AEC 110 - Architectural Design & Modeling (4 Credits)
* PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1 (5 Credits)

## Year 2: Spring

* AEC 206 - Applied Structure Analysis (3 Credits)
* AEC 208 - Building Environmental Systems I (3 Credits)
* ENV 110 - Natural Disasters: GT-SC2 (3 Credits)

## Year 2: Summer

* HIS 101 - Western Civilization: Antiquity-1650 OR HIS 102 - Western Civilization: 1650-Present (3 Credits)
* HUM 121 - Humanities: Early Civilizations, HUM 122 - Humanities: Medieval to Modern, OR HUM 123 - Humanities: The Modern World (GT-AH2) (3 Credits)

## Year 3: Fall

* CAD 224 - Revit Architecture (3 Credits)
* GEO 105 - World Regional Geography OR GEO 106 - Human Geography (GT-SS2) (3 Credits)
* SOC 101 - Introduction to Sociology I, SOC 102 - Introduction to Sociology II OR SOC 207 - Environmental Sociology (GT-SS3) (3 Credits)

## Year 3: Spring

* AEC 236 - International Building Codes (3 Credits)