Academic Plan - Associate of Applied Science Architectural Studies - Architecture Technician

Catalog Year: 2021/2022

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.

Total Credits: 61

General Education Courses

3 Credits, COM 115 - Public Speaking\* (3 Cr.), available fall spring summer

3 Credits, ENG 121 - English Composition I: GT-CO1\*(3 Cr.), available fall spring summer

3 Credits, MAT 122 - College Trigonometry: GT-MA1 (3 Cr.), available fall spring summer

4 Credits, MAT 121 - College Algebra: GT-MA1\* (4 Cr.), available fall spring summer

5 Credits, PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1\* (5 Cr.), available fall spring

Major Courses

3 Credits, AEC 100 - Introduction to Design Theory\* (3 Cr.), available fall spring

3 Credits, AEC 107 - Print Reading Residential/Commercial\* (3 Cr.), available fall spring

3 Credits, AEC 116 - Building Materials\* (3 Cr.), available fall spring

3 Credits, AEC 206 - Applied Structure Analysis\* (3 Cr.), available spring

3 Credits, AEC 208 - Building Environmental Systems I, available spring

3 Credits, AEC 236 - International Building Codes\* (3 Cr.), available spring

3 Credits, CAD 101 - Computer Aided Drafting/2D I (3 Cr.), available fall spring

3 Credits, CAD 102 - Computer Aided Drafting/2D II (3 Cr.), available fall spring

3 Credits, CAD 224 - Revit Architecture (3 Cr.), available fall spring

4 Credits, AEC 110 - Architectural Design & Modeling\* (4 Cr.), available fall spring

Concentration Courses

3 Credits, AEC or CAD Elective Course, available fall spring summer

3 Credits, AEC or CAD Elective Course, available fall spring summer

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Pre-Requisites, Co-Requisites, and Recommendations

* AEC 206 - Applied Structure Analysis\* (3 Cr.)
  + Pre-Requisite: MAT 121 - College Algebra: GT-MA1 or higher
* CAD 101 - Computer Aided Drafting/2D I (3 Cr.)
  + Requirement: Students must have Windows File Management skills to create file folders, rename
* CAD 102 - Computer Aided Drafting/2D II (3 Cr.)
  + Co-Requisite: CAD 101 - Computer Aided Drafting/2D I (3 Cr.)
  + Requirement: Students must have Windows File Management skills to create file folders, rename
* ENG 121 - English Composition I: GT-CO1\*(3 Cr.)
  + Co-Requisite: CCR 094 - Studio 121 (3 Cr.)
* MAT 121 - College Algebra: GT-MA1\* (4 Cr.)
  + Pre-Requisite: MAT 055 - Algebraic Literacy (4 Cr.)
* MAT 122 - College Trigonometry: GT-MA1 (3 Cr.)
  + Pre-Requisite: MAT 121 - College Algebra or Higher
* PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1\* (5 Cr.)
  + 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

Notes

Course availability is subject to change.

Refer to 21/22 catalog for specific requirements and important information about this degree.

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.

\*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

† During the summer semester the only AEC course available is AEC 280 - Internship.

In order to meet program requirements, students registered for ENG 121 or ENG 131 must also register for CCR 094 unless they can demonstrate otherwise meeting the CCR 094 standard through assessment testing, prior college coursework, or recent High School coursework. See an Advisor for details.

Graduation Requirements

To graduate, students must apply for graduation on the [Graduation Webpage](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

4 Credits, AEC 110 - Architectural Design & Modeling (4 Cr.)

3 Credits, AEC or CAD Elective Course

* ~Recommended Course(s)~
* AEC 216 - Construction Estimating\* (3 Cr.)
* AEC 226 - Construction Scheduling\* (3 Cr.)
* AEC 228 - Contracts & The Legal Environment\* (3 Cr.)
* CAD 115 - Sketchup (3 Cr.)

3 Credits, CAD 101 - Computer Aided Drafting/2D I (3 Cr.)

3 Credits, CAD 102 - Computer Aided Drafting/2D II (3 Cr.)

3 Credits, ENG 121 - English Composition I: GT-CO1 (3 Cr.)

Year 1: Spring

3 Credits, AEC 107 - Print Reading Residential/Commercial (3 Cr.)

3 Credits, AEC 116 - Building Materials (3 Cr.)

3 Credits, CAD 224 - Revit Architecture (3 Cr.)

3 Credits, COM 115 - Public Speaking (3 Cr.)

4 Credits, MAT 121 - College Algebra: GT-MA1 (4 Cr.)

Year 2: Spring

3 Credits, AEC or CAD Elective Course

* ~Recommended Course(s)~
  + AEC 231 - Estimating II: Cost Analysis\*
  + AEC 280 - Internship
  + CAD 115 - Sketchup (3 Cr.)
  + CAD 201 - Computer Aided Drafting / Custom (3 Cr.)
  + CAD 216 - Advanced Sketchup (3 Cr.)

Year 2: Fall

3 Credits, AEC 100 - Introduction to Design Theory (3 Cr.)

3 Credits, AEC or CAD Elective Course

* ~Recommended Course(s)~
  + AEC 216 - Construction Estimating\* (3 Cr.)
  + AEC 220 - Surveying\* (3 Cr.)
  + AEC 226 - Construction Scheduling\* (3 Cr.)
  + AEC 228 - Contracts & The Legal Environment\* (3 Cr.)
  + AEC 280 - Internship
  + CAD 115 - Sketchup (3 Cr.)
  + CAD 201 - Computer Aided Drafting / Custom (3 Cr.)

3 Credits, MAT 122 - College Trigonometry: GT-MA1 (3 Cr.)

5 Credits, PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1 (5 Cr.)

Year 2: Spring

3 Credits, AEC 206 - Applied Structure Analysis (3 Cr.)

3 Credits, AEC 208 - Building Environmental Systems I

3 Credits, AEC 236 - International Building Codes (3 Cr.)

3 Credits, AEC or CAD Elective Course

* ~Recommended Course(s)~
  + AEC 231 - Estimating II: Cost Analysis\*
  + AEC 280 - Internship
  + CAD 115 - Sketchup (3 Cr.)
  + CAD 201 - Computer Aided Drafting / Custom (3 Cr.)
  + CAD 216 - Advanced Sketchup (3 Cr.)

RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

Year 1: Spring

3 Credits, AEC or CAD Elective Course

* ~Recommended Course(s)~
  + AEC 231 - Estimating II: Cost Analysis\*
  + AEC 280 - Internship
  + CAD 115 - Sketchup (3 Cr.)
  + CAD 201 - Computer Aided Drafting / Custom (3 Cr.)
  + CAD 216 - Advanced Sketchup (3 Cr.)

Year 1: Summer

3 Credits, AEC or CAD Elective Course

* ~Recommended Elective(s)~
  + AEC 280 - Internship
  + CAD 216 - Advanced Sketchup (3 Cr.)

Year 1: Fall

4 Credits, AEC 110 - Architectural Design & Modeling (4 Cr.)

3 Credits, ENG 121 - English Composition I: GT-CO1 (3 Cr.)

Year 1: Spring

3 Credits, CAD 101 - Computer Aided Drafting/2D I (3 Cr.)

3 Credits, CAD 102 - Computer Aided Drafting/2D II (3 Cr.)

Year 1: Summer

3 Credits, COM 115 - Public Speaking (3 Cr.)

4 Credits, MAT 121 - College Algebra: GT-MA1 (4 Cr.)

Year 2: Summer

3 Credits, AEC or CAD Elective Course

* ~Recommended Elective(s)~
  + AEC 280 - Internship
  + CAD 216 - Advanced Sketchup (3 Cr.)

Year 2: Fall

3 Credits, AEC 107 - Print Reading Residential/Commercial (3 Cr.)

3 Credits, AEC 116 - Building Materials (3 Cr.)

3 Credits, MAT 122 - College Trigonometry: GT-MA1 (3 Cr.)

Year 2: Spring

3 Credits, AEC 206 - Applied Structure Analysis (3 Cr.)

5 Credits, PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1 (5 Cr.)

Year 3: Fall

3 Credits, AEC 100 - Introduction to Design Theory (3 Cr.)

3 Credits, AEC or CAD Elective Course

* ~Recommended Course(s)~
  + AEC 216 - Construction Estimating\* (3 Cr.)
  + AEC 220 - Surveying\* (3 Cr.)
  + AEC 226 - Construction Scheduling\* (3 Cr.)
  + AEC 228 - Contracts & The Legal Environment\* (3 Cr.)
  + AEC 280 - Internship
  + CAD 115 - Sketchup (3 Cr.)
  + CAD 201 - Computer Aided Drafting / Custom (3 Cr.)

3 Credits, CAD 224 - Revit Architecture (3 Cr.)

Year 3: Spring

3 Credits, AEC 208 - Building Environmental Systems I(3 Cr.)

3 Credits, AEC 236 - International Building Codes (3 Cr.)