

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	Credits	Pre or Co Reqs Rqd	Course Availability		
			Fall	Spr	Sum
General Education Courses					
• COM 115 - Public Speaking* (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• ENG 121 - English Composition I: GT-CO1*(3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• MAT 121 - College Algebra: GT-MA1* (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• MAT 122 - College Trigonometry: GT-MA1 (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1* (5 Cr.)	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Major Courses					
• AEC 100 - Introduction to Design Theory* (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• AEC 107 - Print Reading Residential/Commercial* (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• AEC 110 - Architectural Design & Modeling* (4 Cr.)	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• AEC 116 - Building Materials* (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• AEC 206 - Applied Structure Analysis* (3 Cr.)	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• AEC 208 - Building Environmental Systems I (3 Cr.)	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• AEC 236 - International Building Codes* (3 Cr.)	3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CAD 101 - Computer Aided Drafting/2D I (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CAD 102 - Computer Aided Drafting/2D II (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• CAD 224 - Revit Architecture (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concentration Courses					
• AEC or CAD Elective Course	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• AEC or CAD Elective Course	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• AEC or CAD Elective Course†	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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• AEC or CAD Elective Course†	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• AEC or CAD Elective Course†	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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* (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 files, delete files, copy and move files

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 files, delete files, copy and move files

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.)

- Co-Requisite: MAT 093 - Algebra Lab* (1 Cr.) OR MAT 077 - Prep Lab for College Algebra (2 Cr.)
- Pre-Requisite: MAT 055 - Algebraic Literacy (4 Cr.) or appropriate score

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 (3 Cr.)

- 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 architectural scale and digital models.
- 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.
- † During the summer semester the only AEC course available is AEC 280 - Internship.
- AAA 101 – College 101: Student Experience is required for all new college students seeking degrees or transfer.
- Course availability is subject to change.
- 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.



Arts, Communication & Design Pathway

Academic Plan
Associate of Applied Science
Architectural Studies - Architecture Technician

61 Credits

Catalog Year: 2021/2022

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

Graduation Requirements

- To graduate, students must apply for graduation (form available at www.arapahoe.edu/departments-and-programs/graduation) by the deadline and meet all degree requirements.

RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

Year 1: Fall	Credits	Course
	4	AEC 110 - Architectural Design & Modeling (4 Cr.)
	3	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	CAD 101 - Computer Aided Drafting/2D I (3 Cr.)
	3	CAD 102 - Computer Aided Drafting/2D II (3 Cr.)
	3	ENG 121 - English Composition I: GT-CO1 (3 Cr.)
Year 1: Spring	Credits	Course
	3	AEC 107 - Print Reading Residential/Commercial (3 Cr.)
	3	AEC 116 - Building Materials (3 Cr.)
	3	CAD 224 - Revit Architecture (3 Cr.)
	3	COM 115 - Public Speaking (3 Cr.)
	4	MAT 121 - College Algebra: GT-MA1 (4 Cr.)
Year 2: Spring	Credits	Course
	3	AEC or CAD Elective Course ~Recommended Course(s)~ AEC 231 - Estimating II: Cost Analysis* (3 Cr.) 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	Credits	Course
	3	AEC 100 - Introduction to Design Theory (3 Cr.)
	3	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	MAT 122 - College Trigonometry: GT-MA1 (3 Cr.)
	5	PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1 (5 Cr.)
Year 2: Spring	Credits	Course
	3	AEC 206 - Applied Structure Analysis (3 Cr.)
	3	AEC 208 - Building Environmental Systems I (3 Cr.)
	3	AEC 236 - International Building Codes (3 Cr.)



Arts, Communication & Design Pathway

61 Credits

Catalog Year: 2021/2022

3 AEC or CAD Elective Course

~Recommended Course(s)~

AEC 231 - Estimating II: Cost Analysis* (3 Cr.)

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	Credits	Course
	3	AEC or CAD Elective Course† ~Recommended Course(s)~ AEC 231 - Estimating II: Cost Analysis* (3 Cr.) 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	Credits	Course
	3	AEC or CAD Elective Course† ~Recommended Elective(s)~ AEC 280 - Internship CAD 216 - Advanced Sketchup (3 Cr.)
Year 1: Fall	Credits	Course
	4	AEC 110 - Architectural Design & Modeling (4 Cr.)
	3	ENG 121 - English Composition I: GT-CO1 (3 Cr.)
Year 1: Spring	Credits	Course
	3	CAD 101 - Computer Aided Drafting/2D I (3 Cr.)
	3	CAD 102 - Computer Aided Drafting/2D II (3 Cr.)
Year 1: Summer	Credits	Course
	3	COM 115 - Public Speaking (3 Cr.)
	4	MAT 121 - College Algebra: GT-MA1 (4 Cr.)
Year 2: Summer	Credits	Course
	3	AEC or CAD Elective Course ~Recommended Elective(s)~ AEC 280 - Internship CAD 216 - Advanced Sketchup (3 Cr.)
Year 2: Fall	Credits	Course
	3	AEC 107 - Print Reading Residential/Commercial (3 Cr.)
	3	AEC 116 - Building Materials (3 Cr.)
	3	MAT 122 - College Trigonometry: GT-MA1 (3 Cr.)
Year 2: Spring	Credits	Course
	3	AEC 206 - Applied Structure Analysis (3 Cr.)
	5	PHY 111 - Physics: Algebra-Based I with Lab: GT-SC1 (5 Cr.)
Year 3: Fall	Credits	Course
	3	AEC 100 - Introduction to Design Theory (3 Cr.)



Arts, Communication & Design Pathway

61 Credits

Catalog Year: 2021/2022

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

Year 3: Spring	Credits	Course
	3	AEC 208 - Building Environmental Systems I (3 Cr.)
	3	AEC 236 - International Building Codes (3 Cr.)