

**Area of Interest:** Computer Technology, Engineering & Math

**Degree:** Associate of Science (AS)

**Pathway:** Engineering

**Certificate:** AGEC-S

**College Catalog:** [2024-2025](#)



**Program Location:** All Campuses

**Program Description:** Engineering is the application of scientific and mathematical knowledge to design and build structures and products widely used in our everyday life. Engineers are problem solvers and seek solutions that contribute to the comfort and betterment of society.

**Contact Information:** [stem.advisor@centralaz.edu](mailto:stem.advisor@centralaz.edu)

**Area of Interest Website:** [centralaz.edu/academics/areas-of-interest/](http://centralaz.edu/academics/areas-of-interest/)

### Legend

**Bold Course**= Required Course

Recommended Course (**R**); see AGEC List, AZTransfer Major Guide, or an advisor for transfer options.

### AGEC Course list (Arizona General Education Curriculum)

Written Communication ( <b>WC</b> )	Oral Communication ( <b>OC</b> )	Arts/Humanities ( <b>AH</b> )	Social/Behavioral Science ( <b>SB</b> )
Lab Science ( <b>LS</b> )	Mathematics ( <b>M</b> )	Subject Options ( <b>SO</b> )	Transfer Elective ( <b>TE</b> )

**Special Awareness Requirements** for transfer degrees met through courses on the AGEC Course list.

Cultural Awareness (**CU**)

Global/Historical Awareness (**GI/HI**)

Intensive Writing (**IW**)

**Semester 1** New Students-Find your suggested starting point for English/Reading & Math courses.

		COURSE	CREDITS	SEMESTER/GRADE	NOTES
	WC	<b>ENG101 College Composition I</b>	3		
	LS	CHM151 General Chemistry I	4		<b>Prerequisite/Corequisite:</b> CHM090 Preparation for College Chemistry. Consult advisor for additional options.
	M	<b>MAT221 Analytical Geometry and Calculus I</b> or higher	4		Math prerequisites may be needed. Consult with <a href="#">Academic Advisor</a> .
R	TE	EGR102 Introduction to Engineering	3		
		<b>Semester Credits:</b>	<b>14</b>	<b>Meet with your CAC advisor and plan your path!</b>	

### Semester 2

		COURSE	CREDITS	SEMESTER/GRADE	NOTES
	WC	<b>ENG102 College Composition II</b>	3		
	AH	Select an AGEC Arts and Humanities course	3		
	SB	Select an AGEC Social and Behavioral Science course	3		
	LS	CHM152 General Chemistry II	4		
R	TE	MAT231 Analytical Geometry and Calculus II	4		
		<b>Semester Credits:</b>	<b>17</b>	<b>Research career and transfer opportunities!</b>	

### Semester 3

		COURSE	CREDITS	SEMESTER/GRADE	NOTES
	AH	Select an AGEC Arts & Humanities course	3		
	CC	<b>PHY121 University Physics I: Mechanics</b>	4		Fall only
R	TE	MAT241 Analytical Geometry and Calculus III	4		
	TE	Transfer Elective Options	4		
		<b>Semester Credits:</b>	<b>15</b>	<b>Apply for graduation and attend transfer events!</b>	

## Semester 4

		COURSE	CREDITS	SEMESTER/GRADE	NOTES
R	SB	ECN201 Principles of Macroeconomics	3		
	CC	<b>PHY122 University Physics II: Electricity &amp; Magnetism</b>	4		Spring only
R	TE	MAT275 Modern Differential Equations	4		
	TE	Transfer Elective Options	5		
<b>Semester Credits:</b>			<b>16</b>	<b>Finish strong-don't get distracted before finals!</b>	
<b>Total Degree Credits:</b>			<b>62</b>		
<b>Total Certificate Credits:</b>			<b>38</b>		

Arizona Resident Tuition for 2024-2025 is \$75 per credit hour; see [Paying for College](#). Financial aid may be available.

## Transfer Information

[AZTransfer Major Guide](#) has a list of transfer programs at ASU, NAU, or UA.

**CAC University Transfer Center:** [centralaz.edu/transfer](http://centralaz.edu/transfer) FREE CAC transfer resources and assistance.

### Transfer Option Course List

Aerospace Engineering	Chemical Engineering	Civil Engineering	Computer Engineering	Electrical Engineering	Mechanical Engineering
<b>EGR222</b> Circuits I ( <b>Spring Only</b> )	<b>CHM235</b> General Organic Chemistry I	<b>BIO181</b> General Biology I or <b>GLG101</b> Physical Geology	<b>EGR120</b> Digital Design Fundamentals ( <b>Fall Only</b> )	<b>EGR120</b> Digital Design Fundamentals ( <b>Fall Only</b> )	<b>EGR222</b> Circuits I ( <b>Spring Only</b> )
<b>MAT242</b> Elementary Linear Algebra	<b>CHM236</b> General Organic Chemistry II	<b>EGR222</b> Circuits I ( <b>Spring Only</b> )	<b>EGR222</b> Circuits I ( <b>Spring Only</b> )	<b>EGR222</b> Circuits I ( <b>Spring Only</b> )	<b>MAT242</b> Elementary
	<b>MAT242</b> Elementary Linear Algebra	<b>MAT242</b> Elementary Linear Algebra	<b>CIS216</b> Java Programming	<b>CIS216</b> Java Programming	
			<b>CIS231</b> Object Oriented Programming/Data Structures		

## Career Information

**CAC Career Center:** [centralaz.edu/career](http://centralaz.edu/career) FREE CAC career resources and assistance.

**O\*NET OnLine:** Visit [onetonline.org](http://onetonline.org) and search for:

### Occupations in including:

- Education needed for specific occupations
- Occupation tasks, knowledge, skills and abilities
- Salary/wages for specific occupations (\$)

**Note:** Use this Program MAP as a guide to choose courses with your advisor and track progress towards milestones and completion of program. Work with an advisor to customize your plan to align with your specific career and/or transfer goals.

**Part-Time Students:** Plans can be modified to fit the need of part-time students by adding more semesters.

**Student Name:**

**Advisor Name:**

**Student ID Number:** 880

**Date:**