

# College Transfer Associate in Engineering (A. E.) Degree

The Associate in Engineering (AE) degree is designed for students who plan to transfer to 4-year colleges and universities to major in Engineering. The degree transfers as a block to North Carolina public universities and other institutions which participate in the Comprehensive Articulation Agreement (CAA). Electives should be selected based on the intended major. For specific requirements, consult with an academic advisor in the Central Piedmont Natural Sciences Division, a Central Piedmont Transfer Advisor, or the catalog for the senior four-year school to which transfer is intended. Students are encouraged to take the Accuplacer College Level Mathematics Test to be able to start with Calculus I in the first semester of study.

For the most current information on the Associate in Engineering degree, visit the Associate in Engineering degree page.

## College Transfer Associate in Engineering Degree (A10500)

### Contact Information

The Associate in Engineering Degree is in the Engineering Technology Division. For additional information, visit the Associate in Engineering Degree website or the Program Chair at 704.330.6204

### Program Requirements

#### General Education Requirements

ENG 111	Writing and Inquiry	3.0
ENG 112	Writing and Research in the Disciplines	3.0
COM 231	Public Speaking	3.0
ENG 231	American Literature I	3.0
or ENG 232	American Literature II	
ECO 251	Principles of Microeconomics	3.0
Select one of the following:		3.0
HIS 111	World Civilizations I	
HIS 112	World Civilizations II	
HIS 131	American History I	
HIS 132	American History II	
POL 120	American Government	
PSY 150	General Psychology	
SOC 210	Introduction to Sociology	
MAT 271	Calculus I	4.0
MAT 272	Calculus II	4.0
MAT 273	Calculus III	4.0
CHM 151	General Chemistry I	4.0
PHY 251	General Physics I	4.0
PHY 252	General Physics II	4.0
BIO 111	General Biology I	4.0
or CHM 152	General Chemistry II	

#### Other Requirements:

ACA 122	College Transfer Success	1.0
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EGR 150	Introduction to Engineering	2.0
MAT 280	Linear Algebra	3.0
MAT 285	Differential Equations	3.0
Select 5 credits from the following:		5.0
CSC 134	C++ Programming	
CSC 151	JAVA Programming	
DFT 170	Engineering Graphics	
EGR 212	Logic System Design I	
EGR 220	Engineering Statics	
EGR 228	Introduction to Solid Mechanics	

**Total Credits** **60**

The following are suggested course plans if you would like to complete the Associate in Engineering and transfer to a four-year school for a variety of majors. These plans are based on the program requirements of the 2025-2026 catalog. These are only recommendations — you may take courses in another order upon consultation with your advisor. These plans are based on you starting with college-level math and English courses, starting your program in the fall, and attending full-time. You can also follow these sequences if you attend part-time. Speak with an advisor about your plans and note that recommendations may vary depending on your intended transfer institution.

Course Sequences by Major:

### Civil Engineering Transfer Pathway

Term I		Credits
ENG 111	Writing and Inquiry	3.0
ACA 122	College Transfer Success	1.0
EGR 150	Introduction to Engineering	2.0
MAT 171	Precalculus Algebra	4.0
ECO 251	Principles of Microeconomics	3.0
	<b>Credits</b>	<b>13</b>
Term II		
ENG 112	Writing and Research in the Disciplines	3.0
COM 231	Public Speaking	3.0
MAT 172	Precalculus Trigonometry	4.0
CHM 151	General Chemistry I	4.0
Behavioral/Social Science		3.0
	<b>Credits</b>	<b>17</b>
Term III		
MAT 271	Calculus I	4.0
	<b>Credits</b>	<b>4</b>
Term IV		
MAT 272	Calculus II	4.0
PHY 251	General Physics I	4.0
ENG 231	American Literature I	3.0
or ENG 232	or American Literature II	
CHM 152	General Chemistry II	4.0
CSC 134	C++ Programming	3.0
	<b>Credits</b>	<b>18</b>
Term V		
MAT 273	Calculus III	4.0
PHY 252	General Physics II	4.0
MAT 280	Linear Algebra	3.0
MAT 285	Differential Equations	3.0
EGR 220	Engineering Statics	3.0
	<b>Credits</b>	<b>17</b>
	<b>Total Credits</b>	<b>69</b>

## Computer & Electrical Engineering Transfer Pathway

Term I		Credits
ENG 111	Writing and Inquiry	3.0
ACA 122	College Transfer Success	1.0
EGR 150	Introduction to Engineering	2.0
MAT 171	Precalculus Algebra	4.0
ECO 251	Principles of Microeconomics	3.0
<b>Credits</b>		<b>13</b>
Term II		Credits
ENG 112	Writing and Research in the Disciplines	3.0
COM 231	Public Speaking	3.0
MAT 172	Precalculus Trigonometry	4.0
CHM 151	General Chemistry I	4.0
Behavioral/Social Science		3.0
<b>Credits</b>		<b>17</b>
Term III		Credits
MAT 271	Calculus I	4.0
<b>Credits</b>		<b>4</b>
Term IV		Credits
MAT 272	Calculus II	4.0
PHY 251	General Physics I	4.0
ENG 231	American Literature I	3.0
or ENG 232	or American Literature II	
CSC 134	C++ Programming	3.0
CHM 152	General Chemistry II	4.0
or BIO 111	or General Biology I	
<b>Credits</b>		<b>18</b>
Term V		Credits
MAT 273	Calculus III	4.0
PHY 252	General Physics II	4.0
MAT 285	Differential Equations	3.0
MAT 280	Linear Algebra	3.0
EGR 212	Logic System Design I	3.0
<b>Credits</b>		<b>17</b>
<b>Total Credits</b>		<b>69</b>

## Mechanical Engineering Transfer Pathway

Term I		Credits
ENG 111	Writing and Inquiry	3.0
ACA 122	College Transfer Success	1.0
EGR 150	Introduction to Engineering	2.0
MAT 171	Precalculus Algebra	4.0
ECO 251	Principles of Microeconomics	3.0
<b>Credits</b>		<b>13</b>
Term II		Credits
ENG 112	Writing and Research in the Disciplines	3.0
COM 231	Public Speaking	3.0
MAT 172	Precalculus Trigonometry	4.0
CHM 151	General Chemistry I	4.0
Behavioral/Social Science		3.0
<b>Credits</b>		<b>17</b>
Term III		Credits
MAT 271	Calculus I	4.0
<b>Credits</b>		<b>4</b>
Term IV		Credits
MAT 272	Calculus II	4.0
PHY 251	General Physics I	4.0
ENG 231	American Literature I	3.0
or ENG 232	or American Literature II	

CHM 152	General Chemistry II	4.0
DFT 170	Engineering Graphics	3.0
<b>Credits</b>		<b>18</b>
Term V		Credits
MAT 273	Calculus III	4.0
PHY 252	General Physics II	4.0
MAT 280	Linear Algebra	3.0
MAT 285	Differential Equations	3.0
EGR 220	Engineering Statics	3.0
<b>Credits</b>		<b>17</b>
<b>Total Credits</b>		<b>69</b>

## Systems Engineering Transfer Pathway

Term I		Credits
ENG 111	Writing and Inquiry	3.0
ACA 122	College Transfer Success	1.0
EGR 150	Introduction to Engineering	2.0
MAT 171	Precalculus Algebra	4.0
ECO 251	Principles of Microeconomics	3.0
<b>Credits</b>		<b>13</b>
Term II		Credits
ENG 112	Writing and Research in the Disciplines	3.0
COM 231	Public Speaking	3.0
MAT 172	Precalculus Trigonometry	4.0
CHM 151	General Chemistry I	4.0
Behavioral/Social Science		3.0
<b>Credits</b>		<b>17</b>
Term III		Credits
MAT 271	Calculus I	4.0
<b>Credits</b>		<b>4</b>
Term IV		Credits
MAT 272	Calculus II	4.0
PHY 251	General Physics I	4.0
ENG 231	American Literature I	3.0
or ENG 232	or American Literature II	
CHM 152	General Chemistry II	4.0
MAT 280	Linear Algebra	3.0
<b>Credits</b>		<b>18</b>
Term V		Credits
MAT 273	Calculus III	4.0
PHY 252	General Physics II	4.0
MAT 285	Differential Equations	3.0
EGR 212	Logic System Design I	3.0
EGR 220	Engineering Statics	3.0
<b>Credits</b>		<b>17</b>
<b>Total Credits</b>		<b>69</b>