



Associate in Engineering

Associate Degree
A10500 (60 CREDITS)

Name:	
Student ID:	
HCC Gmail:	
Advisor:	



Program Description

The Associate in Engineering (AE) curriculum is designed for students who plan to transfer to a four-year university and declare a major in engineering. Coursework includes required general education and prerequisite courses for Bachelor of Engineering programs.

Check below if RISE benchmarks met

RISE Placement Measures						
HS GPA	ACT SCORE	SAT SCORE	OLD DEV ED	MAT CREDIT	ENG CREDIT	OTHER TEST

If RISE benchmarks not met, mark courses needed

Transition Level Co-requisite Courses (As Needed)											
ENG 002	MAT 003		ENG 011		MAT 010	OR	MAT 043	OR	MAT 052	OR	MAT 071

Fall I

Course Prefix	Course Title	Course Preferences	Course Notes	Credits	When offered			Semester/Year Course Taken	Grade
					Fall	Spring	Summer		
ACA 122	College Transfer Success	<i>Hybrid, Online, Virtual, or Traditional</i>	<i>Take in the first semester</i>	1	✓	✓	✓		
CHM 151	General Chemistry I	<i>H O V T</i>		2	✓	✓			
EGR 150	Introduction to Engineering	<i>H O V T</i>		3	✓				
ENG 111	Writing & Inquiry	<i>H O V T</i>		4	✓	✓	✓		
MAT 271	Calculus I	<i>H O V T</i>	<i>Must have credit for MAT 172</i>	4	✓				
Semester Totals:				14					GPA:

Spring I

Course Prefix	Course Title	Course Preferences	Course Notes	Credits	When offered			Semester/Year Course Taken	Grade
					Fall	Spring	Summer		
ECO 251	Principles of Microeconomics	<i>Hybrid, Online, Virtual, or Traditional</i>		3	✓	✓	✓		
ENG 112	Writing & Research in the Disciplines	<i>H O V T</i>	<i>Take ENG 111 first</i>	3	✓	✓	✓		
MAT 272	Calculus II	<i>H O V T</i>	<i>Take MAT 271 first</i>	4		✓			
PHY 251	General Physics I	<i>H O V T</i>	<i>Take MAT 272 in the same term</i>	4		✓			
Semester Totals:				14					GPA:

Prerequisite Mathematics Courses

You must have credit for these courses below

MAT 171	Precalculus Algebra (4 credits)
MAT 172	Precalculus Trigonometry (4 credits)

Students must meet the receiving university's requirements prior to or after transferring to the senior institution.

Note to transfer students interested in pursuing a Bachelor of Science in Engineering at a four-year university:

To be eligible for the transfer of credits under the AE to the Bachelor of Science in Engineering Articulation Agreement, community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.5.

Program Completion Guide

Fall II

Course Prefix	Course Title	Course Preferences	Course Notes	Credits	When offered			Semester/Year Course Taken	Grade
					Fall	Spring	Summer		
Choose: Humanities	See Humanities Courses (List A)	<i>Hybrid, Online, Virtual, or Traditional</i>		3	✓	✓			
EGR 220	Engineering Statics	<i>H O V T</i>	<i>Take PHY 251 first</i>	3	✓				
MAT 273	Calculus III	<i>H O V T</i>	<i>Take MAT 272 first</i>	4	✓				
PHY 252	General Physics II	<i>H O V T</i>	<i>Take PHY 251 first</i>	4	✓				
PED 110	Fit & Well for Life	<i>H O V T</i>		2	✓	✓	✓		
Semester Totals:				16					GPA:

Spring II

Course Prefix	Course Title	Course Preferences	Course Notes	Credits	When offered			Semester/Year Course Taken	Grade
					Fall	Spring	Summer		
Choose: Beh/Soc	See Behavioral/Social Science Courses (List B)	<i>Hybrid, Online, Virtual, or Traditional</i>		3	✓	✓			
Choose: Comm/FA	See Communication/Fine Arts Courses (List C)	<i>H O V T</i>		4	✓	✓			
Choose: Science	See General Education/Science Courses (List D)	<i>H O V T</i>		3	✓	✓			
CSC 151	JAVA Programming	<i>H O V T</i>		3		✓			
DFT 170	Engineering Graphics	<i>H O V T</i>		3		✓			
Semester Totals:				16					GPA:
Program Totals:				60					overall GPA:

A. Humanities Courses - 3 credits

Choose 1 course from below

ENG 231	American Literature I (3 credits)
ENG 232	American Literature II (3 credits)
ENG 241	British Literature I (3 credits)
ENG 242	British Literature II (3 credits)
REL 110	World Religions (3 credits)

Electives For a complete list of electives, see next page

B. Behavioral/Social Sciences Courses - 3 credits

Choose 1 course from below

HIS 111	World Civilizations I (3 credits)
HIS 112	World Civilizations II (3 credits)
HIS 131	American History I (3 credits)
HIS 132	American History II (3 credits)
POL 120	American Government (3 credits)
PSY 150	General Psychology (3 credits)
SOC 210	Intro to Sociology (3 credits)

*^RISE rules require that developmental credit is awarded first.
See the college catalog for more detailed requisite information.*

C. Communication/Fine Arts Courses - 3 credits

Choose 1 course from below

ART 111	Art Appreciation (3 credits)
COM 231	Public Speaking (3 credits)
MUS 110	Music Appreciation (3 credits)
MUS 112	Introduction to Jazz (3 credits)

D. General Education/Sciences Courses - 4 credits

Choose 1 course from below

BIO 111	General Biology I (4 credits)
CHM 152	General Chemistry II (4 credits)

Required Courses - Regardless of Major	
Study Skills - 1 credit	
ACA 122	College Transfer Success (1 credit)
Composition - 6 credits	
ENG 111	Writing and Inquiry (3 credits)
ENG 112	Writing/Research in the Disc (3 credits)
Computers - 3 credits	
CIS 110	Introduction to Computers (3 credits)

Gateway Mathematics Courses for Transfer Students	
MAT 143	Quantitative Literacy (3 credits)
MAT 152	Statistical Methods I (4 credits)
MAT 171	Precalculus Algebra (4 credits)

Communication Courses	
COM 120	Intro to Interpersonal Communic (3 credits)
COM 231	Public Speaking (3 credits)

Behavioral and Social Science Courses	
ECO 251	Principles of Microeconomics (3 credits)
ECO 252	Principles of Macroeconomics (3 credits)
HIS 111	World Civilizations I (3 credits)
HIS 112	World Civilizations II (3 credits)
HIS 131	American History I (3 credits)
HIS 132	American History II (3 credits)
POL 120	American Government (3 credits)
PSY 150	General Psychology (3 credits)
SOC 210	Introduction to Sociology (3 credits)

UGETC/General Education Courses - these courses are approved for transfer to four-year institutions in NC

Choose courses that have not been previously used to satisfy Gen Ed / Electives requirements:

ART 111	Art Appreciation (3 credits)	MAT 143	Quantitative Literacy (3 credits)
BIO 111	General Biology I (4 credits)	MAT 152	Statistical Methods I (4 credits)
BIO 112	General Biology II (4 credits)	MAT 171	Precalculus Algebra (4 credits)
CHM 151	General Chemistry I (4 credits)	MAT 172	Precalculus Trigonometry (4 credits)
CHM 152	General Chemistry II (4 credits)	MAT 271	Calculus I (4 credits)
COM 120	Intro to Interpersonal Com (3 credits)	MAT 272	Calculus II (4 credits)
COM 231	Public Speaking (3 credits)	MUS 110	Music Appreciation (3 credits)
ECO 251	Principles of Microeconomics (3 credits)	MUS 112	Introduction to Jazz (3 credits)
ECO 252	Principles of Macroeconomics (3 credits)	PHI 215	Philosophical Issues (3 credits)
ENG 231	American Literature I (3 credits)	PHI 240	Introduction to Ethics (3 credits)
ENG 232	American Literature II (3 credits)	PHY 110	Conceptual Physics (3 credits)
ENG 241	British Literature I (3 credits)	PHY 110A	Conceptual Physics Lab (1 credit)
ENG 242	British Literature II (3 credits)	PHY 251	General Physics I (4 credits)
HIS 111	World Civilizations I (3 credits)	PHY 252	General Physics II (4 credits)
HIS 112	World Civilizations II (3 credits)	POL 120	American Government (3 credits)
HIS 131	American History I (3 credits)	PSY 150	General Psychology (3 credits)
HIS 132	American History II (3 credits)	SOC 210	Introduction to Sociology (3 credits)

Other Elective Courses (non-UGETC)

BUS 110	Intro to Business (3 credits)	REL 110	World Religions (3 credits)
HEA 110	Personal Health & Wellness (3 credits)	REL 211	Intro to Old Testament (3 credits)
HUM 115	Critical Thinking (3 credits)	SOC 213	Sociology of the Family (3 credits)
HUM 120	Cultural Studies (3 credits)	SOC 220	Social Problems (3 credits)
PED 110	Fit & Well for Life (2 credits)	SOC 240	Social Psychology (3 credits)
PSY 241	Developmental Psychology (3 credits)	SPA 111	Elementary Spanish I (3 credits)
PSY 281	Abnormal Psychology (3 credits)	SPA 112	Elementary Spanish II (3 credits)

Natural Science Courses

BIO 111	General Biology I (4 credits)
BIO 112	General Biology II (4 credits)
CHM 151	General Chemistry I (4 credits)
CHM 152	General Chemistry II (4 credits)
PHY 251	General Physics I (4 credits)
PHY 252	General Physics II (4 credits)

General Education Science Courses

BIO 111	General Biology I (4 credits)
BIO 112	General Biology II (4 credits)
CHM 131 &	Intro to Chemistry (3 credits)
CHM 131A	Intro to Chemistry Lab (1 credit)
CHM 151	General Chemistry I (4 credits)
CHM 152	General Chemistry II (4 credits)
PHY 110 &	Conceptual Physics (3 credits)
PHY 110A	Conceptual Physics Lab (1 credit)

Humanities/Fine Arts Courses

ART 111	Art Appreciation (3 credits)
ENG 231	American Literature I (3 credits)
ENG 232	American Literature II (3 credits)
ENG 241	British Literature I (3 credits)
ENG 242	British Literature II (3 credits)
MUS 110	Music Appreciation (3 credits)
MUS 112	Introduction to Jazz (3 credits)
PHI 215	Philosophical Issues (3 credits)
PHI 240	Introduction to Ethics (3 credits)