

UNIVERSITY TRANSFER

Associate in Engineering (A10500)

The Associate in Engineering (AE) degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The degree plan includes required general education and prerequisite courses that are acceptable to all state funded Bachelor of Engineering programs. Students who follow the degree progression plan will meet the entrance requirements at all of the North Carolina public Bachelor of Science Engineering programs. Associate in Engineering graduates may then apply to any of these programs without taking additional and sometimes duplicative courses. Admission to Engineering programs is highly competitive and admission is not guaranteed.

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 on a 4.0 scale.

COURSE REQUIREMENTS

Richmond Community College provides day and evening course sequences for selected programs to enable students to better plan what courses to take to reach their educational goals. However, given the continued increase in the use of technology in instruction and increasing student demand for distance learning courses, the College may offer hybrid, online, web-based and information highway courses in place of traditional courses in any course sequence that is listed. Therefore, students should be aware of this possibility and prepare themselves to successfully function in a hybrid, online, web-based, or information highway course.

A. General Education Courses	Class	Lab	Work/ Clinical	Credit
1. English Composition (6 SHC)				
ENG 111 Writing and Inquiry	3	0	0	3
ENG 112 Writing/Research in the Disciplines	3	0	0	3
2. Humanities (3 SHC)				
<i>Select one course from the following:</i>				
ENG 231 American Literature I	3	0	0	3
ENG 232 American Literature II	3	0	0	3
ENG 241 British Literature I	3	0	0	3
ENG 242 British Literature II	3	0	0	3
PHI 215 Philosophical Issues	3	0	0	3
PHI 240 Introduction to Ethics	3	0	0	3
REL 110 World Religions	3	0	0	3
3. Fine Arts and Communication (3 SHC)				
<i>Select one course from the following:</i>				
ART 111 Art Appreciation	3	0	0	3
ART 114 Art History Survey I	3	0	0	3
ART 115 Art History Survey II	3	0	0	3
COM 231 American Literature I	3	0	0	3

MUS	110	Music Appreciation	3	0	0	3
4. Social/Behavioral Sciences (6 SHC)						
Required						
ECO	251	Principles of Microeconomics	3	0	0	3
<i>Select one course from the following:</i>						
HIS	111	World Civilizations I	3	0	0	3
HIS	112	World Civilizations II	3	0	0	3
HIS	131	American History I	3	0	0	3
HIS	132	American History II	3	0	0	3
POL	120	American Government	3	0	0	3
PSY	150	General Psychology	3	0	0	3
SOC	210	Introduction to Sociology	3	0	0	3
5. Mathematics (12 SHC)						
MAT	271	Calculus I	3	2	0	4
MAT	272	Calculus II	3	2	0	4
MAT	273	Calculus III	3	2	0	4
6. Natural Sciences (12 SHC)						
CHM	151	General Chemistry I	3	3	0	4
PHY	251	General Physics I	3	3	0	4
PHY	252	General Physics II	3	3	0	4
B. Other Required Courses						
1. Academic Transition (1 SHC)						
ACA	122	College Transfer Success	0	2	0	1
2. Pre-major Elective (2 SHC)						
EGR	150	Introduction to Engineering	1	2	0	2
Other General Education and Pre-Major Elective Hours (15 SHC)						
BIO	111	General Biology I	3	3	0	4
CHM	152	General Chemistry II	3	3	0	4
COM	110	Introduction to Communication	3	0	0	3
CSC	151	JAVA Programming	2	3	0	3
ECO	252	Principles of Macroeconomics	3	0	0	3
EGR	220	Engineering Statics	3	0	0	3
EGR	225	Engineering Dynamics	3	0	0	3
MAT	285	Differential Equations	2	2	0	3
PED	110	Fitness and Wellness for Life	1	2	0	2
Total Credit Hours					60	

*Approved Electives are listed on the page before the Course Descriptions.

SEMESTER SCHEDULE ENGINEERING (DAY)

			Work/ Clinical Credit			
			Class	Lab	Clinical	Credit
First Year – Fall Semester						
ACA	122	College Transfer Success	0	2	0	1
CHM	151	General Chemistry I	3	3	0	4

ENG	111	Writing and Inquiry	3	0	0	3
MAT	271	Calculus I	3	2	0	4
		Humanities	3	0	0	3
			<u>12</u>	<u>7</u>	<u>0</u>	<u>15</u>
First Year – Spring Semester						
CHM	152	General Chemistry II	3	3	0	4
ENG	112	Writing/Research in the Disciplines	3	0	0	3
MAT	272	Calculus II	3	2	0	4
PHY	251	General Physics I	3	3	0	4
			<u>12</u>	<u>8</u>	<u>0</u>	<u>15</u>
Second Year – Fall Semester						
CSC	151	JAVA Programming	2	3	0	3
EGR	150	Introduction to Engineering	1	2	0	2
EGR	220	Engineering Statics	3	0	0	3
MAT	273	Calculus III	3	2	0	4
PHY	252	General Physics II	3	3	0	4
			<u>12</u>	<u>10</u>	<u>0</u>	<u>16</u>
Second Year – Spring Semester						
ECO	251	Principles of Microeconomics	3	0	0	3
EGR	225	Engineering Dynamics	3	0	0	3
MAT	285	Differential Equation	2	2	0	3
		Fine Arts/Communication	3	0	0	3
		Social/Behavioral Sciences	3	0	0	3
			<u>14</u>	<u>2</u>	<u>0</u>	<u>15</u>
Total Credit Hours						61