Northern Virginia Community College 2007-2008 Catalog

ENGINEERING: Electrical Engineering Specialization
Associate of Science Degree **AN**

Purpose: The curriculum is designed to permit the student to transfer into a baccalaureate degree program in Electrical Engineering (EE). All B.S.E.E. degree-granting colleges/universities require specific preparation in the sophomore year for EE majors.

Transfer Information: Students are advised to work closely with the faculty and counseling staff for program and course scheduling. Electives should be chosen carefully to meet requirements of transfer institution. The responsibility for proper course selection rests with the student.

Recommended Preparation: High school courses: 4 units of English, 2 units of algebra, 1 unit of geometry, 1 unit of trigonometry, and 1 unit of laboratory science (chemistry or physics).

Completion Requirements: Grades of C and above are required in courses intended to be transferred for credit to a baccalaureate degree-granting college/university.

Two Years		**Credits**
1st Semester		
CHM	111 College Chemistry I	4
EGR	120 Introduction to Engineering	2
ENG	111 College Composition I	3
MTH	173 Calculus/Analytic Geometry I	5
[1]PED	116 Lifetime Fitness & Wellness	1
SDV	Elective	1
	Total	**16**
2nd Semester		
[2]EGR	126 Computer Programming for Engineers	3
[3]ENG	112 College Composition II	3
MTH	174 Calculus/Analytic Geometry II	5
PHY	241 University Physics I or	
	PHY 231 General University Physics I	4-5
	Total	**15-16**
3rd Semester		
EGR	240 Engineering Mech. - Statics	3
EGR	251 Basic Electric Circuits I	3
MTH	277 Vector Calculus	4
[1]PED/RPK		1
[4]___	Social Science Elective	3
[5]SPD	Elective	3
	Total	**17**
4th Semester		
EGR	252 Basic Electric Circuits II	3
EGR	255 Electric Circuits Laboratory	1
[6]__	Humanities/Fine Arts Elective	3
PHY	242 University Physics II or	
	PHY 232 General University Physics II	4-5
[4]___	Social Science Elective	3
	Total	**14-15**
5th Semester		
[7]EGR	Elective	2-3*
EGR	265 Digital Elec. & Logic Design	4*
MTH	285 Linear Algebra	3*
MTH	291 Differential Equations	3*
MTH	292 Topics in Differential Equations	3*

Total	**15-16**

Total credits for the A.S. Degree in Engineering with a Specialization in Electrical Engineering = 62-64.

[1] The PED requirement may be met by one of the following options: PED 116, 2 cr.; PED 116, 1 cr. plus a PED activities course, 1 cr.; or PED 116, 1 cr. plus RPK activities course. PED 116 is offered as both a 1-credit and a 2-credit course.

[2] CSC 201 may be substituted for transfer to GMU.

[3] ENG 125 may be substituted with the advice of a counselor or faculty advisor according to requirements of transfer institutions.

[4] Must include one semester of history (American or Western Civilization) plus a second semester of history, economics, psychology, or sociology.

[5] The SPD elective may be selected from the following: SPD 100, 110, 115, 126, 227 or 229.

[6] The humanities/fine arts elective may be selected from list on page 54. Elective should be selected with advice of a counselor or faculty advisor to meet requirements of transfer institution.

[7] EGR 206 (2 credits) required at Va. Tech and desirable elsewhere. EGR 266 is required for EE curriculum at all universities.

[*] These courses are not required for the A.S. degree; however, completion of them is desirable for transfer as a junior in Electrical Engineering. Consult the requirements of your transfer institution.