

**GEORGE MASON UNIVERSITY**  
**THE VOLGENAU SCHOOL OF ENGINEERING**  
**B.S. DEGREE IN ELECTRICAL ENGINEERING (3100 The Engineering Building, 703-993-1569)**  
[http://ece.gmu.edu/index.php?id=bs\\_ee](http://ece.gmu.edu/index.php?id=bs_ee)  
**2012-2013 CATALOG**

	<u>Department(s) &amp; Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<b><u>GENERAL EDUCATION REQUIREMENTS (24)</u></b>			
a. Written Communication: ENGH 101 (100), ENGH 302 (C or better) (3,3)		___ ___	___ ___
b. Oral Communication: COMM 100 (3)		___ ___	___ ___
c. Quantitative Reasoning (satisfied by completion of major requirements)		___ ___	___ ___
d. Literature (3) See Department for approved courses)	_____	___ ___	___ ___
e. Arts (3) (See Department for approved courses)	_____	___ ___	___ ___
f. Western Civilization (HIST 100, 125, or acceptable transfer course)		___ ___	___ ___
g. ECON 103 (3)		___ ___	___ ___
i. Natural Science (satisfied by completion of major requirements)		___ ___	___ ___
j. Global Understanding (3) (See Department for approved courses)	_____	___ ___	___ ___
k. Information Technology (satisfied by completion of major requirements)		___ ___	___ ___
l. Synthesis (satisfied by completion of major requirements)		___ ___	___ ___

**MATHEMATICS AND BASIC SCIENCES (32 hours required)**

a. MATH 113, 114 (4,4)		a. ___ ___	___ ___
b. MATH 213, 214 (3,3)		b. ___ ___	___ ___
c. MATH 203 (3)		c. ___ ___	___ ___
d. STAT 346 (3)		d. ___ ___	___ ___
e. PHYS 160, 161 (3,1)		e. ___ ___	___ ___
f. PHYS 260, 261 (3,1)		f. ___ ___	___ ___
g. PHYS 262, 263 (3,1)		g. ___ ___	___ ___

**ENGINEERING AND COMPUTER SCIENCES (64 hours required)**

a. ENGR 107 (2)		a. _____	_____
b. CS 112 (4)		b. _____	_____
c. CS 222 (3)		c. _____	_____
d. ECE 101, ECE 201 (3,3)		d. ___ ___	___ ___
e. ECE 220, ECE 280 (3,5)		e. ___ ___	___ ___
f. ECE 305, ECE 320 (3,3)		f. ___ ___	___ ___
g. ECE 331, ECE 332 (3,1)		g. ___ ___	___ ___
h. ECE 333 (writing intensive course), ECE 334 (3,1)		h. ___ ___	___ ___
i. ECE 421, ECE 433 (3,3)		i. ___ ___	___ ___
j. ECE 445 (writing intensive course), ECE 460 (3,3)		j. ___ ___	___ ___
k. Advanced Engineering Labs (list courses) (2)		k. ___ ___	___ ___
1. _____ 2. _____			
l. Senior technical electives (list courses) (9)		l. ___ ___	___ ___
1. _____ 2. _____			
3. _____		___ ___	___ ___
m. ECE 491 (writing intensive course), ECE 492, ECE 493 (1,1, 2)		m. ___ ___	___ ___

Concentrations are available in the following areas: Bioengineering, Communications and Signal Processing, Computer Engineering, Control Systems, and Electronics; see Catalog for more information.

EE students must present a C or better in all ECE, BENG, and ENGR courses presented as part of the 120 credits hours needed for the degree.

**MINIMUM HOURS TO GRADUATE: 120**

**UPPER DIVISION HOURS (minimum 45): Satisfied by required courses.**  
**TRANSFER COURSES WITH "L" IN "EQUIVALENCIES" DO NOT CONTRIBUTE TO THE REQUIRED 45 HOURS.**

This planning form is intended to be used in consultation with your academic advisor and reflects the requirements for the 2012-2013 Catalog; the University Catalog is the official reference for program requirements.

# COURSE LISTS (ELECTRICAL ENGINEERING)

## University General Education Requirements

Written Communication: ENGH 101 (or 100) and ENGH 302

Oral Communication: COMM 100

Quantitative Reasoning: MATH 113. The Math Placement Test is required to take a MATH course. (See this web site for more information: [http://cos.gmu.edu/academics/undergraduate/math\\_placement\\_testing](http://cos.gmu.edu/academics/undergraduate/math_placement_testing))

Literature: ARAB 325; CHIN 310, 311, 325, 328; CLAS 250, 260, 340, 350, 360, 380; ENGH 201, 202, 203, 204; FREN 325, 329; FRLN 330; GERM 325; ITAL 325; PHIL 253; RELI 235; RUSS 325, 326, 327; SPAN 325

Arts: ARTH 102, 200, 201, 203, 204, 321, 322, 324, 333, 334, 341, 342, 344, 360, 362, 372, 373, 376; DANC 101, 390, 391; ENGH 332; MUSI 101, 102, 107, 302; THR150,151.

Western Civilization: HIST 100 or 125; transfer students may substitute the following courses for HIST 100 or 125: HIST 101, 102, 301, 302, 304, 305, 306, 308, 309, 314, 321, 322, 388, 435, 436, 480.

Social and Behavioral Sciences: **ECON 103**

Natural Sciences: PHYS 160/161 & 260/261

Global Understanding: ANTH 302, 304, 306, 307, 308, 309, 311, 312, 332, 385; ARTH 319, 320, 380, 382, 383, 384, 385; COMM 305; ECON 360, 361, 362, 380, 390; ENGL 349; GGS 101; GLOA 101; GOVT 132, 133; HIST 130, 251, 252, 262, 272, 282, 329, 356, 358, 364, 460, 462; JAPA 310; MSOM 305; MUSI 103, 431; RELI 100, 211, 212, 313, 315, 374; RUSS 354; SOCI 120, 332; SPAN 322; WMST 100

Information Technology: CS 112 and ENGR 107

Synthesis: **ECE 492, 493**

