

**GEORGE MASON UNIVERSITY**  
**THE VOLGENAU SCHOOL OF ENGINEERING**  
**B.S. DEGREE IN ELECTRICAL ENGINEERING (3100 Nguyen Engineering Building, 703-993-1569)**  
[http://ece.gmu.edu/index.php?id=bs\\_ee](http://ece.gmu.edu/index.php?id=bs_ee)  
**2016-2017 CATALOG**

	<u>Department(s) &amp; Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<b><u>MASON CORE REQUIREMENTS (24)</u></b>			
a. Written Communication: ENGH 101 (100), ENGH 302 (C or better) (3,3)		___ ___	___ ___
b. Oral Communication: COMM 100 or 101 (please circle choice) (3)		___	___
c. Quantitative Reasoning (satisfied by completion of major requirements)		___	___
d. Literature (3)	_____	___	___
e. Arts (3)	_____	___	___
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)	_____	___	___
k. Information Technology (satisfied by completion of major requirements)		___	___
l. Synthesis (satisfied by completion of major requirements)		___	___

Go to: <http://masoncore.gmu.edu/> to link to information on Mason Core 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 (65 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 285, *ECE 286 (3,3,3)		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.

\*Note that ECE 285/ECE 286 courses taken at Mason prior to fall 2013 or transferred to Mason prior to fall 2014 do NOT meet the circuit analysis requirement. Students who fit in either category need to contact the department as soon as possible to discuss their options

Students must present a C or better in all ECE, BENG, ENGR, CS, MATH, PHYS, and STAT courses presented as part of the 121 credits hours needed for the degree.

**MINIMUM HOURS TO GRADUATE: 121**

**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 2016-2017 Catalog; the University Catalog is the official reference for program requirements.

# COURSE LISTS (ELECTRICAL ENGINEERING)

## Mason Core Requirements

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

Oral Communication: COMM 100 or COMM 101

Quantitative Reasoning: MATH 113. The Math Placement Test is required to take MATH 113. See this web site for more information: [http://math.gmu.edu/placement\\_test.php](http://math.gmu.edu/placement_test.php)

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 320, 325; JAPA 340; KORE 311; PHIL 253; RELI 235; RUSS 325, 326, 327; SPAN 325

Arts: ARTH 101, 102, 103, 200, 201, 203, 204, 321, 322, 324, 333, 334, 335, 340, 341, 342, 344, 345, 360, 362, 370, 372, 373, 376; AVT 103, 104, 215, 222, 232, 243, 252, 253, 262, 272, 385; DANC 101, 119, 125, 131, 145, 161, 225, 231, 245, 301, 325, 331, 345, 425, 445, 390, 391; ENGH 370, 372, 396; FAVS 225; GAME 101; MUSI 100, 101, 102, 107, 280, 301, 302, 380, 381, 382, 383, 384, 385, 387, 389, 485; PHIL 156; THR 101, 150, 151, 210, 230, 395, 411, 412.

Western Civilization: HIST 100 or 125; transfer students may substitute: the following courses for HIST 100: HIST 101, 102, 301, 302, 304, 305, 306, 308, 309, 312, 314, 322, 388, 436, 480; and the following courses for HIST 125: HIST 202, 387.

Social and Behavioral Sciences: ECON 103

Natural Sciences: PHYS 160/161 & 260/261

Global Understanding: ANTH 302, 306, 307, 308, 309, 311, 312, 313, 316, 331, 332; ARTH 319, 320, 380, 382, 383, 384, 385, 386; BUS 200; CEIE 100; COMM 305, 456; CRIM 405; DANC 118, 318, 418; ECON 360, 361, 362, 380, 390; ENGH 362, 366; FAVS 300; FRLN 331; GCH 205; GGS 101; GLOA 101; GOVT 132, 133; HIST 251, 252, 261, 262, 271, 272, 281, 282, 328, 329, 356, 357, 358, 360, 364, 365, 387, 460, 462; JAPA 310; MUSI 103, 431; PHIL 243; PSYC 379; RELI 100, 211, 212, 313, 315, 320, 322, 341, 374; RUSS 354; SOCI 120, 320, 332; SPAN 322, 466; SYST 202; THR 359, TOUR 210; WMST 100

Information Technology: CS 112 and ENGR 107

Synthesis: ECE 492, 493