

GEORGE MASON UNIVERSITY
SCHOOL OF INFORMATION TECHNOLOGY AND ENGINEERING
B.S. DEGREE IN SYSTEMS ENGINEERING (2100 The Engineering Building, 703-993-1670)
<http://www.gmu.edu/departments/seor/undergrad.html>
2011-2012 CATALOG

	<u>Department(s) & Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<u>GENERAL EDUCATION REQUIREMENTS (*24)</u>			
a. Written Communication: ENGH 101 (100), ENGH 302 (C or better; natural science) (3,3)		_____	_____
b. Oral Communication (satisfied by completion of major requirements)			
c. Quantitative Reasoning (satisfied by completion of mathematics and basic sciences requirements)			
d. Literature (3) (from approved course list)	_____	_____	_____
e. Arts (3) (from approved course list)	_____	_____	_____
f. Western Civilization (3)	_____	_____	_____
g. ECON 103 (3)	_____	_____	_____
h. Natural Science (satisfied by completion of mathematics and basic sciences requirements)			
i. Global Understanding (3) (from approved course list)	_____	_____	_____
j. Information Technology (satisfied by completion of major requirements)			
k. Synthesis (satisfied by completion of major requirements)			

MATHEMATICS AND BASIC SCIENCES (35 hours required)

a. MATH 113, MATH 114 (4,4)		a. _____	_____
b. MATH 213, MATH 214 (3,3)		b. _____	_____
c. MATH 203 (3)		c. _____	_____
d. CHEM 251 (4) or CHEM 211 (4)		d. _____	_____
e. PHYS 160, PHYS 161 (3,1)		e. _____	_____
f. PHYS 260, PHYS 261 (3,1)		f. _____	_____
g. STAT 344 (3)		g. _____	_____
h. STAT 354 (3)		h. _____	_____

ENGINEERING SCIENCES (61 hours required)

a. CS 112 (4)		a. _____	_____
b. ENGR 107 (2)		b. _____	_____
c. CS 211 (3)		c. _____	_____
d. SYST 101 (3)		d. _____	_____
e. SYST 210 (3)		e. _____	_____
f. SYST 220 (3)		f. _____	_____
g. SYST 221 (1)		g. _____	_____
h. SYST 320 (3)		h. _____	_____
i. SYST 330 (3)		i. _____	_____
j. SYST 335 (3)		j. _____	_____
k. SYST 371 (3)		k. _____	_____
l. SYST 470 (3)		l. _____	_____
m. SYST 473 (3)		m. _____	_____
n. SYST 489 (writing intensive course) (3)		n. _____	_____
o. SYST 490 (3)		o. _____	_____
p. SYST 495 (3)		p. _____	_____
q. OR 441 (3)		q. _____	_____
r. OR 442 (3)		r. _____	_____
s. Technical Emphasis Ares: The systems engineering program requires 9 credits of technical electives. Students must select one of the following technical emphases, each containing three courses. See http://catalog.gmu.edu/preview_program.php?catoid=17&pooid=7247 for details (9)			
1. _____		1. _____	_____
2. _____		2. _____	_____
3. _____		3. _____	_____

MINIMUM HOURS TO GRADUATE: 120

UPPER DIVISION HOURS (minimum 45): Satisfied by required courses.

COURSE LISTS (SYSTEMS ENGINEERING)

University General Education Requirements

Written Communication: ENGH 101 (or 100) and ENGH 302 (natural science section)

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)

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 101, 102, 103, 200, 201, 203, 204, 321, 322, 324, 333, 334, 335, 340, 341, 342, 344, 345, 360, 362, 372, 373, 376; AVT 103, 104, 215, 222, 232, 243, 252, 253, 262, 272; DANC 101, 119, 125, 131, 145, 161, 225, 231, 245, 301, 390, 391; ENGH 372, 396; MUSI 100, 101, 102, 107, 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 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, 313, 331, 332, 385; ARTH 319, 320, 380, 382, 383, 384, 385, 386; CEIE 100; COMM 305, 456; CRIM 405; DANC 118, 318; ECON 360, 361, 362, 380, 390; ENGH 362, 366; GCH 205; GGS 101; GLOA 101; GOVT 132, 133; HIST 130, 251, 252, 261, 262, 271, 272, 281, 282, 328, 329, 356, 358, 360, 364, 365, 387, 460, 462; JAPA 310; MSOM 305; MUSI 103, 431; PSYC 379; RELI 100, 211, 212, 313, 315, 341, 374; RUSS 354; SOCI 120, 320, 332; SPAN 322; SYST 100; THR 359, TOUR 210; WMST 100

Information Technology: CS 112 and ENGR 107

Synthesis: **SYST 495**

