

GEORGE MASON UNIVERSITY
THE VOLGENAU SCHOOL OF INFORMATION TECHNOLOGY AND ENGINEERING
B.S. DEGREE IN BIOENGINEERING
(BIOENGINEERING HEALTHCARE INFORMATICS CONCENTRATION)
(3800 Nguyen Engineering Building, 703-993-4190)
<http://bioengineering.gmu.edu/>
2015-2016 CATALOG

	<u>Department(s) & Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<u>MASON CORE REQUIREMENTS (21)</u>			
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)	_____	___ ___	___ ___
e. Arts (3)	_____	___ ___	___ ___
f. Western Civilization (HIST 100, 125, or acceptable transfer course)		___ ___	___ ___
g. Social & Behavioral Science: (satisfied by completion of major requirements)		___ ___	___ ___
h. Natural Science (satisfied by completion of major requirements)		___ ___	___ ___
i. Global Understanding (3)	_____	___ ___	___ ___
j. Information Technology (satisfied by completion of major requirements)		___ ___	___ ___
k. Synthesis (satisfied by completion of major requirements)		___ ___	___ ___

Go to: <http://masoncore.gmu.edu/> to link to information on Mason Core requirements.

BIOENGINEERING, MATHEMATICS, COMPUTER SCIENCES, AND BASIC SCIENCES (70-71)

a. BENG 101, BENG 220 (3,3)	a. ___ ___	___ ___
b. BENG 301, BENG 302 (3,1)	b. ___ ___	___ ___
c. BENG 304, BENG 320 (3,3)	c. ___ ___	___ ___
d. BENG 380, BENG 381 (3,1)	d. ___ ___	___ ___
e. BENG 420 (3)	e. ___ ___	___ ___
f. BENG 491, BENG 492 (1,2)	f. ___ ___	___ ___
g. BENG 493, BENG 495 (2,1)	g. ___ ___	___ ___
h. BIOL 213 & BIOL 425 or BIOL 430 or BENG 313 (4,3-4)	h. ___ ___	___ ___
i. CS 112, ENGR 107 (4,2)	i. ___ ___	___ ___
j. MATH 113, MATH 114 (4,4)	j. ___ ___	___ ___
k. MATH 213, MATH 214 (3,3)	k. ___ ___	___ ___
l. MATH 203 (3)	l. ___ ___	___ ___
m. PHYS 160, PHYS 161 (3,1)	m. ___ ___	___ ___
n. PHYS 260, PHYS 261 (3,1)	n. ___ ___	___ ___
o. STAT 344 (3)	o. ___ ___	___ ___

Bioengineering Healthcare Informatics Concentration (31)

a. CHEM 251 (4)	a. ___ ___	___ ___
b. CS 222 (3)	b. ___ ___	___ ___
c. ECON 103 (3)	c. ___ ___	___ ___
d. BENG 322(3)	d. ___ ___	___ ___
e. HAP 301, HAP 360 (3,3)	e. ___ ___	___ ___
f. IT 214 (3)	f. ___ ___	___ ___
g. Nine credits of Technical Electives chosen from the following (circle choices): BENG 341, 390, 392, 395, 406, 441, 451, 499, 525, 538; ECE 305, 410, 421, 450; ME 313 (Students may choose to substitute one of the three credit technical electives with one of the following: BIOL 305/306, CHEM 313/315, CS 310, CS 444, CS 445, NEUR 327, PSYC 372)		___ ___

Students must complete each BENG, BIOL, ECE and ENGR course presented as part of the required credits for the degree with a grade of C or better.

MINIMUM HOURS TO GRADUATE: 122-123

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 2015-2016 Catalog; the University Catalog is the official reference for program requirements

Course Lists (Bioengineering, Health Informatics)

Mason Core 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 MATH 113. See this web site for more information: 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; 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; 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, 435, 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; BIOL 213; CHEM 251

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: **BENG 492 and 493**