

GEORGE MASON UNIVERSITY
VOLGENAU SCHOOL OF ENGINEERING
B.S. DEGREE IN APPLIED COMPUTER SCIENCE (COMPUTER GAME DESIGN CONCENTRATION)
(4300 Nguyen Engineering Building, 703-993-1530)
<http://cs.gmu.edu/programs/undergraduate/acs/>
2016-2017 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 (satisfied by completion of major requirements)	___	___
f. Western Civilization (HIST 100, 125, or acceptable transfer course) (3)	___	___
g. Social & Behavioral Science (3)	___	___
h. Natural Science (satisfied by completion of major requirements)	___	___
i. Global Understanding (3)	___	___
j. Information Technology (satisfied by completion of major requirements)	___	___
k. Synthesis (3) (satisfied by completion of major requirements)	___	___

Applied Computer Science majors must take the Natural Sciences section of [ENGH 302](#).
 Go to: <http://masoncore.gmu.edu/> to link to information on Mason Core requirements.

MAJOR REQUIREMENTS (95 hours required)

ACS Foundation Courses (24)

a. CS 101, 105 (2,1)	a. ___ ___	___ ___
b. CS 112, 211 (4,3)	b. ___ ___	___ ___
c. MATH 113, 114 (4,4)	c. ___ ___	___ ___
d. MATH 125, 203 (3,3)	d. ___ ___	___ ___

ACS Core (23)

a. ECE 301, CS 262 (3,2)	a. ___ ___	___ ___
b. CS 310, 321 (3,3)	b. ___ ___	___ ___
c. CS 330, 367 (3,3)	c. ___ ___	___ ___
d. CS 465, 483 (3,3)	d. ___ ___	___ ___

ACS Elective (3)

a. One CS course numbered above 400 except CS 498 (3) CS _____	a. _____	_____
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COMPUTER GAME DESIGN CONCENTRATION (45)

a. CS 225, 325 (3,3)	a. ___ ___	___ ___
b. CS 306, 351 (3,3)	b. ___ ___	___ ___
c. AVT 104 (4)	c. ___	___
d. STAT 344 (3)	d. ___	___
e. CS 425, 426 (3,3)	e. ___	___
f. CS 451 (3)	f. ___	___
g. AVT 382, 383 (3,3)	g. ___	___
h. One approved elective related to game design (3) (circle choice) Chosen from: CS 332, 455, 475, 480, 485; SWE 432; GAME 332; AVT 370, 374, 487	h. ___	___
i. PHYS 160/161 & one additional lab science (list course) (3/1, 4)	i. ___	___

GENERAL ELECTIVES (List courses)

MATH 104, MATH 105, and MATH 108 cannot be counted toward this degree.

Students must take [CS 101](#) within their first year at the university. Students should take [CS 105](#) during their second semester. A grade of C or better must be earned in [CS 306](#) for this course to satisfy the [Mason Core](#) synthesis requirement.

Students must earn a C or better in any course intended to satisfy a prerequisite for a computer science course. Computer science majors may not use more than one course with grade of C- or lower toward department requirements.

MINIMUM HOURS TO GRADUATE: 120

UPPER DIVISION HOURS (minimum 45):

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 (APPLIED COMPUTER SCIENCE, COMPUTER GAME DESIGN CONCENTRATION)

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

Arts: AVT 104

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: AFAM 200; ANTH 114, 120, 135, 363, 372, 396; BUS 100; CONF 101; CONS 410; CRIM 100; ECON 100, 103, 104, 105, 367; EDUC 203, 372; GGS 103; GOVT 101, 103, 367; HEAL 230; HIST 121, 122; LING 306; PSYC 100, 211, 231; SOCI 101, 352, 355; TOUR 311; WMST 200

Natural Sciences: PHYS 160/161 & one of the following: ASTR 111/112, 113/114, 115; BIOL 103, 104; BIOL 213; CDS 101/102; CHEM 103, 104, 155, 156; CHEM 211/213, 212/214, 251; CLIM 102, 111/112; EVPP 110, 111; GEOL 101, 102; GGS 121; PHYS 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; MBUS 305; 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 105 and CS 112

Synthesis: CS 306