GEORGE MASON UNIVERSITY  
COLLEGE OF SCIENCE  
B.S. DEGREE IN COMPUTATIONAL AND DATA SCIENCES (352 Research I, 703-993-8402)  
http://spacs.gmu.edu/  
2012-2013 CATALOG

GENERAL EDUCATION REQUIREMENTS (*27)  

<table>
<thead>
<tr>
<th>Department(s) &amp; Course # (s)</th>
<th>Completed/Grade(s)</th>
<th>Needed</th>
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<tr>
<td>a. Written Communication: ENGH 101 (100), ENGH 302 (C or better) (3,3)</td>
<td>_____ _____</td>
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<td>b. Oral Communication: COMM 100 or 101 (please circle choice) (3)</td>
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<td>c. Quantitative Reasoning (satisfied by completion of major requirements)</td>
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<td>d. Literature (3)</td>
<td>__________</td>
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<td>e. Arts (3)</td>
<td>__________</td>
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<td>f. Western Civilization (3)</td>
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<td>g. Social &amp; Behavioral Science (3)</td>
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<td>h. Natural Science (satisfied by completion of major requirements)</td>
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<tr>
<td>i. Global Understanding (3)</td>
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<td>j. Information Technology (partially satisfied by completion of major requirements)</td>
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<td>k. Synthesis (3)</td>
<td>__________</td>
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Go to: [http://chss.gmu.edu/general-education/all-requirements](http://chss.gmu.edu/general-education/all-requirements) to link to information on general education requirements.

MAJOR REQUIREMENTS (72-83 hours required)  

a. CDS 302 (writing intensive course) (3)  
b. Five courses chosen from the following (15):  
   - CDS 101 or 130, CDS 251, CDS 301, CDS 401, CDS 410, CDS 411 (circle choices)  
c. CDS 151 (1)  
d. MATH 113, MATH 114 (4,4)  
e. MATH 203, MATH 213 (3,3)  
f. MATH 214, MATH 446 (3,3)  
g. STAT 344 (3)  
h. Three to nine credits of CDS electives (list course(s)) (3-9)  
i. One of the following Physics sequences: PHYS 160/161; 260/261 or PHYS 243/244; PHYS 245/246 (circle choice) (8)  
j. Twenty Credits of Science Electives or a science concentration: (20-25)  

**Science Electives** (chosen in consultation with the academic advisor) (list courses)(20)

| __________ | __________ | __________ |
| __________ | __________ | __________ |

**Physics:** (21)  
1. PHYS 160/161 (3,1)  
2. PHYS 260/261 (3,1)  
3. PHYS 262/263 (3,1)  
4. Three of the following (circle choices): PHYS 303, PHYS 305, PHYS 306, PHYS 307, PHYS 308, PHYS 328 (9)  

**Chemistry:** (21)  
1. PHYS 243/244 (3/1)  
2. PHYS 245/246 (3/1)  
3. CHEM 211, CHEM 212 (4,4)  
4. CHEM 313/315 (3,2) or CHEM 331/336 (3,2) (circle choice)  

**Biology:** (25)  
1. CHEM 211, CHEM 212 (4,4)  
2. CHEM 313/315 (3,2)  
3. BIOL 213, BIOL 311 (4,4)  
4. BIOL 305, BIOL 306 (3,1)  

A GPA of 2.0 or better is needed in major requirements.

GENERAL ELECTIVES (List courses)

| __________ | __________ | __________ |
| __________ | __________ | __________ |

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 2012-2013 Catalog; the University Catalog is the official reference for program requirements.
COURSE LISTS (COMPUTATIONAL AND DATA SCIENCES)

University General Education Requirements

Written Communication: ENGL 101 (or 100) and ENGL 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://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


Western Civilization: HIST 100 or 125; transfer students may substitute the following courses for HIST 100 or 125: HIST 101, 102, 202, 301, 302, 304, 305, 306, 308, 309, 314, 322, 387, 388, 435, 436, 480.

Social and Behavioral Sciences: AFAM 200; ANTH 114, 120, 135, 396; CONF 101; CONS 410; CRIM 100; ECON 100, 103, 104, 105, 110, 111 (110 and 111 must be taken together); EDUC 372; GGS 103; GOVT 101, 103, 367; HEAL 230; HIST 121, 122; LING 306; PSYC 100, 211, 231; SOCI 101; SOM 100; TOUR 311; WMST 200

Natural Sciences: Satisfied by completion of major requirements.

Global Understanding: ANTH 302, 304, 306, 307, 308, 309, 311, 312, 313, 331, 332, 333, 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; ENGL 349, 350; GCH 205; GGS 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; THR 359, 393, 395, 396, 411, 412; WMST 100

Information Technology: One of these courses: ANTH 395, CDS 130, CHEM 350, CEIE 117, GOVT 300, HIST 390, IT 103, MUSI 415 or Course(s) from a) and one course from b): a) AVT 180; CS 112; PHYS 251; PSYC 300, 301, & 372 (all three must be taken and in sequence); b) CDS 151, CEIE 409, CS 105, ENGR 107, IT 304, PHIL 112

Synthesis: ANTH 400; ARTH 394; AVT 497, 498; BINF 354; BIOL 301; BIS 490; CEIE 490; COMM 326, 362, 454; CONF 490; CONS 490; CRIM 495; CS 306; DANC 490; ECE 447, 492, 493; ECON 309; EDCI 490; ENGL 305; EVPP 335; FAVS 352; FRLN 385; GEOL 420; GGS 303, 304; GOVT 490, 491; HAP 465; HIST 300, 499; IT 492; LAS 499; MATH 400; MUSI 490; NCLC 308; NURS 265; PHIL 309, 343, 377, 378; PSYC 405, 406; RELI 490; RUSS 353; SOCI 377, 483; SOCW 323, SOM 498; SPAN 388; SYST 495; THR 440, 496; PROV 342; UNIV 442