

**GEORGE MASON UNIVERSITY
VOLGENAU SCHOOL OF ENGINEERING
B.S. DEGREE IN APPLIED COMPUTER SCIENCE (BIOINFORMATICS CONCENTRATION)
(4300 Nguyen Engineering Building, 703-993-1530)
<http://cs.gmu.edu/programs/undergraduate/acs/>
2018 - 2019 CATALOG**

| | <u>Department(s) & Course #(s)</u> | <u>Completed/ Grade(s)</u> | <u>Needed</u> |
|---|--|--------------------------------|---------------|
| <u>MASON CORE REQUIREMENTS (24 credit hours required)</u> | | | |
| a. Written Communication: ENGH 101 (100), ENGH 302 Natural Science Section Only (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) (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 CS 306) Grade of C or better required | | | |

Go to: <http://catalog.gmu.edu/mason-core/> to link to information on Mason Core requirements.

MAJOR REQUIREMENTS (91 credit hours required)

ACS Foundation Courses (24 credits)

| | | | |
|------------------------|----|---------|---------|
| a. CS 110 (3) | a. | ___ ___ | ___ ___ |
| b. CS 112, 211 (4,3) | b. | ___ ___ | ___ ___ |
| c. MATH 113, 114 (4,4) | c. | ___ ___ | ___ ___ |
| d. MATH 125, 203 (3,3) | d. | ___ ___ | ___ ___ |

ACS Core (22 credits)

| | | | |
|----------------------|----|---------|---------|
| a. CS 262 (3) | a. | ___ ___ | ___ ___ |
| b. CS 310, 321 (3,3) | b. | ___ ___ | ___ ___ |
| c. CS 330, 367 (3,4) | c. | ___ ___ | ___ ___ |
| d. CS 465, 483 (3,3) | d. | ___ ___ | ___ ___ |

ACS Elective (3 credits)

| | | | |
|--|----|-------|-------|
| a. One CS course numbered above 400 except CS 498 (3) CS _____ | a. | _____ | _____ |
|--|----|-------|-------|

BIOINFORMATICS CONCENTRATION (42 credits)

| | | | |
|--|----|---------|---------|
| a. PHYS 160,161 (3,1) | a. | ___ ___ | ___ ___ |
| b. CHEM 201 (3), BIOL 213 (4) | b. | ___ ___ | ___ ___ |
| c. STAT 344 (3), CS 306 (3) | c. | ___ ___ | ___ ___ |
| d. BINF 450 (4), BIOL 482 (3) | d. | ___ ___ | ___ ___ |
| e. BIOL 580 (3), CS 450 (3) | e. | ___ ___ | ___ ___ |
| f. BINF 401 or CS 444 (circle choice) (3) | f. | ___ ___ | ___ ___ |
| g. BINF 402 or CS 445 (circle choice) (3) | g. | ___ ___ | ___ ___ |
| h. Two approved electives related to bioinformatics (3,3) (list courses) | | _____ | _____ |

MATH 104, MATH 105, and MATH 108 cannot be counted toward this degree. Students must take CS 110 within their first year at the university. 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.

GENERAL ELECTIVES (5 credits) (List courses as needed) At most 3 credits of 100-level RECR coursework may be taken to satisfy the degree requirements of those VSE programs that allow general electives.

| | | |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |

MINIMUM 120 HOURS (including Minimum 45 UPPER DIVISION HOURS) to GRADUATE

This planning form is intended to be used in consultation with your academic advisor and reflects the requirements for the 2018 - 2019 Catalog; the University Catalog is the official reference for program requirements.