

# GETTING STARTED IN COMPUTER SCIENCE @ MASON 2020 - 2021

## **MATERIALS**

### **CATALOG:**

This is the official record of policies and degree requirements. You can graduate under the rules of any Catalog that is in force when you are a student (but not a combination of catalogs).

- <http://catalog.gmu.edu>

### **BS CS BROCHURE:**

This departmental document shows all the requirements by category. Many students find it useful as a planning tool. (It does not replace the catalog.) It includes:

- **Sample Schedule:** The sample satisfies all prerequisites and shows one way to spread out the required courses over eight semesters. However, it is only a sample. It is typically more useful for first-year students than transfer students.
- **Natural Science:** The brochure presents the approved courses for the lab sequence.
- **CS-Related Electives:** The brochure includes a list of the courses for this requirement, which includes advanced CS electives.

### **BS ACS BROCHURES:**

These departmental documents summarize the requirements and sample schedules for the different concentrations. All share a common **CS foundation** and require additional classes for each concentration.

### **DEGREE EVALUATION PROGRESS REPORT:**

This is a record of the courses you have received credit for and gives a detailed account of what courses you still need to take to complete the requirements for your degree. It is available on PatriotWeb. It should be printed out and brought with you any time that you come for advising.

- <http://patriotweb.gmu.edu>

## **CURRICULUM OVERVIEW**

### **MASON CORE [MC] REQUIREMENTS**

8 courses in English and the Humanities (**BS CS**)  
Varies for **BS ACS** depending on concentration

### **BS CS REQUIREMENTS**

16 CS courses; 6 in mathematics  
3 courses in natural science (w/lab sequence)  
2 CS-related (see brochure)

### **CHOOSING INITIAL CS COURSES [ACS & CS]**

- 110:** Offers a broad overview of computer science designed to provide computer science majors with an introduction to their discipline.
- 112:** This is the initial programming course for all majors. It will teach you the important analytic steps that precede and underlie good programs. The prerequisite is calculus-readiness, i.e. placing into MATH 113.
- 211:** This sequel to CS 112 emphasizes the object-oriented approach to program design. It is taught using Java.

**UPPER DIVISION:** Transfer students must be careful to accumulate a total of 45 credits in courses numbered 300 and above.

**NOTE:** Even if a Lower Division course from another school transfers to an Upper Division GMU course, it still does *not* count toward this requirement.

**NOTE:** Even if you are waived from a required upper division GMU course (i.e., it is not for credit), it does *not* count toward this requirement.

### **NVCC (VCCS) EQUIVALENTS**

CSC 201, 202 transfer to Mason as CS 112, 211. See the sample schedule for transfer students having VCCS/NVCC Associates degrees on the CS website (Current Students Advising link.)

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## 2020 - 2021

### GET CREDIT FOR WHAT YOU KNOW

#### MATH PLACEMENT TEST

Math Dept. (4400 Exploratory Hall) 703-993-1460  
(<http://math.gmu.edu>)

#### ENGLISH 101/302 PROFICIENCY EXAMS

English Dept. (A487 Robinson Hall) 703-993-1160  
(<http://composition.gmu.edu>)

#### AP TEST IN COMPUTER SCIENCE

- Computer Science A with a score of 4 or 5  
You get credit for CS 112.

#### IB TEST IN COMPUTER SCIENCE

- Computing Science HL with a score of 4  
You get credit for CS 112.
- Computing Science HL with a score of 5, 6 or 7  
You get credit for CS 112 **and** CS 211.

#### MATH PLACEMENT RESULTS

One possible outcome is placement into Calculus I (MATH 113). In this case, you **are also qualified** to take CS 112. This is because many of the same problem-solving and symbol-handling capabilities are needed for both mathematics and computer science.

Other possible outcomes are placement into MATH 104 or MATH 105 that will prepare you for both CS and calculus. In this case, you **do not qualify** for CS 112 – you should focus on learning the material in these math classes before signing up for CS 112 and MATH 113.

Still another possible math placement test outcome is having to take the test again. Remedial material is provided in this case.

### ACADEMIC INFORMATION

#### CS DEPARTMENT (4300 Nguyen Engr. Bldg.)

- 703-993-1530
- Email: [csug@gmu.edu](mailto:csug@gmu.edu)
- Undergrad Administrative Advisors can help

#### USEFUL WEB SITES

- <http://cs.gmu.edu>  
(CS Department & Student FAQs)
- <http://volgenau.gmu.edu>  
(Volgenau School of Engineering)
- <http://www.gmu.edu>  
(University)
- <http://cos.gmu.edu>  
(College of Science)
- <http://admissions.gmu.edu>  
(Course equivalency info for transfers)
- <http://registrar.gmu.edu>  
(Academic calendars and forms)

### STUDENT SERVICES INFORMATION

**CAREER SERVICES...** job openings and internships; interview skills; create resume and career documents. Located in: SUB-I-3400  
<http://careers.gmu.edu> 703-993-2370

**LEARNING SERVICES...** can help with your academic life. <http://learningservices.gmu.edu/> 993-2380

**ACADEMIC ADVISING...**major and minor exploration. <http://advising.gmu.edu> 993-2470

**COUNSELING SERVICES...** programs designed to enhance students' personal experience and academic performance. <http://caps.gmu.edu> 993-2380

### FREQUENTLY ASKED QUESTIONS

- What computers does GMU have?  
See <http://doit.gmu.edu/>
- What computer should I buy?  
No computer is required; however, you can look for recommendations here:  
<http://cs.gmu.edu/resources/computer-accounts/>
- What is a good extra-curricular activity?  
<http://cs.gmu.edu/community/student-organizations/>
- What is "VSE"?  
GMU's Volgenau School of Engineering.