# **COMPUTER SCIENCE MINOR**

#### **Banner Code: CS**

#### **Academic Advising**

Phone: 703-993-1530 Email: csinfo@gmu.edu Website: cs.gmu.edu/current-students/undergraduates/minors/

# **Admissions & Policies**

## **Admissions Declaring a CS Minor**

Students requesting a Computer Science Minor must have completed CS 112 Introduction to Computer Programming (Mason Core) (http://catalog.gmu.edu/mason-core/) or CS 211 Object-Oriented Programming with a grade of B or better.

# **Policies**

#### Grades

No more than 3 credits of D grades may be used to satisfy requirements for the Computer Science Minor.

#### **Program Requirements**

The minor in computer science requires completion of at least 19 credits. Students should pay careful attention to prerequisites when selecting courses. Eight credits of coursework must be unique to the minor and students must complete all coursework with a minimum GPA of 2.00.

For policies governing all minors, see AP.5.3.4 Minors (http:// catalog.gmu.edu/policies/academic/undergraduate-policies/#ap-5-3-4).

## **Requirements**

# **Minor Requirements**

Total credits: 19-20

#### **Required Courses**

| Code                  | Title                                                                                         | Credits |
|-----------------------|-----------------------------------------------------------------------------------------------|---------|
| CS 112                | Introduction to Computer Programming<br>(Mason Core) (http://catalog.gmu.edu/<br>mason-core/) | 4       |
| or CS 108<br>& CS 109 | Intro to Computer Programming, Part A<br>and Intro to Computer Programming, Part B            |         |
| CS 211                | Object-Oriented Programming                                                                   | 3       |
| CS 310                | Data Structures                                                                               | 3       |
| Total Credits         |                                                                                               | 10      |

#### **Additional Computer Science Courses**

| Code                             | 2         | Title                                 | Credits |
|----------------------------------|-----------|---------------------------------------|---------|
| Select three from the following: |           | 9-10                                  |         |
| CS                               | 5 222     | Computer Programming for Engineers    |         |
|                                  | or CS 262 | Introduction to Low-Level Programming |         |

| CS 306        | Synthesis of Ethics and Law for the<br>Computing Professional (Mason Core)<br>(http://catalog.gmu.edu/mason-core/) |      |
|---------------|--------------------------------------------------------------------------------------------------------------------|------|
| CS 321        | Software Engineering                                                                                               |      |
| CS 325        | Introduction to Game Design                                                                                        |      |
| CS 330        | Formal Methods and Models                                                                                          |      |
| CS 367        | Computer Systems and Programming                                                                                   |      |
| CS 450        | Database Concepts                                                                                                  |      |
| CS 451        | Computer Graphics                                                                                                  |      |
| CS 455        | Computer Communications and<br>Networking                                                                          |      |
| CS 463        | Comparative Programming Languages                                                                                  |      |
| CS 465        | Computer Systems Architecture                                                                                      |      |
| CS 468        | Secure Programming and Systems                                                                                     |      |
| CS 471        | Operating Systems                                                                                                  |      |
| CS 480        | Introduction to Artificial Intelligence                                                                            |      |
| CS 483        | Analysis of Algorithms                                                                                             |      |
| CS 484        | Data Mining                                                                                                        |      |
| SWE 419       | Object-Oriented Software Design and<br>Implementation                                                              |      |
| or CS 332     | Object-Oriented Software Design and<br>Implementation                                                              |      |
| Total Credits |                                                                                                                    | 9-10 |