



## Volgenau School of Engineering

### COMPUTER SCIENCE MINOR 2019-2020

Computer Science is a discipline concerned with the analysis, design, implementation, maintenance and evolution of computer-based systems used in almost all walks of life. The Minor in Computer Science is intended for those pursuing other undergraduate degree programs and who feel the need to pursue Computer Science to complement their other studies. Regardless of their discipline, undergraduates find a knowledge of Computer Science to be helpful in today's world. This minor is not a "computer literacy" program; all the courses are the same ones taken by Computer Science majors.

Students requesting a Computer Science Minor must have completed CS112 or CS211 with a grade of B or better.

#### Requirements:

CS 112	Credits: 4	Introduction to Computer Programming
CS 211	Credits: 3	Object-Oriented Programming
CS 310	Credits: 3	Data Structures

And three courses chosen from:

CS 222 Computer Programming for Engineers <b>or</b>	CS 451 Computer Graphics
CS 262 Introduction to Low-Level Programming	CS 455 Computer Comm & Networking
CS 306 Synthesis of Ethics & Law	CS 463 Comparative Programming Languages
CS 321 Software Engineering	CS 465 Computer Systems Architecture
CS 325 Computer Game Design	CS 468 Secure Programming and Systems
CS 330 Formal Methods and Models	CS 471 Operating Systems
CS 332 Object-Oriented Software Design & Impl.	CS 480 Artificial Intelligence
CS 367 Computer Systems and Programming	CS 483 Analysis of Algorithms
CS 450 Database Concepts	CS 484 Data Mining

This totals 19 credits. Students should pay careful attention to prerequisites when selecting courses and be aware that at least 4 semesters are needed to complete the Minor.

University requirements state that at least 6 hours must be completed at George Mason University. No more than 3 hours of "D" in the minor is accepted. University requirements also state that at least 8 hours used towards the minor may not be used towards the student's major requirements.

#### We invite requests for additional information. Please contact:

Computer Science Department  
Volgenau School of Engineering  
George Mason University, Mail Stop 4A5  
Nguyen Engineering Building, Suite 4300  
Fairfax, VA 22030-4444

Phone: (703) 993-1530  
Fax: (703) 993-1710  
E-mail: [csug@gmu.edu](mailto:csug@gmu.edu)  
Internet: <http://cs.gmu.edu>