

# COMPUTATIONAL AND DATA SCIENCES MINOR

**Banner Code:** CDS

## Academic Programs Administrator

Email: [cgs@gmu.edu](mailto:cds@gmu.edu)

Website: [science.gmu.edu/academics/departments-units/computational-data-sciences/computational-data-sciences-minor](http://science.gmu.edu/academics/departments-units/computational-data-sciences/computational-data-sciences-minor)

The minor provides an attractive option for students majoring in science, technology, engineering, or mathematics (STEM) who wish to augment their major degree program with additional courses in modeling, simulation, data science, and scientific computing. The combination of computer science, numerical methods, science, and computational and data sciences (CDS) synthesis courses will significantly enhance the practical knowledge and computational skills of the students when compared with the major field alone. Students will acquire the knowledge, skills, and techniques commonly used across scientific disciplines, which will allow them to apply their George Mason University education in a practical way in industrial, government, and academic settings. Computational and data sciences skills are highly sought after in today's marketplace.

For additional information, please contact the CDS undergraduate coordinator/advisor.

## Admissions & Policies

### Policies

At least 8 credits must be unique to this minor and may not be used to fulfill requirements of the student's major, concentration, or another minor or undergraduate certificate. Students must complete at least 6 credits in their minor at George Mason and achieve a minimum GPA of 2.00 in courses applied to the minor.

For policies governing all minors, see AP5.3.4 Minors (<http://catalog.gmu.edu/policies/academic/undergraduate-policies/#ap-5-3-4>).

## Requirements

### Minor Requirements

Total credits: 15

Students should refer to the Admissions & Policies tab for specific policies related to this program.

Students should note that many of the required courses have prerequisites. Nonetheless, this minor is within efficient reach of most students majoring in science, mathematics, engineering, or computer science. It is very likely that students with these backgrounds will already have the prerequisites completed.

### CDS Courses

Code	Title	Credits
CDS 101	Introduction to Computational and Data Sciences (Mason Core) ( <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> )	3

or CDS 130 Computing for Scientists (Mason Core) (<http://catalog.gmu.edu/mason-core/>)

Total Credits 3

### CDS or CSI Courses

Code	Title	Credits
Select 9 credits from any CDS or CSI courses		9
CDS	( <a href="http://catalog.gmu.edu/courses/cds/">http://catalog.gmu.edu/courses/cds/</a> )	
CSI	( <a href="http://catalog.gmu.edu/courses/csi/">http://catalog.gmu.edu/courses/csi/</a> )	

Total Credits 9

### Upper-level Courses

Code	Title	Credits
Select 3 credits from any College of Science or Volgenau School of Engineering course at the 300 level or above <sup>1</sup>		3
Total Credits		3

<sup>1</sup>

Other discipline-based courses may be permitted with permission of the undergraduate program director.