Program Change Request

Date Submitted: 09/06/24 12:25 pm

Viewing: SC-MS-CSIM : Computational Science, MS

Last approved: 04/26/24 4:23 pm

Last edit: 09/06/24 12:25 pm

Changes proposed by: jbazaz

Catalog Pages
Using this Program
Computational Science, MS

Are you completing this form on someone else's behalf?

Yes

Requestor:

In Workflow

1. **CDS Chair**
2. **SC Curriculum Committee**
3. SC Assistant Dean
4. Assoc Provost-Graduate
5. Registrar-Programs

Approval Path

1. 12/06/24 3:35 pm Arie Croitoru (acroitor): Approved for CDS Chair

History

1. Oct 23, 2017 by clmig-jwehrheim
2. Jan 11, 2018 by rzachari
3. Feb 14, 2018 by rzachari
4. Feb 22, 2018 by rzachari
5. Feb 23, 2021 by jriemen
6. Apr 13, 2022 by Tory Sarro (vsarro)
7. Apr 27, 2022 by Tory Sarro (vsarro)
8. Jan 25, 2023 by Jennifer Bazaz Gettys (jbazaz)

9. Apr 26, 2024 by Jennifer Bazaz Gettys (jbazaz)

Name	Extension	Email
Eduardo Lopez	5916	elopez22

Effective Catalog: 2025-2026

Program Level: Graduate

Program Type: Master's

Degree Type: Master of Science

Title: Computational Science, MS

Banner Title: MS Computational Science

Registrar/OAPI Use Only – SCHEV Status Approved

Registrar's Office Use Only – Program Start Term

Registrar/OAPI Use Only – SCHEV Letter

Registrar/OAPI Use Only – SACSCOC Status

Concentration(s):

Registrar/IRR Use Only – Concentration CIP Code

College/School: College of Science

Department / Academic Unit:	Computational & Data Sciences
Jointly Owned Program?	No

Justification

What: Specifying minimum number of 799 credits.

Why: To communicate how the 799 credits will be applied to the degree audit and to direct students to the related thesis policy.

Total Credits Required:	Total credits: 30
Registrar's Office Use Only - Program Code:	SC-MS-CSIM
Registrar/IRR Use Only – Program CIP Code	30.0801 - Mathematics and Computer Science.
Admission Requirements:	

Admissions

University-wide admissions policies can be found in the Graduate Admissions Policies section of this catalog. International students and students having earned international degrees should also refer to Admission of International Students for additional requirements.

Eligibility

Applicants to the Computational Science, MS should have an academic background in one of the following fields: physical sciences, life sciences, engineering, mathematics, or computer science. They should have an earned baccalaureate from an institution of higher education accredited by a Mason-recognized U.S. institutional accrediting agency, or international equivalent with a GPA of at least 3.00 in their last 60 credits of study. In addition, applicants should have taken at least one course in differential equations and have facility in using a high-level computer programming language.

Application Requirements

To apply for this program, prospective students should submit the George Mason University Admissions Application and its required supplemental documentation, a goals statement, and two letters of recommendation. The GRE is not required for admission into this program.

Program-Specific Policies:

Policies

For policies governing all graduate programs, see AP.6 Graduate Policies.

Transferring Previous Graduate Credit into this Program

Previously earned and relevant graduate credits may be eligible for transfer into this program; details can be found in the Credit by Exam or Transfer section of this catalog.

Degree Requirements:

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

Core Courses

Select 6 credits from the following:		6
CSI 690	Numerical Methods	
CSI 695	Scientific Databases	
CSI 702	High-Performance Computing	
CSI 703	Scientific and Statistical Visualization	
Total Credits		6

Computational Extended Core

Select 15 credits from any graduate-level CSI, CDS, or CSS courses [1]		15
CDS		
CSI		
CSS		
Total Credits		15

[1] Not including the following research courses: CSI 796 Directed Reading and Research, CSI 798 Practicum Project, CSI 799 Master's Thesis, CSI 898 Research Colloquium in Computational Sciences and Informatics, CSI 899 Colloquium in Computational and Data Sciences, CSI 996 Doctoral Reading and Research, or from courses previously taken.

Electives

Select 9 credits of electives [1,2,3]		9

Total Credits	9

[1] Typically chosen from computational sciences and informatics, chemistry, mathematics, physics, engineering, information technology, and statistics courses.

[2] Students should create a curriculum plan for an area of emphasis or combined areas of emphases in consultation with their academic advisor.

[3] No more than 6 credits may be chosen from areas outside of CSI.

Elective credits may also include:

CSI 796	Directed Reading and Research	1-6
CSI 798	Practicum Project	1-3
CSI 799	Master's Thesis [1]	1-6

[1] If CSI 799 Master's Thesis is chosen, at least 3 credits must be taken; see AP 6.9.3 for additional details.

Retroactive Requirements Updates:

Plan of Study:

Honors
Informatio
Accelerate
Descriptio
INTO-Masc
Requireme
College
Requireme
Departmer
Academic U

Program Outcomes

Additional Program Information

This information is required by the Office of Accreditation and Program Integrity.

Courses offered via distance (if applicable):

What is the primary delivery format for the program? Face-to-Face Only

Does any portion of this program occur off-campus?

No

Are you working with a vendor / other collaborators to offer your program?

No

Related Departments

Could this program prepare students for any type of professional licensure, in Virginia or elsewhere?

No

Are you adding or removing a licensure component?

No

Additional SCHEV & SACSCOC Information

Is this change a simple retitling of an existing program, with no other changes, to any existing program content, curriculum requirements, etc?

No

Does this change represent a repackaging of content in an existing approved degree/certificate program at the same instructional level (i.e., baccalaureate, master's, or doctoral)?

No

Percentage of total credits containing new course content. ("New course content" is defined by SACSCOC as content that is not currently included in an existing approved degree/certificate program at the same instructiona level. Do not exclude gen ed credits in calculations for undergraduate programs.)

0%-24%

Does this change include the addition of a distance education or face-to-face method of delivery for this program

No

Does this change include the addition of a course/credit-based competency-based education delivery option?

No

Will any additional equipment/facilities be needed?

No

Will any additional faculty be required?

No

Will any additional financial resources be needed?

No

Additional library/learning resources needed?

No

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes

Green Leaf Program Designation

Is this a Green Leaf program? No

Does this program cover material which crosses into another department?

No

Additional Attachments ms computational science_001.pdf

SCHEV Proposal

Executive Summary

Reviewer Comments

Additional Comments

Is this course required of all students in this degree program?

%wi_required.eschtml%

Key: 24