

Program Change Request

Date Submitted: 03/01/24 10:20 am

Viewing: **SC-MS-BCB : Bioinformatics and Computational Biology, MS**

Last approved: 05/10/22 3:21 pm

Last edit: 03/01/24 10:20 am

Changes proposed by: jbazaz

Catalog Pages
Using this Program
[Bioinformatics and Computational Biology, MS](#)

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

No

Effective Catalog: 2024-2025

Program Level: Graduate

Program Type: Master's

Degree Type: Master of Science

Title:
Bioinformatics and Computational Biology, MS

Banner Title: Bioinformatics & Compu Biol MS

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

In Workflow

1. SSB CC

2. SSB Program Chair

3. SC Curriculum Committee

4. SC Assistant Dean

5. Assoc Provost-Graduate

6. Registrar-Programs

Approval Path

1. 03/01/24 10:40 am
Ramin Hakami (rhakami):
Approved for SSB CC

2. 03/22/24 11:42 am
Iosif Vaisman (ivaisman):
Approved for SSB Program Chair

History

1. Nov 16, 2017 by clmig-jwehrheim

2. Feb 23, 2021 by jriemen

3. May 10, 2022 by Jennifer Bazaz Gettys (jbazaz)

Concentration(s):

**Registrar/IRR Use
Only –
Concentration CIP
Code**

College/School: College of Science

**Department /
Academic Unit:** School of Systems Biology

**Jointly Owned
Program?** No

Justification

What: Referring applicants to central admissions language and removing extraneous wording.

Why: To make the program more adaptable to changes in university policies.

**Total Credits
Required:** Total credits: 31

Registrar's Office Use Only - Program Code:
SC-MS-BCB

**Registrar/IRR Use
Only – Program CIP
Code**

**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.](#)

~~To apply for this program, please complete the George Mason University Admissions Application.~~ **Eligibility**

Applicants should have a bachelor's degree in biology, computer science, or a related [field from an institution field, with a GPA of higher education accredited by a Mason-recognized U.S. at least 3.00 in their last 60 credits of study: institutional accrediting agency or international equivalent with a GPA of at least 3.00 in their last 60 credits of study.](#)

Applicants should have taken courses in biology, computer science, calculus, physical chemistry, and statistics. Students with deficiencies in one or more of these areas may be required to take additional courses from the undergraduate curriculum.

Application Requirements

To [apply for this program](#), ~~apply~~; prospective students should [submit the complete a George Mason University Admissions Application and its required supplemental documentation](#), ~~supply~~ a [goals statement](#), ~~copy of official transcripts from each college~~ and [two letters of recommendation](#).
~~graduate institution attended, a current résumé, and an expanded goals statement.~~
~~Applicants should also include two letters of recommendation. TOEFL or IELTS scores are required for all international applicants.~~ 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.

Bioinformatics Core Courses

<u>BINF 630</u> Bioinformatics Methods	3
<u>BINF 631</u> Molecular Cell Biology for Bioinformatics	3
<u>BINF 634</u> Bioinformatics Programming	3
<u>BINF 701</u> Systems Biology	3
Total Credits	12

Advanced Bioinformatics

Advanced bioinformatics courses numbered [BINF 730](#) and above

Total Credits	3
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Bioinformatics Seminar

[BINF 704](#)Colloquium in Bioinformatics

Total Credits	1
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Research Project or Thesis and Electives

Select either a research project or a master's thesis and electives courses.

Research Project

<u>BINF 798</u>	Research Project	3
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Select 12 credits of elective in bioinformatics and computational biology, biology and biotechnology, or computational sciences, as approved by the advisor 12

Total Credits 15

Thesis

BINF 799 Master's Thesis 6

Select 9 credits of electives in bioinformatics and computational biology, biology and biotechnology, or computational sciences, as approved by the advisor 9

Total Credits 15

**Retroactive
Requirements
Updates:**

Plan of Study:

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?**
Both Face-to-Face and Distance

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 instructional 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**

SCHEV Proposal

Executive Summary

**Reviewer
Comments**

**Additional
Comments**

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

%wi_required.eshtml%

Key: 416