# Program Change Request

Date Submitted: 03/07/25 1:34 pm

## Viewing: **SC-MS-BNFM : Bioinformatics Management, MS**

Last approved: 04/29/24 9:26 am

Last edit: 03/07/25 1:34 pm

Changes proposed by: jbazaz

**Catalog Pages**
**Using this Program**
  [Bioinformatics Management, MS](#)

Anticipated

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

No

**Effective Catalog:**          2025-2026

**Program Level:**              Graduate

**Program Type:**               Master's

**Degree Type:**                Master of Science

**Title:**
  Bioinformatics Management, MS

**Banner Title:**               Bioinformatics Management MS

## 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. 03/07/25 1:43 pm Ramin Hakami (rhakami): Approved for SSB CC
2. 02/26/26 10:23 am Iosif Vaisman (ivaisman): Approved for SSB Program Chair

## History

1. Nov 16, 2017 by clmig-jwehrheim
2. Jan 23, 2019 by Jennifer Bazaz Gettys (jbazaz)
3. Mar 15, 2019 by Tory Sarro (vsarro)
4. Feb 23, 2021 by jriemen
5. May 2, 2022 by Jennifer Bazaz Gettys (jbazaz)

| | | |
|---|---|---|
| **Registrar/OAPI Use Only – SCHEV Status** | Approved | 6. Apr 29, 2024 by Jennifer Bazaz Gettys (jbazaz) |

**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:**    School of Systems Biology

**Jointly Owned Program?**    No

**Is there an embedded degree as part of a program?**

**Justification**

What: Replacing an inactivated course, HAP 713, with HI 613.

Why: To keep the curriculum updated.

**Total Credits Required:**    Total credits: 30

**Registrar's Office Use Only - Program Code:**

SC-MS-BNFM

**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.

## Eligibility

Applicants should have a bachelor's degree in biology, computer science, or a related field 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. Applicants should have taken courses in molecular 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, 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. |
|---|---|

## Bioinformatics Core Courses

Foundational courses in modern biotechnology, tools and methods for bioinformatics analysis, and methods for creating customized bioinformatics tools.

| | | |
|---|---|---|
| BINF 530 | Introduction to Bioinformatics Methods | 3 |
| or BINF 630 | Bioinformatics Methods | |
| BINF 531 | Molecular Cell Biology for Bioinformatics | 3 |
| or BINF 631 | Molecular Cell Biology for Bioinformatics | |
| BINF 634 | Bioinformatics Programming | 3 |
| BINF 730 | Biological Sequence and Genome Analysis | 3 |
| Select one from the following: | | 3 |

| BINF 633 | Molecular Biotechnology | |
|---|---|---|
| BINF 650 | Introduction to Bioinformatics Database Design | |
| BINF 702 | Biological Data Analysis | |
| Total Credits | | 15 |

## Management Core Courses

Foundational courses in management theory related directly to the management of scientific programs and personnel.

| Select 12 credits from the following courses: | | 12 |
|---|---|---|
| COS 500 | Professional Preparation for STEM Disciplines | |
| COS 600 | Multidisciplinary Problem Solving and Leadership | |
| EVPP 638 | Corporate Environmental Management and Policy | |
| GBUS 613 | Financial Reporting and Decision Making | |
| GBUS 623 | Marketing Management | |
| GBUS 643 | Managerial Finance | |
| GBUS 653 | Organizational Behavior | |
| GCH 691 | Project Management in Public Health | |
| ~~HAP 713~~ | ~~Project Management in Health Information Technology~~ | |
| HI 613 | Project Management in Health Information Technology | |
| MBA 712 | Project Management | |
| SWE 625 | Software Project Management | |
| Total Credits | | 12 |

## Capstone Research Project

Focusing on bioinformatics management issues and techniques.

| BINF 798 | Research Project | 3 |
|---|---|---|
| Total Credits | | 3 |

**Retroactive Requirements Updates:**

**Plan of Study:**

Honors
Information:

Accelerated
Description/Du
Degree
INTO-Mason
Requirements:

College
Requirements &
Policies:
Department /
Academic Unit
Requirements &

**Program Outcomes**

## Additional Program Information

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*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

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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

Have you reached out to the Libraries to determine whether there are adequate resources to support your program? If not, please email Meg Meiman, Associate University Librarian for Learning, Research, and Engagement at mmeiman2@gmu.edu.

## OAPI Use Only – Determination of SACSCOC Impact

**Comments or Notes**

### Green Leaf Program Designation

**Is this a Green Leaf program?**          No

List sustainabili
List sustainabili

**Does this program cover material which crosses into another department?**

Yes

**Impacted Departments**

| Department |
| --- |
| School of Business |
| Health Administration & Policy |
| Computer Science |

**Additional Attachments**

**SCHEV Proposal**

**Executive Summary**

**Reviewer Comments**

**Additional Comments**

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

%wi_required.eschtml%