

Program Change Request

Date Submitted: 03/04/22 11:59 am

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

Last approved: 02/23/21 4:35 pm

Last edit: 03/04/22 12:12 pm

Changes proposed by: jbazaz

Catalog Pages

Using this Program

[Bioinformatics Management, MS](#)

No Longer
Anticipated closure
Rationale for

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

Yes

Requestor:

Name	Extension	Email
Diane St. Germain	4263	dstgerma@gmu.edu

Effective Catalog: 2022-2023

Program Level: Graduate

Program Type: Master's

Degree Type: Master of Science

Title: Bioinformatics Management, MS

- Approval Criteria
1. What was the process used within your department to review this request?
 2. What evidence was used to identify new or revised content?
 3. What evidence was used to identify new or revised content?
 4. Have you ensured there are no other existing programs that overlap with this request?
 5. Has CPF confirmed the proposed badge do not overlap with existing programs?
 6. Has the instructor(s) for this badge experience?
 7. Is there a contact hour minimum?

In Workflow

1. SSB Program Chair
2. SC Curriculum Committee
3. SC Associate Dean
4. Assoc Provost-Graduate
5. Registrar-Programs

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 Johanna Riemen (jriemen)

5. Is this badge co-sponsored with another

organization, association, or unit? (If yes, would it

a. What is the organization, program, or departme

Earning Criteria

Course:

Badge:

Participant:

Document:

Portfolio:

Presentation:

Assessment:

Credential:

Education

Other:

Project:

Professional

Schedule/Registration:

Volunteer:

Skills Tag

Skills Tag

Badge Attributes

Please select one from each category:

Achievement Type:

Mastery Level:

Time Commitment:

Cost:

Industry Standards:

Recommendations:

Issuance information and Pricing

Pricing: See <https://cpe.gmu.edu/digitalbadges/pricing/> for more information

Estimated Number of Badges Expected to be Issued:

Notes:

All badge requests will be routed to CPE for review and approval. Please

- A Mason Digital Credentials Advisory Group may be developed to review k

Banner Title: Bioinformatics Management MS

Is this a retitling of an existing

Existing Program

Registrar/OAPI Use Only – SCHEV Approved

Status

Registrar’s Office

Use Only –

Program Start Term

Registrar/OAPI Use

Only – SCHEV

Letter

**Registrar/OAPI Use
Only – SACSCOC
Status**

Concentration(s):

INTO Major(s):

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

College/School: College of Science

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

**Jointly Owned
Program?** No

Participating

Participating

Justification

What: Removing the requirement for two official transcripts. Reducing the letters of recommendation to two. Removing the GRE requirement.

Why: These changes will allow us to ease the path into the program while still receiving enough information to make an informed admission decision.

Catalog Published Information

**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. 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, 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, prospective students should submit the [George Mason University Admissions Application](#), supply **two copies** of official transcripts from each college and graduate institution attended, a current résumé, and an expanded goals statement. Applicants should also include **two three** letters of **recommendation**. ~~recommendation and official scores obtained on the GRE general exam. The GRE requirement will be waived if the student holds a master's degree from an institution of higher education accredited by a Mason-recognized U.S. institutional accrediting agency or international equivalent.~~ TOEFL or IELTS scores are required of 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](#).

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
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<u>COS 600</u>	Multidisciplinary Problem Solving and Leadership
<u>EVPP 638</u>	Corporate Environmental Management and Policy
<u>GBUS 613</u>	Financial Reporting and Decision Making
<u>GBUS 623</u>	Marketing Management
<u>GBUS 643</u>	Managerial Finance
<u>GBUS 653</u>	Organizational Behavior
<u>GCH 691</u>	Project Management in Public Health
<u>HAP 713</u>	Project Management in Health Information Technology
<u>MBA 712</u>	Project Management
<u>SWE 625</u>	Software Project Management

Total Credits

12

Capstone Research Project

Focusing on bioinformatics management issues and techniques.

<u>BINF 798</u>	Research Project	3
Total Credits		3

**Retroactive
Requirements
Updates:**

Plan of Study:

**Honors
Information:**

**Accelerated
Description/Dual
Degree
Description:**

**INTO-Mason
Requirements:**

**College
Requirements &
Policies:**

**Department /
Academic Unit
Requirements &
Policies:**

Program Outcomes

Additional Program Information

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

Courses offered via distance (if applicable):

Indicate whether students are able

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

Off-campus details:

Are you working with a vendor / other collaborators to offer your program?
No

Please explain:

Related Departments

Could this program prepare students for any type of professional licensure, in Virginia or elsewhere?
No

Please explain:

Are you adding or removing a licensure component?
No

Please explain:

Additional SCHEV & SACSCOC Information

Is the content of the new program closely related to that of an existing approved program at the same instructional level (i.e., baccalaureate, master's, doctoral)?

Which existing approved program(s)?

Is this new program considered to be "advancing the degree level of a currently approved program" (i.e. existing content is at lower degree level, new content is at the higher degree level)?

Which existing approved program(s)?

Is this new program considered to be "lowering the degree level of a currently approved program" (i.e. existing content is at higher degree level, new content is at the lower degree level)?

Which existing approved program(s)?

Is this a re-opening of a program that was closed to admission within the last five years?

Date of Program Closure**What are the methods of delivery for the program?****Does this program include a course/credit-based competency-based education delivery option?****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****Which existing approved program(s)?****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****What is the new method of delivery?****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****Description of institutional impact:****Will any additional faculty be required?****No****Description of institutional impact:****Will any additional financial resources be needed?****No**

Description of institutional impact:

Additional library/learning resources needed?

No

Description of institutional impact:

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes

Green Leaf Program Designation

Is this a Green Leaf program? No

Green Leaf Designation

Sustainability-focused academic programs require at least one green leaf course. Either that course is itself sustainability-focused or else the program requires a set of sustainability-related courses with aggregated

Relationship to Existing Courses

Relationship to Existing Programs

List sustainability-focused courses currently required in the degree

Sustainability-related academic programs either require at least one sustainability-related course or else offer any green leaf course as an option or elective *

List sustainability-related courses currently required in the degree

Does this program cover material which crosses into another department?

Yes

Impacted Departments

Department
School of Business

Department
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.eshtml%

Attached Document

Key: 417