# **Program Change Request**

Date Submitted: 11/28/18 2:49 pm

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

Last approved: 11/16/17 5:21 pm

Last edit: 11/28/18 2:49 pm

Changes proposed by: jbazaz

**Bioinformatics Management, MS** 

Catalog Pages
Using this Program

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

Yes

Requestor:

- 4			
Name	Extension	Email	
Diane St. Germain	4263	dstgerma@gmu.edu	

Effective Catalog: 2019-2020

Program Level: Graduate

Program Type: Master's

Degree Type: Master of Science

Title: Bioinformatics Management, MS

Banner Title: Bioinformatics Management MS

Approved

Registrar/OAPI Use

Only – SCHEV Status

Registrar's Office Use Only – Program Start Term

Registrar/OAPI Use Only – SCHEV Letter

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

Modifying the "Management Core" to remove courses that are no longer being offered and

insert more current course offerings.

Total Credits

Total credits: 30

Required:

Registrar's Office Use Only - Program Code:

SC-MS-BNFM

#### In Workflow

- 1. SSB Program Chair
- 2. SC Curriculum

#### Committee

- 3. SC Associate Dean
- 4. BU GR Impacted
  Unit Approver
- 5. CS Representative-

Graduate

- 6. HAP Chair
- 7. SC CAT Editor
- 8. Assoc Provost-Graduate
- 9. Registrar-Programs

### **Approval Path**

- 04/23/18 7:50 pm losif Vaisman (ivaisman): Approved for SSB Program Chair
- 2. 04/30/18 2:13 pm Jennifer Bazaz
  - Gettys (jbazaz):
    Approved for SC
    Curriculum
- Committee
  3. 04/30/18 2:33 pm
- Jennifer Bazaz Gettys (jbazaz): Approved for SC
- Approved for SC Associate Dean
- 4. 04/30/18 4:21 pm Patrick Soleymani
  - (psoleyma): Rollback to SC Associate Dean for
- BU Impacted Unit Approver
- 05/07/18 12:26 pm Jennifer Bazaz Gettys (jbazaz): Approved for SC
- Associate Dean 6. 05/07/18 1:53 pm

Patrick Soleymani (psoleyma): Rollback to SC

Associate Dean for

Registrar/IRR Use Only - Program CIP Code

Admission Requirements: **BU** Impacted Unit Approver

- 7. 05/07/18 2:38 pm Jennifer Bazaz Gettys (jbazaz): Approved for SC Associate Dean
- 8. 11/28/18 1:56 pm Paige Wolf (pwolf1): Rollback to SC Associate Dean for **BU GR Impacted** Unit Approver
- 9. 11/28/18 2:26 pm Jennifer Bazaz Gettys (jbazaz): Rollback to Initiator
- 10. 12/03/18 5:15 pm **losif Vaisman** (ivaisman): Approved for SSB Program Chair

#### History

1. Nov 16, 2017 by clmig-jwehrheim

## 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 three letters of 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 a U.S. institution. TOEFL or IELTS scores are required of all international applicants.

Program-Specific **Policies:** 

### **Policies**

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

#### **Degree Requirements:**

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

#### **Bioinformatics Core Courses**

12

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

Course List					
Code	Title	Credits	j		
BINF 630	Bioinformatics Methods	3			
BINF 631	Molecular Cell Biology for Bioinformatics	3			
BINF 530	Introduction to Bioinformatics Methods	3			
or <u>BINF 630</u>	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 follow	ving:	3			
BINF 633	Molecular Biotechnology				
BINF 636	Microarray Methodology and Analysis				
BINF 702	Biological Data Analysis				
BINF 650	Introduction to Bioinformatics Database Design				
Total Credits		15			

## **Management Core Courses**

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

	Course List	
Code	Title	Credits
MBA 638	Operations Management	3
Select 12 credits fro	om the following courses:	12
COS 500	Professional Preparation for STEM Disciplines	
COS 600	Multidisciplinary Problem Solving and Leadership	
<b>EVPP 638</b>	Corporate Environmental Management and Policy	
<b>GBUS 613</b>	Financial Reporting and Decision Making	
<b>GBUS 623</b>	Marketing Management	
<b>GBUS 643</b>	Managerial Finance	
<b>GBUS 653</b>	Organizational Behavior	
GCH 691	Project Management in Public Health	
HAP 713	Project Management in Health Information Technology	
MBA 712	Project Management	
TECM 615	Decision Making Using Accounting and Financial Data	3
TECM 640	Management of Consulting and Technical Professionals	<del>3</del>
<b>SWE 625</b>	Software Project Management	

## **Capstone Research Project**

Focusing on bioinformatics management issues and techniques.

Course List
Code Title Credits

BINF 798 Research Project 3
Total Credits 3

Retroactive Requirements Updates: Plan of Study:

**Total Credits** 

### **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 delive

**Both Face-to-Face and Distance** 

primary delivery format for the program?

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

Are you changing the total number of credits required for this program?

Are you changing the delivery format in any way (e.g adding an online option)?

Are you adding/removing a licensure option which was approved by SCHEV?

Will any portion of this program be offered at an off-campus location?

Are you adding significant new content areas to the program?

Will this program change affect any specialized accreditation?

### **Green Leaf Program Designation**

Is this a Green Leaf program?

No

Does this program cover material which crosses into another department?

Yes No

Impacted Departments

Department

School of Business

Health Administration & Policy

Computer Science

Additional Attachments

**SCHEV Proposal** 

Executive

Summary

Reviewer Comments Patrick Soleymani (psoleyma) (04/30/18 4:21 pm): Rollback: Hi, this should go to Paige Wolf

(pwolf1@gmu.edu) as she is our graduate programs dean. Thanks!

Patrick Soleymani (psoleyma) (05/07/18 1:53 pm): Rollback: Need to go to pwolf1@gmu.edu

Paige Wolf (pwolf1) (11/28/18 1:56 pm): Rollback: hi

Jennifer Bazaz Gettys (jbazaz) (11/28/18 2:26 pm): Rollback: Update per 11/28/18

conversation.

Additional Comments

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

%wi\_required.eschtml%

Key: 417