Program Change Request

Date Submitted: 03/24/25 10:15 am

Viewing: MATH: Mathematics Minor

Last approved: 05/09/23 10:38 am

Last edit: 03/24/25 11:02 am

Changes proposed by: jbazaz

Mathematics Minor

Catalog Pages
Using this Program

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

Yes

Requestor:

Name	Extension	Email
Catherine Sausville	5302	csausvil@gmu.edu

Effective Catalog: 2025-2026

Program Level: Undergraduate

Program Type: Minor

Title: Mathematics Minor

Banner Title: Mathematics Minor

In Workflow

- 1. MATH Chair
- 2. SC Curriculum
 Committee
- 3. SC Assistant Dean
- 4. Assoc Provost-Undergraduate
- 5. Registrar-Programs

Approval Path

- 1. 03/24/25 10:24 pm Maria Emelianenko (memelian): Approved for MATH Chair
- 2. 03/28/25 11:20 am Gregory Craft (gcraft): Approved for SC Curriculum Committee
- 3. 03/31/25 8:19 am
 Jennifer Bazaz
 Gettys (jbazaz):
 Approved for SC
 Assistant Dean

Registrar's Office
Use Only –

Program Start Term

Registrar/OAPI Use Only – SACSCOC Status

College/School:

College of Science

Department / Academic Unit:

Mathematical Sciences

Jointly Owned Program?

No

Justification

What: The Undergraduate Committee proposes revisions to the Mathematics Minor to make it more accessible to students across the university. These changes include reducing the number of required courses while increasing elective options, allowing students greater flexibility in shaping the minor to fit their interests. Additionally, we aim to promote the minor as "workforce ready" by formally incorporating internship credits into the requirements. While the minor already allows for this, Math 490 and Math 491 will be limited to 3 credits total between the two courses to count toward the minor.

Why: The Mathematics Minor strengthens students' logical reasoning, critical thinking, and quantitative analysis skills—valuable assets in any career. It complements their major without serving as a replacement for a Mathematics degree.

Currently, the minor is officially listed as requiring 21 credits, but in practice, it demands 29 credits. With the Mathematics BA requiring 38 credits, the significant overlap between the two can deter students who want mathematical training without committing to a full degree. Increasing flexibility in course selection will make the minor more appealing to a broader range of students.

History

- 1. Nov 17, 2017 by clmig-jwehrheim
- 2. Feb 7, 2018 by rzachari
- 3. Mar 24, 2020 by Jennifer Bazaz Gettys (jbazaz)
- 4. Mar 3, 2021 by Jennifer Bazaz Gettys (jbazaz)
- 5. May 12, 2022 by Tory Sarro (vsarro)
- 6. May 9, 2023 by Deborah Mcgarrah (dmcgarra)

Catalog Published Information

Total Credits

Total credits: 21

Required:

Registrar's Office Use Only - Program Code:

MATH

Registrar/IRR Use Only – Program CIP Code

Admission Requirements:

Program-Specific

Policies:

Policies

Eight credits of coursework must be unique to the minor. For policies governing all minors, see AP.5.3.4 Minors.

Students must earn a minimum 2.00 GPA in courses applied to the minor.

Degree

Requirements:

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

Required <u>Core</u> Courses

MATH 125	Discrete Mathematics I (<u>Mason Core</u>)	3
MATH 203	Linear Algebra	3
MATH 213	Analytic Geometry and Calculus III	3
or <u>MATH 215</u>	Analytic Geometry and Calculus III (Honors)	
MATH 214	Elementary Differential Equations	3
or MATH 216	Theory of Differential Equations	
MATH 300	Introduction to Advanced Mathematics (Mason Core) 1	3

3/31/25, 9:44 AM MATH: Mathematics Minor

Total Credits 9

Mathematical Reasoning Courses

¹Students must earn a 2.00 or higher in MATH 300%7CCode.

Mathematics Elective

Select 3 credits from the following: 1		
MATH 315	Advanced Calculus I	
MATH 321	Abstract Algebra	
MATH 322	Advanced Linear Algebra	
Select one course from t	the following:	<u> </u>
MATH 214	Elementary Differential Equations	
or MATH 216	Theory of Differential Equations	
<u>MATH 300</u>	Introduction to Advanced Mathematics (Mason Core)	
MATH 325	<u>Discrete Mathematics II</u>	
Total Credits		

¹Students must earn a 2.00 or higher.

General Elective **Courses**

Select 3 credits from the following:		
One 3-credit math	course at the 300 or 400 level ¹	
Select 9 credits from	the following:	<u>9</u>
MATH 490	Internship ¹	

MATH 491

Reading and Undergraduate Research in Mathematics

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other mathematics courses at the 300 or 400 level

Other ma

Total Credits 9

1

A maximum of 3 total credits for both MATH 490 Internship and MATH 491 Reading and Undergraduate Research in Mathematics may be applied to the minor.

Excluding MATH 400 History of Math (Topic Varies) (Mason Core) and MATH 401 Mathematics through 3D Printing (Mason Core).

Probability and Statistics for Engineers and Scientists I

Retroactive Requirements Updates:

STAT 344

Program Outcomes

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 No program?

3/31/25, 9:44 AM MATH: Mathematics Minor

Does this program cover material	which cros	sses into and	ther de	partment?
----------------------------------	------------	---------------	---------	-----------

No

Additional

Attachments

Reviewer

Comments

Additional

Comments

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

%wi_required.eschtml%

Key: 560