

# Course Change Request

Date Submitted: 12/11/25 2:22 pm

Viewing: **MATH 665 : Mathematics of Data Science**

Last approved: 05/29/21 4:57 am

Last edit: 12/11/25 2:21 pm

Changes proposed by: csausvil

Catalog Pages  
referencing this  
course

- [Department of Mathematical Sciences](#)
- [Mathematics \(MATH\)](#)

Select modification type:

Substantial

## In Workflow

1. **MATH Chair**
2. **SC Curriculum Committee**
3. SC Assistant Dean
4. Assoc Provost-Graduate
5. Registrar-Courses
6. Banner

## Approval Path

1. 12/11/25 2:55 pm  
Maria Emelianenko (memelian):  
Approved for MATH Chair

## History

1. May 29, 2021 by  
Catherine Sausville (csausvil)

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

Yes ~~No~~

Requestor:

Name	Extension	Email
<u>Evelyn Sander</u>	<u>3-1461</u>	<u>esander@gmu.edu</u>

Effective Term: Summer 2026

Subject Code: MATH - Mathematics

Course Number: 665

Bundled Courses:

Is this course replacing another course?

No

Equivalent Courses:

Catalog Title:

Mathematics of Data Science

Banner Title:

Mathematics of Data Science

Will section titles  
vary by semester?

No

Credits:

3

Schedule Type:

Lecture

Hours of Lecture or Seminar per  
week:

3

Repeatable:

May be only taken once for credit, limited to 3 attempts (N3)

Max Allowable Credits:  
9

Default Grade  
Mode:

Graduate Regular

Recommended  
Prerequisite(s):

[Math 664](#)

Recommended  
Corequisite(s):

Required  
Prerequisite(s) /  
Corequisite(s)  
(Updates only):

~~Math 664~~

Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
	(	MATH 664	B-	GR		
Or		MATH 664	XS	GR	)	

Registration  
Restrictions  
(Updates only):

Registrar's Office Use Only - Registration Restrictions:

**Field(s) of Study:****Class(es):**

Include

Limited to students with a class of Advanced to Candidacy. (SCRRCLS\_ONLY\_DC)

Limited to students with a class of Graduate. (SCRRCLS\_ONLY\_GR)

Limited to students with a class of Non Degree (SCRRCLS\_ONLY\_ND)

Limited to students with a class of Senior Plus (SCRRCLS\_ONLY\_SP)

Limited to students with a class of Junior Plus (SCRRCLS\_ONLY\_JP)

**Level(s):****Degree(s):**

Exclude

Non-Degree Undergraduate Degree students may not enroll. (SCRRDEG\_NO\_NDU)

**School(s):****Catalog****Description:**

Covers mathematical aspects of data science including theory of linear and nonlinear dimension reduction, elements of spectral graph theory, function spaces and regularity in regression, and data-driven dynamics identification and discovery. Computational and analytic assignments are given.

**Justification:**

We are updating the graduate sequence to be consistent with the updated prerequisites for the undergraduate sequence.

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

Yes

**Impacted  
Departments:**

Department
CDS - Computational & Data Sciences
CS - Computer Science
STAT - Statistics

**Learning Outcomes:**

Stated on attached syllabus.

**Will this course be scheduled as a cross-level cross listed section?**

**Attach Syllabus**

[MATH665-syllabus\\_revMay52021.pdf](#)

**Additional  
Attachments**

**Specialized Course  
Categories:**

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

**Additional  
Comments:****Reviewer  
Comments**

Key: 17213