

# Course Change Request

Date Submitted: 10/10/24 10:27 am

Viewing: **CSI 690 : Numerical Methods**

Last approved: 05/06/21 5:01 am

Last edit: 10/10/24 10:27 am

Changes proposed by: blaisten

Catalog Pages  
referencing this  
course

- [Computational Sciences and Informatics \(CSI\)](#)
- [Department of Computational and Data Sciences](#)

Select modification type:

- Simple
- Substantial

## In Workflow

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

## Approval Path

1. 10/10/24 9:12 pm  
Arie Croitoru  
(acroitor): Approved for CDS Chair

## History

1. May 6, 2021 by Tory Sarro (vsarro)

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

No

Effective Term: Spring 2025

Subject Code: CSI - Computational Science & Informatics

Course Number: 690

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses: ~~MATH 685 - Numerical Analysis~~  
~~OR 682 - Computational Methods in Engineering and Statistics~~

**Catalog Title:** Numerical Methods

**Banner Title:** Numerical Methods

**Will section titles vary by semester?** No

**Credits:** 3

**Schedule Type:** Lecture

**Hours of Lecture or Seminar per week:** 3

**Repeatable:** May only be taken once for credit (NR)  
\*GRADUATE ONLY\*

**Default Grade Mode:** Graduate Regular

**Recommended Prerequisite(s):**

MATH 203 and 214 or equivalent, CDS 251 or CSI 501 or equivalent. ~~and some programming experience.~~

**Recommended Corequisite(s):**

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

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

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?

**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 Senior Plus (SCRRCLS\_ONLY\_SP)

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

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 Junior Plus (SCRRCLS\_ONLY\_JP)

**Level(s):**

Include

Enrollment limited to students with a level of Non-Degree (SCRRVLV\_ONLY\_ND)

Limited to undergraduate level students. (SCRRVLV\_ONLY\_UG)

Limited to graduate level students only. (SCRRVLV\_ONLY\_GR)

**Degree(s):**

Exclude

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

**School(s):**

**Catalog**

**Description:**

Covers computational techniques for solving science, engineering problems. Develops algorithms to treat typical problems in applications, emphasizing types of data encountered in practice. Covers theoretical development as well as implementation, efficiency, and accuracy issues in using algorithms and interpreting results. When applicable, uses computer graphical techniques to enhance interpretation.

**Justification:**

What: i) elimination of the CSI 690 equivalence with MATH 685 and OR 682; ii) include "CDS 251 or CSI 501 or equivalent" in the prerequisites in-lieu of "some programming experience."

Why: CSI 690, MATH 685, and OR 682 have evolved over time to be focused for graduate students populations associated to the graduate programs administered in each of the 3 departments, separately.

The equivalence between the three courses has lost its purpose and currently impacts the course scheduling in the three involved departments. The three departments are in agreement of the equivalency elimination.ii) The prerequisite language change is more precise.

**Does this course cover material which crosses into another department?** No

**Learning Outcomes:**

**Will this course be scheduled as a cross-level cross listed section?** No

**Attach Syllabus**

**Additional Attachments**

**Specialized Course Categories:**

**Additional  
Comments:**

This modification has the CDS faculty voted permission of moving forward in the workflow. The three involved departments, Computational and Data Sciences (COS), Mathematical Sciences (COS) and Systems Engineering and Operations Research (CEC) are in agreement of the proposed equivalency elimination between CSI 690/MATH 685, and CSI 690/OR 682.

**Reviewer  
Comments**

Key: 3303