

CE 260: MATRIX STRUCTURAL ANALYSIS

In Workflow

1. CE Committee Chair (fogarty@csus.edu)
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Approval Path

1. Thu, 17 Sep 2020 02:36:16 GMT
Julie Fogarty (fogarty): Approved for CE Committee Chair
2. Thu, 17 Sep 2020 16:14:25 GMT
Benjamin Fell (fellb): Approved for CE Chair
3. Thu, 01 Oct 2020 16:34:00 GMT
Gareth Figgess (figgess): Approved for ECS College Committee Chair
4. Fri, 02 Oct 2020 15:51:57 GMT
Kevan Shafizadeh (kevan): Approved for ECS Dean

Date Submitted: Thu, 17 Sep 2020 02:29:50 GMT

Viewing: CE 260 : Matrix Structural Analysis

Formerly known as: CE 231A

Last edit: Thu, 17 Sep 2020 02:29:49 GMT

Changes proposed by: Julie Fogarty (218645519)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
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Catalog Title:

Matrix Structural Analysis

Class Schedule Title:

Matrix Structural Analysis

Academic Group: (College)

ECS - Engineering & Computer Science

Academic Organization: (Department)

Civil Engineering

Will this course be offered through the College of Continuing Education (CCE)?

No

Catalog Year Effective:

Fall 2021 (2021/2022 Catalog)

Subject Area: (prefix)

CE - Civil Engineering

Catalog Number: (course number)

260

Course ID: (For administrative use only.)

107576

Units:

3

In what term(s) will this course typically be offered?

Fall term only - even years

Does this course require a room for its final exam?

Yes, final exam requires a room

Does this course replace an existing experimental course?

No

This course complies with the credit hour policy:

Yes

Justification for course proposal:

Graduate CE courses are being renumbered to clarify course pre- and co-requisites and topic areas to help students plan their path to graduation. Prerequisites numbers (not courses) are being changed to reflect course number changes.

The course name change more accurately reflects the content of the course. The course description and learning objectives have not changed.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)

Flexibility and stiffness methods of structural analysis are applied to two- and three-dimensional framed structures. Use of computer software to perform analysis is discussed in detail. Techniques of computer modeling are discussed.

Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

No

Does this course require safety training?

No

Does this course require personal protective equipment (PPE)?

No

Does this course have prerequisites?

Yes

Prerequisite:

CE 160

Prerequisites Enforced at Registration?

Yes

Does this course have corequisites?

No

Graded:

Letter

Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s):

Seminar

Seminar Classification

CS#05 - Seminar (K-factor=1 WTU per unit)

Seminar Units

3

Is this a paired course?

No

Is this course crosslisted?

No

Can this course be repeated for credit?

No

Can the course be taken for credit more than once during the same term?

No

Description of the Expected Learning Outcomes: Describe outcomes using the following format: 'Students will be able to: 1), 2), etc.'

- 1) Apply advanced structural analysis theory within the context of software packages.
- 2) Interpret analysis results from modern structural analysis programs.
- 3) Reconstruct and propose a computer program for the structural analysis of frame structures

Attach a list of the required/recommended course readings and activities:

CE 260.doc

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above.

Homework: ELOs (1) (2) (3)

Project: ELOs (1) (2) (3)

Exams: ELOs (1)(2)

Is this course required in a degree program (major, minor, graduate degree, certificate?)

No

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

Yes

Indicate which department(s) will be affected by the proposed course:

Department(s)
Civil Engineering

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals**Graduate (Masters) Learning Goals:**

Critical thinking/analysis

Information literacy

Disciplinary knowledge

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

Is this a Graduate Writing Intensive (GWI) course?

No

Key: 567