# **CE 263A: ADVANCED STEEL DESIGN**

# In Workflow

- 1. CE Committee Chair (fogarty@csus.edu)
- 2. CE Chair (fellb@csus.edu)
- 3. ECS College Committee Chair (figgess@csus.edu)
- ECS Dean (kevan@csus.edu)
- 5. Academic Services (torsetj@csus.edu;%20cnewsome@skymail.csus.edu)
- 6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
- 7. Dean of Undergraduate (james.german@csus.edu;%20celena.showers@csus.edu)
- 8. Dean of Graduate (cnewsome@skymail.csus.edu)
- 9. Catalog Editor (torsetj@csus.edu)
- 10. Registrar's Office (wlindsey@csus.edu)
- 11. PeopleSoft (PeopleSoft@csus.edu)

# **Approval Path**

- 1. Thu, 17 Sep 2020 02:36:23 GMT
- Julie Fogarty (fogarty): Approved for CE Committee Chair
- 2. Thu, 17 Sep 2020 16:14:45 GMT Benjamin Fell (fellb): Approved for CE Chair
- 3. Thu, 01 Oct 2020 16:34:49 GMT Gareth Figgess (figgess): Approved for ECS College Committee Chair
- 4. Fri, 16 Oct 2020 17:20:26 GMT Kevan Shafizadeh (kevan): Approved for ECS Dean

# **New Course Proposal**

Date Submitted: Thu, 17 Sep 2020 02:32:15 GMT

# Viewing: CE 263A : Advanced Steel Design

# Last edit: Fri, 16 Oct 2020 17:20:02 GMT

Changes proposed by: Julie Fogarty (218645519) Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Benjamin Fell	fellb@csus.edu	916-278-8139

Catalog Title: Advanced Steel Design

Class Schedule Title:

Advanced Steel Design

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) 263A

## Course ID: (For administrative use only.)

201361

Units:

3

In what term(s) will this course typically be offered? Spring 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 topic areas to help students plan their path to graduation and be consistent with the undergraduate CE course numbers. Prerequisites numbers (not courses) are being changed to reflect course number changes that occurred in the undergraduate program in 2019-2020.

This is not a new course. It is being proposed as a new course so that the existing number can be reused for another course. There is no change to the content (course description, ELOs, assessment) for this course. It is simply a number change.

When coding this course for the catalog, please drop the A on this course so it is simply the number CE 263 (another course using CE 263 is being changed concurrently to a different number).

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

Advanced design methodology of steel structures using Load and Resistance Factor Design (LRFD). System level behavior, especially from a seismic loading perspective, is integrated into the design of steel components and connections. Other topics include plate girder design, plastic design of indeterminate systems, design of moment frame systems, and design of braced-frame systems.

## 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 163 or instructor permission

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) Describe the theory behind the American Institute of Steel Construction (AISC) Design Specifications and ASCE/SEI 7 regarding steel structural systems

2) Analyze and design several types of steel structural systems including moment frame systems and braced-frame systems.

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

CE 263.docx

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and posttests, 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, design projects, exams (ELO 1 & 2)

## For whom is this course being developed?

Majors in the Dept

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 Communication Information literacy Disciplinary knowledge Professionalism

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: 14288