

# CE 170: SOIL MECHANICS

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## In Workflow

1. CE Committee Chair (j.garcia@csus.edu)
2. CE Chair (khan@csus.edu)
3. ECS College Committee Chair (abadi@csus.edu)
4. ECS Dean (101010646@csus.edu)
5. Academic Services (catalog@csus.edu)
6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
7. Dean of Undergraduate (james.german@csus.edu; renee.leonard@csus.edu)
8. Dean of Graduate (cnewsome@skymail.csus.edu)
9. Catalog Editor (catalog@csus.edu)
10. Registrar's Office (w lindsey@csus.edu)
11. PeopleSoft (PeopleSoft@csus.edu)

## Approval Path

1. Sat, 17 Sep 2022 21:59:28 GMT  
Jose Garcia (j.garcia): Approved for CE Committee Chair
2. Sun, 18 Sep 2022 00:25:49 GMT  
Ghazan Khan (khan): Approved for CE Chair
3. Mon, 03 Oct 2022 04:06:54 GMT  
Masoud Ghodrat Abadi (abadi): Approved for ECS College Committee Chair
4. Wed, 05 Oct 2022 16:05:32 GMT  
101010646: Approved for ECS Dean

## History

1. Dec 3, 2018 by Julie Fogarty (fogarty)
2. Sep 10, 2020 by Richard Armstrong (richard.armstrong)
3. Aug 23, 2021 by Julie Fogarty (fogarty)
4. Jun 8, 2022 by 302822325

Date Submitted: Fri, 16 Sep 2022 22:27:08 GMT

**Viewing: CE 170 : Soil Mechanics**

**Formerly known as: CE 170C / CE 171A**

**Last approved: Wed, 08 Jun 2022 14:01:07 GMT**

**Last edit: Mon, 03 Oct 2022 04:06:34 GMT**

Changes proposed by: Julie Fogarty (218645519)

**Contact(s):**

Name (First Last)	Email	Phone 999-999-9999
Ghazan Khan	khan@csus.edu	916-278-3886

**Catalog Title:**

Soil Mechanics

**Class Schedule Title:**

Soil Mechanics

**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 2023 (2023/2024 Catalog)

**Subject Area: (prefix)**

CE - Civil Engineering

**Catalog Number: (course number)**

170

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

203303

**Units:**

3

**Is the only purpose of this change to update the term typically offered or the enforcement of existing requisites at registration?**

No

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

Fall, Spring

**Does this course require a room for its final exam?**

Yes, final exam requires a room

**This course complies with the credit hour policy:**

Yes

**Justification for course proposal:**

Changed CE 101 to be a concurrent prerequisite to remove structural barrier to student success and align all upper-division CE core courses (CE 130/140/150/160/170 and labs) as CE 150/150L already has CE 101 as a concurrent prerequisite. While skills gained from CE 101 are relevant to upper-division CE students, the course content can be taken at the same time as their core courses.

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

Composition and properties of soils; soil classification; soil compaction; soil-water interaction, including permeability and seepage analyses; soil stresses; soil compressibility, consolidation, and settlement analysis; soil shear strength.

**Are one or more field trips required with this course?**

No

**Fee Course?**

No

**Is this course designated as Service Learning?**

No

**Is this course designated as Curricular Community Engaged 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 1, CE 100, CE 101, ENGR 112, and CE 170L. CE 170L may be taken concurrently. CE 101 may be taken concurrently. Not currently enrolled in CE 170.

**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):**

Discussion

**Discussion Classification**

CS#04 - Lecture /Recitation (K-factor=1 WTU per unit)

**Discussion 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 and Assessment Strategies:**

List the Expected Learning Outcomes and their accompanying Assessment Strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers). Click the plus sign to add a new row.

	Expected Learning Outcome	Assessment Strategies
1	Demonstrate basic concepts and principles of soil mechanics using analytical and experimental procedures.	Homework, exams, and laboratory assignments
2	Calculate values related to soil composition, soil classification, soil index properties, soil-water interaction, seepage, stresses within soil, soil consolidation, and soil shear strength.	Homework, exams, and laboratory assignments
3	Apply soil mechanics to some Geotechnical engineering problems.	Homework, exams, and laboratory assignments

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

CE\_170\_Course\_Syllabus-v2.pdf

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

Yes

**Has a corresponding Program Change been submitted to Workflow?**

Yes

**Identify the program(s) in which this course is required:****Programs:**

BS in Civil Engineering

**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?**

No

**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**

### **Undergraduate Learning Goals:**

Competence in the disciplines  
Knowledge of human cultures and the physical and natural world  
Integrative learning  
Intellectual and practical skills

**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

## **GE Course and GE Goal(s)**

**Is this a General Education (GE) course or is it being considered for GE?**

No

Key: 553