

CE 140: TRANSPORTATION ENGINEERING

In Workflow

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Approval Path

1. Sat, 12 Oct 2019 03:21:52 GMT
Julie Fogarty (fogarty): Approved for CE Committee Chair
2. Mon, 14 Oct 2019 18:00:25 GMT
Benjamin Fell (fellb): Approved for CE Chair
3. Fri, 25 Oct 2019 16:31:25 GMT
Troy Topping (troy.topping): Approved for ECS College Committee Chair
4. Fri, 25 Oct 2019 16:53:16 GMT
Kevan Shafizadeh (kevan): Approved for ECS Dean

History

1. Mar 27, 2019 by Julie Fogarty (fogarty)

Date Submitted: Sat, 12 Oct 2019 03:09:35 GMT

Viewing: CE 140 : Transportation Engineering

Formerly known as: CE 147

Last approved: Wed, 27 Mar 2019 14:01:26 GMT

Last edit: Sat, 12 Oct 2019 03:09:34 GMT

Changes proposed by: Julie Fogarty (218645519)

Contact(s):

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

Transportation Engineering

Class Schedule Title:

Transportation Engineering

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 2020 (2020/2021 Catalog)

Subject Area: (prefix)

CE - Civil Engineering

Catalog Number: (course number)

140

Course ID: (For administrative use only.)

107306

Units:

3

Changes to a course's units impact any related programs. As a result, a corresponding change must also be submitted for those programs

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

Does this course replace an existing experimental course?

No

This course complies with the credit hour policy:

Yes

Justification for course proposal:

There is a high DFW rate for many of the combined CE lecture/lab courses. This leads to delayed graduation since repeating students need to be accommodated and those seeking to take the course for the first time are prevented from enrolling in the limited laboratory seats.

Separating the civil engineering lab and lecture experiences will:

- 1) open up the limited lab seats available for students first attempting the course;
- 2) enable students who have failed the combined lab/lecture courses to better spend their time on the lecture content when repeating the course if they have already successfully completed the lab activities.

Undergraduate 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 writing requirement prerequisite is placed only on upper division laboratory courses.

The current offering of the 4-unit CE 147 will be separated into a 3-unit lecture only session (CE 140) and a 1-unit laboratory only session (CE 140L). The new offerings will be co-requisites meaning students must take CE 140 and CE 140L together unless a student has already successfully completed one course in the co-requisite pair.

Through curriculum paper forms in 2016, each CE course had the "Not currently enrolled in CE XXX" as a prerequisite approved, so that students could not register for a "CE" prefix course if they were currently enrolled in it. This was to prevent students who thought they were failing from giving up or taking up a seat they didn't need if they passed the course. That prefix managed to make it into the online system for only one or two classes and is being put through curriculum workflow again.

The writing proficiency prerequisite (WPJ) is only placed on the lab component of the course.

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

Introduction to the fundamental topics in Transportation Engineering. Focus on roadway geometric design, layout considerations, pavement materials and design, traffic operations and analysis.

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:

Complete CE 1, CE 9, CE 9L, CE 101, and ENGR 115. Not currently enrolled in CE 140.

Prerequisites Enforced at Registration?

Yes

Does this course have corequisites?

Yes

Corequisite:

CE 140L

Corequisites Enforced at Registration?

Yes

Graded:

Letter

Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s):

Lecture

Lecture Classification

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

Lecture 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."

Students will be able to:

- 1) Interpret fundamental topics in transportation engineering and traffic analysis
- 2) Calculate values related to roadway traffic operations and analysis, geometric analysis and design, layout considerations, and pavement design.

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

2020 Fall - CE 140 - Syllabus.docx

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.

Quizzes, exams, participation (ELO 1 & 2)

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: 539