EEE 144: ELECTRIC POWER DISTRIBUTION

In Workflow

1. EEE Committee Chair (pheedley@csus.edu)
2. EEE Chair (mahyar.zarghami@csus.edu)
3. ECS College Committee Chair (mohammed.eltayeb@csus.edu)
4. ECS Dean (arad@csus.edu)
5. Academic Services (torsetj@csus.edu; cnewsome@skymail.csus.edu)
6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
7. Dean of Undergraduate (james.german@csus.edu; celena.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. Mon, 12 Apr 2021 17:05:32 GMT
   Perry Heedley (pheedley): Approved for EEE Committee Chair
2. Sat, 08 May 2021 00:54:03 GMT
   Mahyar Zarghami (mahyar.zarghami): Approved for EEE Chair
3. Fri, 17 Sep 2021 17:21:07 GMT
   Mohammed Eltayeb (mohammed.eltayeb): Approved for ECS College Committee Chair
4. Fri, 17 Sep 2021 17:36:51 GMT
   Behnam Arad (arad): Approved for ECS Dean

Date Submitted: Mon, 12 Apr 2021 16:40:45 GMT

Viewing: EEE 144 : Electric Power Distribution

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Changes proposed by: Mahyar Zarghami (214200923)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Atousa Yazdani	atousa.yazdani@csus.edu	916-278-4964

Catalog Title:
Electric Power Distribution

Class Schedule Title:
Electric Power Distributn

Academic Group: (College)
ECS - Engineering & Computer Science

Academic Organization: (Department)
Electrical and Electronic Engineering

Will this course be offered through the College of Continuing Education (CCE)?
No

Catalog Year Effective:
Fall 2022 (2022/2023 Catalog)

Subject Area: (prefix)
EEE - Electrical and Electronic Engineering

Catalog Number: (course number)
144

Course ID: (For administrative use only.)
126931

Units:
3

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

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:
The main change in the course is to change its prerequisite from EEE 130 to EEE 141.

The EEE department is changing an upper division course for the EEE major requirement through a Form B. (EEE141 is now a major requirement while EEE130 is now an elective). Other electives related to the power area for EEE department should be looked into for possible changes as well. Based on the proposed changes, the required knowledge associated with single-phase and three-phase systems and power definitions will now be covered in EEE 141.

The new pre-requisite will be: EEE141.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)
Operation and design of utility and industrial distribution systems including distribution system planning; load characteristics; application of distribution transformers; design of subtransmission lines, distribution substations, primary systems, secondary systems; application of capacitors; voltage regulation and reliability.

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:
EEE 141.

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: Describe outcomes using the following format: "Students will be able to: 1), 2), etc."
After completion of this course, the students will be able to:
1. Describe and list various components and their functionalities in an electric distribution system.
2. Apply fundamental concepts to the design and analysis of distribution systems.
3. Utilize available tools for simulation of electric distribution systems.

Attach a list of the required/recommended course readings and activities:
EEE 144 Course Outline_ABET - Schedule.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.
Homework assignments to assess ELOs 1 through 3.
Projects to assess ELOs 1 through 3.
In-class quizzes to assess ELOs 1 through 3.
Exams to assess ELOs 1 through 3.

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?
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
Integrative learning

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: 1691