

EEE 131: ELECTROMECHANICS LABORATORY

In Workflow

1. EEE Committee Chair (102011596@csus.edu)
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Approval Path

1. Fri, 10 Feb 2023 23:30:33 GMT
102011596: Rollback to Initiator
2. Fri, 24 Feb 2023 22:17:09 GMT
102011596: Rollback to Initiator
3. Fri, 14 Apr 2023 21:21:24 GMT
102011596: Approved for EEE Committee Chair
4. Fri, 05 May 2023 22:22:10 GMT
Mahyar Zarghami (mahyar.zarghami): Approved for EEE Chair
5. Fri, 12 May 2023 16:39:31 GMT
Masoud Ghodrat Abadi (abadi): Approved for ECS College Committee Chair
6. Fri, 12 May 2023 16:54:29 GMT
Behnam Arad (arad): Approved for ECS Dean

Date Submitted: Mon, 27 Feb 2023 17:13:29 GMT

Viewing: EEE 131 : Electromechanics Laboratory

Last edit: Fri, 12 May 2023 16:35:37 GMT

Changes proposed by: Atousa Yazdani (217486426)

Contact(s):

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Catalog Title:

Electromechanics Laboratory

Class Schedule Title:

Electromechanics Lab

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:

Spring 2024 (2023/2024 Catalog)

Subject Area: (prefix)

EEE - Electrical and Electronic Engineering

Catalog Number: (course number)

131

Course ID: (For administrative use only.)

126881

Units:

1

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:

Traditionally the Electromechanical Conversion course offers knowledge of stationary and rotating electric machines. Students come in to the course with not enough visualization capabilities to understand the material. Recently, power lab was equipped with educational level equipment. The equipment is safe to be used by students. Requiring EEE 130 and EEE 131 as co-requisites will serve students in multiple ways.

1- enhances their understanding of the concepts

2- gives them hands on opportunity to test the concepts in a safe and educationally-friendly environment

3- there is room for mistakes in the lab and clearing the mistakes will teach students much better than listening to lectures in a one way class room environment.

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

Direct current motor and generator characteristics, three phase synchronous motor and synchronous generator characteristics, single phase power transformer short circuit and no-load tests, frequency changer tests and tests on DC and AC machine models, potential and current transformers.

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?

Yes

Does this course require personal protective equipment (PPE)?

No

Course Note: (Note must be a single sentence; do not include field trip or fee course notations.)

This course requires safety training.

Does this course have prerequisites?

Yes

Prerequisite:

EEE 117 and WPJ score of 70+, or at least a C- in ENGL 109M or ENGL 109W.

Prerequisites Enforced at Registration?

Yes

Does this course have corequisites?

Yes

Corequisite:

EEE 130

Corequisites Enforced at Registration?

Yes

Graded:

Letter

Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s):

Laboratory

Laboratory Classification

CS#16 - Science Laboratory (K-factor=2 WTU per unit)

Laboratory Units

1

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	1. Conduct hardware and software experiments on single-phase and three-phase power circuits, and apply different voltage, current and power measurements at different locations.	Lab reports
2	2. Perform hardware and software experiments with single-phase and three-phase transformers.	Lab reports
3	3. Perform hardware and software experiments on circuits with DC machines.	Lab reports
4	4. Perform hardware and software experiments on circuits with induction and synchronous AC machines.	Lab reports

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:

Integrative learning
Personal and social responsibility
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

Please attach any additional files not requested above:

EEE_131_Safety_Procedure.pdf
EEE_131_Electromechanics_Laboratory-v2.docx

Reviewer Comments:

102011596 (Fri, 10 Feb 2023 23:30:33 GMT): Rollback: Make the changes suggested during the EEE Curriculum Committee meeting on 2/10/23.

102011596 (Fri, 24 Feb 2023 22:17:09 GMT): Rollback: Please make the changes discussed in the EEE Curriculum Committee meeting

Key: 1685