# **EEE 108L: ELECTRONICS I LABORATORY**

## In Workflow

- 1. EEE Committee Chair (pheedley@csus.edu)
- 2. EEE Chair (mahyar.zarghami@csus.edu)
- 3. ECS College Committee Chair (figgess@csus.edu)
- 4. 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. Fri, 25 Sep 2020 21:33:56 GMT
- Perry Heedley (pheedley): Approved for EEE Committee Chair
- Fri, 25 Sep 2020 21:34:31 GMT Mahyar Zarghami (mahyar.zarghami): Approved for EEE Chair
- 3. Tue, 29 Sep 2020 18:49:51 GMT Gareth Figgess (figgess): Rollback to EEE Chair for ECS College Committee Chair
- Sat, 03 Oct 2020 02:55:27 GMT Mahyar Zarghami (mahyar.zarghami): Approved for EEE Chair
- 5. Fri, 23 Oct 2020 17:25:12 GMT Gareth Figgess (figgess): Approved for ECS College Committee Chair
- 6. Fri, 23 Oct 2020 17:48:29 GMT Kevan Shafizadeh (kevan): Approved for ECS Dean

Date Submitted: Fri, 25 Sep 2020 18:32:15 GMT

# Viewing: EEE 108L : Electronics I Laboratory

# Last edit: Tue, 29 Sep 2020 18:49:49 GMT

Changes proposed by: Perry Heedley (102011596)

#### Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Perry Heedley	pheedley@csus.edu	916-278-6873

Catalog Title:

**Electronics I Laboratory** 

Class Schedule Title: Electronics I Laboratory

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 2021 (2021/2022 Catalog)

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

#### Catalog Number: (course number) 108L

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

126816

Units:

1

#### In what term(s) will this course typically be offered? Fall, Spring

**Does this course require a room for its final exam?** No, final exam does not require a room (Last Class)

Does this course replace an existing experimental course? No

This course complies with the credit hour policy: Yes

Justification for course proposal:

Update catalog description to reflect the current course content.

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

Characteristics and applications of semiconductor devices including diodes, BJTs and FETs, and analog integrated circuits including opamps. Introduction to circuit simulation using professional computer-aided design (CAD) software. Laboratory three hours.

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 117, EEE 117L.

Prerequisites Enforced at Registration? Yes

Does this course have corequisites? Yes

Corequisite: EEE 108.

**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: Describe outcomes using the following format: 'Students will be able to: 1), 2), etc.'

Upon successful completion of this course, the student will be able to :

1. Use laboratory test equipment to measure characteristics of electronic circuits

- 2. Use simulation software to simulate characteristics of electronic circuits
- 3. Build circuits using semiconductor devices including diodes, BJTs & FETs
- 4. Build circuits using analog integrated circuits including opamps
- 5. Document results from laboratory experiments in a professional manner

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

eee108L\_ABET\_course\_outline-2020.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.

Students demonstrate the results of each laboratory experiment to the instructor, and also document their results in a professional manner. (EO 1-5)

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

Yes

Has a corresponding Program Change been submitted to Workflow?

No

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

**Programs:** 

BS in Electrical and Electronic Engineering BS in Computer 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 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

Reviewer Comments: Gareth Figgess (figgess) (Tue, 29 Sep 2020 18:49:51 GMT): Rollback: As requested by email

Key: 1676