

EENG 1910.002 - Introduction to Electrical Engineering

Fall 2025

Instructor: Colleen Bailey PhD, NTDP B252, Colleen.Bailey@unt.edu

Office Hours: TR 3:30 PM to 4:00 PM, NTDP B252, or by appointment

Lecture: W 5:30 PM to 8:20 PM; NTDP B227

TA: Tejaswini Dendi, TejaswiniDendi@my.unt.edu, MW 1:00 PM - 3:00 PM, NTDP B250

Prerequisite: Electrical Engineering or Pre-Electrical Engineering major or department consent.

Course Description: Introduction to Electrical Engineering equips students with foundational skills and a lifelong learning mindset for success in the field. The course emphasizes how engineering concepts are learned and applied in real-world contexts, combining individual and collaborative problem-solving with critical thinking, creativity, and ethics. Key topics include history, theory, engineering design, and the societal impact of electrical engineering, alongside communication skills, project-based learning, and strategies for adapting to evolving technologies.

Course Outline: Topic Overview

Topic 1	ENGINEERING
Topic 2	EE History
Topic 3	EE Fundamentals
Topic 4	Joining Materials
Topic 5	Ethics
Topic 6	Professionalism
Topic 7	Standards
Topic 8	Test and Measurement

Course Outcomes:

- Ability to integrate design concepts, analytical thinking, and problem solving skills
- Appreciation of engineering as a profession and its required professional ethics
- Ability to work in teams
- Ability to prepare, deliver oral presentations, and write technical reports
- Awareness of societal issues such as globalization, environmental and contemporary issues, and impact of engineering solutions
- Understanding of electrical engineering programs and a basic knowledge of laboratory equipment, soldering, as well as analog and digital circuits

Grading: (may be adjusted at instructor discretion)

Final grades are based on participation, assignments and assessments.

Canvas: Course material and grades will be maintained on the course Canvas site. Be sure to check the site regularly to stay current on assignments and announcements: <https://unt.instructure.com>

Course Policies:

- Assignments are due by the date and time posted on Canvas. Late submissions will receive a 50% penalty and assignments more than 24 hours past the posted deadline will not be accepted.
- Make-up assignments or assessments are only allowed if prearranged with the instructor for a university-approved absence.
- You have one week from the date a grade is returned to contest it. If the assignment or assessment was graded by a TA or grader, you must first discuss the issue with them before escalating it to the instructor.
- Letter grades will not be finalized until the end of the term, after all assignments have been graded. Any grade posted prior to the end of the course should be considered tentative and subject to change.

Rights and Responsibilities:

- Students are expected to communicate any issues regarding their performance in class to the instructor in advance as soon as possible.
- Students who are aware of an authorized absence from a scheduled class or assessment (e.g., religious observance, military service, official university function) should notify the instructor as soon as possible, in accordance with UNT Policy 06.039.
- Students with disabilities should inform the instructor of their needs at the beginning of the semester, in accordance with UNT Policy 16.001, to receive appropriate accommodations.
- Cheating and academic dishonesty will not be tolerated. Any student found to have engaged in academic dishonesty may receive an F in the course and could be subject to further disciplinary action. Acts of academic dishonesty include, but are not limited to: academic fraud (e.g., altering solutions to appeal a grade), copying or allowing one's work to be copied, fabrication or falsification, plagiarism, sabotage of others' work, or substitution (e.g., taking an exam for someone else). For more details, see UNT Policy 06.003.