

## **EGDT 1010 Course Syllabus**

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: https://catalog.uvu.edu/

Semester: Spring Year: 2025

Course Prefix: EGDT Course and Section #: 1010-001

Course Title: Electrical Drafting and Design Credits: 3

## Course Description

Introduces several types of electrical drawings such as Block, Connection, Logic, Schematic, Wiring and Panel Diagrams. Covers basic DC theory, electricity and electrical terms. Includes the principles of Ohm's Law, Watt's Law, Logic Truth Table, Series and Parallel Circuits, and Printed Circuit Board Design.

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Γhis course has the following attributes:
☐ General Education Requirements
☐ Global/Intercultural Graduation Requirements
☐ Writing Enriched Graduation Requirements
☑ Discipline Core Requirements in Program
☐ Elective Core Requirements in Program
☐ Open Elective
Other: Click here to enter text.

## Instructor Information

Instructor Name: Sidney D. Smith

## Student Learning Outcomes

- 1. Produce electrical drawings such as block, connection, logic, schematic, wiring and panel diagrams.
- 2. Outline basic DC theory, electricity and electrical terms, logic and truth tables.
- 3. Classify fundamental relationships of current, voltage and resistance using Ohm's Law and Watt's Law.
- 4. Design simple printed circuit boards.

#### Course Materials and Texts

- Study Manual Provided (PDF)
- Electronic File Storage
- 2H Pencil, Red/Yellow/Blue colored pencils
- Engineer's Computation Pad (Green)
- 3-Ring Binder, Red/Yellow

## Course Requirements

### Course Assignments, Assessments, and Grading Policy

- Worksheets: Weekly reading/study assignments
- Drawings: Weekly sketches and CAD assignments
- Quizzes: In-class quizzes/discussions.
- Portfolio Peer Reviews
- Tests: Final, Comprehensive

Final Grades are calculated and assigned the corresponding letter grade.

Grading Scheme:		B+ 90-87%	C+ 80-77%	D+ 70-67%
A	100-94%	B 87-83%	C 77-73%	D 67-63%
Α	- 94-90%	B- 83-80%	C- 73-70%	D- 63-60%

### Required or Recommended Reading Assignments

Required reading from course text and align with weekly lectures.

#### General Description of the Subject Matter of Each Lecture or Discussion

- L1, introduction
- L2, block & blow diagrams
- L3, point to point, baseline, highway diagrams
- L4, Quiz1, schematic diagrams
- L5, introduction to electricity
- L6, electrical terms
- L7, Quiz2, engineering notation
- L8, sources of electricity
- L9, logic
- L10, Quiz3, resistors
- L11, L12, L13, L15, printed circuit boards
- L14, Quiz4, ohm's law & watt's law
- L16, sheet metal
- L17, series circuits
- L18, Quiz5, magnetism
- L19, L20, L22wiring diagrams
- L21, Quiz6, parallel circuits
- L23, Quiz7, project 1
- L24, project 2
- L25, Final Exam Preview, SRI

## Required Course Syllabus Statements

#### Generative AI

The use of generative AI tools is not permitted in this course.

# **Using Remote Testing Software**

☐ This course does not use remote testing software.

☐ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

## Required University Syllabus Statements

#### Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancyrelated conditions may contact UVU Accessibility Services at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

#### **Academic Integrity**

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in <u>UVU Policy 541: Student</u> Code of Conduct.

## **Equity and Title IX**

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – <u>TitleIX@uvu.edu</u> – 800 W University Pkwy, Orem, 84058, Suite BA 203.

#### **Religious Accommodation**

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at <a href="mailto:accessibilityservices@uvu.edu">accessibilityservices@uvu.edu</a>. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a <u>specially dedicated</u> <u>space</u> for meditation, prayer, reflection, or other forms of religious expression.