

Electrical Drafting 202490.DFTG2307.1A1

CREDIT

3 Semester Credit Hours (2 hours lecture, 4 hours lab)

MODE OF INSTRUCTION

Hybrid

PREREQUISITE/CO-REQUISITE:

DFTG 1309 or DFTG 1313

COURSE DESCRIPTION

A study of area lighting, control systems and power layouts, electrical and safety codes, load factors and distribution requirements.

COURSE OBJECTIVES

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

1. Create electrical details and diagrams.
2. Identify current standards to size conductors, conduit and controllers.
3. Calculate load factors and electrical distribution requirements.
4. Apply National Electric Code (NEC) standards for electrical safety.

INSTRUCTOR CONTACT INFORMATION

Instructor: Stanley Spooner

Email: saspooner@lit.edu

Office Phone: 409-247-5214

Office Location: Building T5 Room 109

Office Hours: Wednesdays and Fridays 11:00am – 12:00pm



**LAMAR INSTITUTE
OF TECHNOLOGY**

REQUIRED TEXTBOOK AND MATERIALS

1. Modern Commercial Wiring, Author: Harvey N. Holzman
7th Edition, ISBN-13 9781631269080
2. Flash Drive – 1 GB minimum
3. Notebook
4. Access to computer with AutoCAD

ATTENDANCE POLICY

Attendance is expected of all students.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the [Academic Calendar](#). If you stop coming to class and fail to drop the course, you will earn an “F” in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR

DUE DATE	ASSIGNMENTS
9/16/24	Line Diagram Drawing
9/23/24	Start-Stop Pushbutton Schematic Diagram
9/23/24	Start-Stop Pushbutton Wiring Diagram
9/30/24	Chapter 1 Homework (Electrical Fundamentals Review)
9/30/24	Typical Power Supply Drawing
10/7/24	One Line Diagram of MCC (Motor Control Center)
10/7/24	One Line Diagram of Unit Substations and Motor Starters
10/14/24	MC33035-MC33039 DC Motor Control Wiring Diagram
10/21/24	Light Relay Wiring Diagram
10/21/24	Chapter 4 Homework (Electrical Prints, Specifications and Codes)
10/28/24	Lighting and Power Plan
11/4/24	LIT Parking Lot Power Junction Box Elevation
11/4/24	Chapter 6 Homework (Conductors)
11/11/24	LIT Inside Process Training Unit – P1 & P2 Motor Starter Elevation
11/11/24	Chapter 8 Homework (Overcurrent Protection)
11/18/24	Motor and Pushbutton Connection Detail
11/25/24	LIT Inside Process Training Unit – Electrical Motor Plan (FINAL DWG)
12/2/24	Notebooks Due

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Activity	Percentage
Drawings	60%
Quiz	10%
Homework	10%
Notebook	5%
Final Drawing	15%
Total	100%

NOTE - 25 point deduction for late submitted assignments

GRADE SCALE

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

LIT does not use +/- grading scales

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with

disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION