



Electrical Drafting (DFTG 2307)

Credit: 3 semester credit hours (2 hours lecture, 4 hours lab)

Pre-requisite/Co-requisite: DFTG 1309

Course Description

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

Required textbook and materials

1. Modern Commercial Wiring, Author: Harvey N. Holzman
6th Edition, ISBN-13 978-1619608542 ISBN-10 1619608545
Goodheart - Willcox Company, Inc. (Publisher)
2. Flash Drive – 1GB minimum
3. Access to computer with AutoCAD
4. Notebook

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.

Course outline

- A. Introduction
 - a. Introduction of faculty and staff
 - b. Review syllabus and class policies
- B. Electrical basics
 - a. Electrical safety and National Electric Code
 - b. Electrical symbols
 - c. 3. OHMS Law and Load Factors
- C. Electrical diagrams
 - a. Line diagrams
 - b. Wiring diagrams
 - c. Schematic diagrams
- D. Electrical plans
 - a. Location plans
 - b. Grounding plans
 - c. Lighting plans
- E. Miscellaneous electrical drawings
 - a. Electrical details
 - b. Electrical panel details

Grade Scale

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

Course Evaluation

Final grades will be calculated according to the following criteria:

Activity	Percentage
Quizzes/Drawings	60%
Professionalism	10%
Final Exam	20%
Notebook	10%
Total	100%

Late penalties will be assessed on all work turned in late, 5 points per day

Course requirements

1. Teach principles of electrical drawings
2. Stress modern representation for block diagrams
3. Teach schematic, logic and wiring diagrams
4. Teach motor control diagrams
5. Teach power distribution diagrams
6. Teach electrical one-line diagrams
7. Teach schematic, logic and wiring diagrams
8. Teach power distribution

Attendance Policy (all work during absence must be made up)

1. 5 absences allowed – 4 tardies are equivalent to 1 absence
2. 2 points per absence off final grade after 5 initial absences

Course Policies

1. No food, drinks or use of tobacco products in class.
2. No foul or harsh language will be tolerated.
3. Turn off all cell phones during lectures.
4. Do not bring children to class.
5. No cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can and will be removed from the class for the semester. Cheating can result in expulsion from LIT.
6. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course you will earn an “F” in the course.
7. Back-ups
 - a. It is the student’s responsibility to make back-up copies of their work. Do not rely on the server to be there 100% of the time. I cannot help you if

you lose your work. Remember that in order for your work to be graded it must be turned in.

8. Internet usage
 - a. Classroom computers have access to the internet.
 - b. Student usage of the internet will be monitored.
 - c. Proper usage of the internet will be allowed for classroom research.
 - d. Any unauthorized use of the internet will not be tolerated.
 - e. Improper usage of the internet, such as profanity, pornography, gambling, etc. will result in disciplinary action not limited to expulsion from LIT.

Disabilities Statement

The Americans with Disabilities Act of 1992 and section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services in the Cecil Beeson Building.

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 or obtained in print upon request at the Student Services Office.

Refer to Calendar for important dates and course schedules!