AC/DC Motor Controls (INTC 1457 1A1)

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

MODE OF INSTRUCTION
Hybrid

PREREQUISITE/CO-REQUISITE:
CETT 1403 & CETT 1405

COURSE DESCRIPTION
A study of electric motors and motor control devices common to a modern industrial environment. A presentation of motor characteristics with emphasis on starting, speed control, and stopping systems.

COURSE OBJECTIVES
Upon completion of this course, the student will be able to
1. Describe the types of electric motors.

2. Explain the operation and function of various motor control devices.

INSTRUCTOR CONTACT INFORMATION

Instructor:	Josef Anderson
Email:	jeanderson@lit.edu
Office Location:	PATC 233
Office Hours:	30 minutes before and after class. Other times available by request.

REQUIRED TEXTBOOK AND MATERIALS
1. *Electrical Motor Controls 5th Edition by* Gary J. Rockis & Glen A. Mazur

    a. ISBN number is 9780826912268

2. *Electrical Motor Controls5th Edition* Workbook

    a. ISBN number is 9780826912275

3. Notebook

4. Pencils (NO WORK IN PEN WILL BE ACCEPTED)

ATTENDANCE POLICY
Students must be in class in order to complete lab activities for that day.
1. Missing 20% (6) or more of classes will result in an automatic F for the course.
2. Missing more than 20% of a class period will count as an absence.

Approved: 08/15/2025

DROP POLICY
If you wish to drop a course, you are 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.

COURSE CALENDAR

Assignment Name	Due Date and Time	Location
Practice Syllabus Quiz Practice Assignment Introduction Discussion Netiquette Discussion	Sunday, August 31, 2025 11:59PM	Getting Started Folder
Bench Lab 1- Intro Lab	Thursday, September 4	In Class
Chapter 2 Review	Sunday, September 7, 2025 11:59PM	Unit 1 Folder
Trainer Labs 1-3	Thursday, September 11	In Class
Chapter 1-4 Lab Packet	Thursday, September 11	In Class
Chapter 3 Review Chapter 4 Review	Sunday, September 14, 2025 11:59PM	Unit 1 Folder
Trainer Labs 4-6	Thursday, September 18	In Class
Quiz 1	Friday, September 19, 2025 11:59PM	Unit 1 Folder
Exam 1	Sunday, September 21, 2025 11:59PM	Unit 1 Folder
Bench Lab 2- CR Lab	Thursday, September 25	In Class

Chapter 5 Review	Sunday, October 5, 2025 11:59PM	Unit 2 Folder
Bench Lab 3- Run/Jog CR	Thursday, October 9	In Class
Bench Lab 4- Man/Auto CR	Thursday, October 9	In Class
Chapter 5-7 Lab Packet	Thursday, October 9	In Class
Chapter 6 Review Chapter 7 Review	Sunday, October 12, 2025 11:59PM	Unit 2 Folder
Lab Exam 1	Thursday, October 16	In Class
Quiz 2	Friday, October 17, 2025 11:59PM	Unit 2 Folder
Exam 2	Sunday, October 19, 2025 11:59PM	Unit 2 Folder
Trainer Labs 7-8	Thursday, October 23	In Class
Chapter 8 Review Chapter 12 Review	Sunday, October 26, 2025 11:59PM	Unit 3 Folder
Trainer Labs 10-11	Thursday, October 30	In Class
Quiz 3	Friday, October 31, 2025 11:59PM	Unit 3 Folder

Exam 3	Sunday, November 2, 2025 11:59PM	Unit 3 Folder
Bench Lab 5 - Run/Jog Motor Starter	Thursday, November 6	In Class
Trainer Lab 19	Thursday, November 6	In Class
Chapter 9 Review Chapter 10 Review	Sunday, November 9, 2025 11:59PM	Unit 4 Folder
Bench Lab 6- Man/Auto Motor Starter	Thursday, November 13	In Class
Trainer Lab 13	Thursday, November 13	In Class
Chapter 13 Review Chapter 14 Review	Sunday, November 16, 2025 11:59PM	Unit 4 Folder
Lab Exam 2	Thursday, November 20	In Class
Quiz 4	Friday, November 21, 2025 11:59PM	Unit 4 Folder
Exam 4	Sunday, November 23, 2025 11:59PM	Unit 4 Folder
Lab Final	Thursday, December 4	In Class

Final Exam	Friday, December 5, 2025 5:00 PM	Final Exam Folder

COURSE EVALUATION
Final grades will be calculated according to the following criteria:
  EXAMS*- 30%
  Labs (Daily & Lab Exams)- 50%
  Quizzes/Assignments- 20%

  *There will be 4 major EXAMS and a FINAL EXAM. If you choose to *not* take the FINAL,
  your Exam Average of your first 4 exams will be used as your FINAL EXAM grade.

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

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

1. ALL work should be completed in PENCIL! Work submitted in pen will receive a ZERO.

2. No food, drinks, or use of tobacco products in class.

3. No foul or harsh language will be tolerated

4. Turn off all Cell Phones during lectures, unless otherwise instructed by me

5. Clean up work station after you complete your lab assignments. Materials left at work station will result in 10 points deducted from that lab assignment.

6. Take care of tools and equipment used during class.

7. Headphones may be worn only upon Instructor approval.

8. Do not bring children to class.

9. 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 from expulsion from LIT.

10. Students must have access to, and knowledge of basic computer functions (including

Blackboard)

11. Students should check Blackboard daily.

12. Internet Usage
    1. Classroom computers have access to the internet.
    2. Student usage of the internet will be monitored.
    3. Proper usage of the internet will be allowed for classroom
    research, classwork, tests, and assignments as directed.
    4. Any unauthorized usage of the Internet will not be tolerated.
    5. Improper usage of the Internet, such as profanity, nudity, gambling, etc. will result in
       disciplinary action.

13. **There will be NO make-up Exams.** If you miss an Exam for any reason, you automatically
    forfeit your possible exemption from the Final.

14. **There will be NO make-up Labs.**

15. There will be a 20 point penalty **for each day** deducted from late work (**daily
    assignments only**).