

Introduction to Engineering: Lecture / Lab \_ENGR 1201

#### INSTRUCTOR CONTACT INFORMATION

Instructor: Thinesh Selvaratnam, Ph.D.

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Office Phone:

Office Location:

Office Hours: By appointment



#### CREDIT

2 Semester Credit Hours

#### MODE OF INSTRUCTION

Hybrid

#### PREREQUISITE/CO-REQUISITE:

MATH 1314 or 1414 College Algebra or equivalent academic preparation.

#### COURSE DESCRIPTION

An introduction to the engineering profession with emphasis on technical communication and team-based engineering design.

#### COURSE OBJECTIVES

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

- Describe the engineering profession and ethics, including professional practice and licensure.
- Develop an awareness and understanding of the different engineering disciplines
- Use technical communication skills to explain the analysis and results of introductory engineering and computer science laboratory exercises.
- Explain the engineering analysis and design process.
- Apply EXCEL and MATLAB to solve engineering problems.
- Describe the impact engineering has had on the modern world.
- As part of a team, design a simple engineering device, write a design report, and present the design.
- Demonstrate computer literacy.

#### REQUIRED TEXTBOOK AND MATERIALS

1. Scientific calculator
2. Laptop
3. **Optional:** "Engineering Fundamentals and Problem Solving", 8<sup>th</sup> ed., McGraw-Hill. ISBN: 978-1-264-90147-0

#### ATTENDANCE POLICY

The campus policy mandates that students attend 80% of their scheduled instructional days. Class attendance is critical for understanding the topics. This will be tracked in Starfish via student access in Blackboard and participation during specified meeting times. Excessive unexplained absences will result in a ten-point penalty from the final semester grade (at the discretion of the instructor).

## 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.

## COURSE EVALUATION

Final grades will be calculated according to the following criteria:

Attendance/ Class Participation: 15%  
Homework and Assignments: 60%  
Personal Essay: 10%  
Term Project and Final Presentation: 15%

## 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/index.php>

## 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 Wi-Fi 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](mailto:specialpopulations@lit.edu). You may also visit the online resource at [Special Populations - Lamar Institute of Technology](#)

## 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](http://www.lit.edu). Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

## 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 My LIT 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. Any assignment that Blackboard considers late will be manually graded with a deduction of 20 points.
2. The Final Exam cannot be late for ANY reason. The semester ends when the Final Exam is due.
3. Extra Credit is not generally given, and “creative rounding” is not applied. A student who finishes the course with an 89.4XXXX will receive a “B” and a student who finished the course with an 89.5XXXX will receive an “A.”
4. Changes will be made to the calendar's topics and assignments because of any unanticipated circumstances.