

**MSE101/L – Introduction to Engineering (2 units)**  
**CSUN – Fall 2023, Tickets: 16363 (Lab) & 16777 (Lecture)**  
**Friday, Lecture: 1:00. - 1:50 pm & Lab: 2:00 – 4:45 pm, Room: JD-1126**

**Instructor**     **Ghassan “Gus” H. Elias:** BS/MS; Industrial/Manufacturing Systems Engineering  
**-Expertise:** Engineering Consulting, Decision-Making/Risk Analysis and Facility Planning. Quality Assurance & Control, Industrial Safety & Material Control, Global safety certification programs for installing & commissioning electronic & pneumatic devices in General (Non-Hazardous) Locations, Hazardous ‘Classified’ Areas & Potentially Explosive Atmospheres.  
Email address: [Gus.Elias@csun.edu](mailto:Gus.Elias@csun.edu)                      Faculty Office: **JD-3308**  
Office hours: Friday, 12:00 - 1:00 pm (**will meet in lab**)  
MSEM Department Office: JD-4510; (818) 677-2167

**Course Resources:**

**Online Access -**

- CSUN website: [www.csun.edu](http://www.csun.edu)
- CANVAS online access: <https://www.csun.edu/it/canvas>
- For lecture modules & other instructions: <http://www.csun.edu/~ghe59995/>

**Required Textbooks -**

- Studying Engineering, 5<sup>th</sup> edition, Raymond B. Landis, Discovery Press,  
ISBN: 978-0-9793487-2-3 (Published by Discovery Press) -- **((REQUIRED))**
- Engineering Ethics, 4<sup>th</sup> edition, C. Fledderman, Prentice Hall,  
ISBN-13: 978-0-13-214521-3 **((REQUIRED))**
- Introduction to Excel, 5<sup>th</sup> edition, Kuncicky & Larsen, Prentice Hall, 2013  
ISBN-10: 0133083659 • ISBN-13: 9780133083651 **((Recommended))**

**Catalog Description**     **Co-requisite: MSE101L.** Introduction to the engineering profession and academic programs. Orientation to the University, the college and its departments. Development of study, communication, problem-solving, design, analytical, and computing skills. Introduction to the internet, word processing, spreadsheet, computer-aided design, and presentation software. Design project development and team-work experience. One hour lecture and three hours lab-work per week.

**COURSE LEARNING OBJECTIVES:**

This course will contribute to enhancing **your:**

- 1- ability to use computers to solve engineering problems & to communicate the results in reports & memos.
  - 2- knowledge of the engineering design process.
  - 3- ability to write reports on engineering endeavors and to give oral presentations on the results of your work.
  - 4- ability to plan your academic career in engineering before and after you graduate from CSUN
  - 5- ability to work on inner-disciplinary teams in working design solutions.
  - 6- ability to choose an engineering academic discipline to follow at CSUN and to plan your career as an engineer.
  - 7- ability to use word processing, spreadsheet, CAD and to conduct literature and web searches.
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## STANDARD OPERATING PROCEDURES

1. Class members are expected to maintain personal and professional standards consistent with the Code of Ethics of the National Society of Professional Engineers, the Preamble and Fundamental Canons of which are as follows:

*Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct. Engineers, in the fulfillment of their professional duties, shall:*

- *Hold paramount the safety, health and welfare of the public.*
- *Perform services only in areas of their competence.*
- *Issue public statements only in an objective and truthful manner.*
- *Act for each employer or client as faithful agents or trustees.*
- *Avoid deceptive acts.*
- *Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.*

Engineers uphold and advance the integrity, honor and dignity of the engineering profession by:

- *using their knowledge and skill for the enhancement of human welfare;*
- *being honest and impartial, and serving with fidelity the public, their employers and clients;*
- *striving to increase the competence and prestige of the engineering profession; and*
- *supporting the professional technical societies of their disciplines.*

2. Students must take ORIGINAL NOTES and submit ONLY ORIGINAL WORK. Notes taken by other students in previous semesters are NOT allowed in the class. Class members are expected to comply with University regulation governing intellectual property, origin of work, and honesty. Failure to maintain these standards will result in student disciplinary action and a grade of “F” in both the course and lab sections.
3. Class members are expected to attend ALL class sessions, promptly & entirely and are responsible for the course material, reading assignments, class presentations, discussions, and practice problems. Tardy/Late submissions of assignments are unacceptable. NO EXCEPTIONS!
4. Class members must always be considerate and respectful to their colleagues.
5. Pagers, Cellular Phones, Alarms, etc., MUST BE TURNED OFF during class sessions throughout the semester. IMPORTANT NOTICE: Unless otherwise authorized, the use of PC Laptops, cameras, video recorders, internet-ready devices, mobile phones, AND the exchange of textbooks or notes during the exams/quizzes is strictly prohibited. Violation of this policy will result in the student’s dismissal from the class and issuance of an “F” grade for the course. NO EXCEPTIONS!



**NOTE #1:** Activate **and** use **solely** your CSUN email address for ALL academic correspondences. Do not use your personal email address to communicate with the instructor. Messages from non-CSUN email addresses will **NOT** be acknowledged. Instructor will only utilize SOLAR's email database to communicate with class members.

**NOTE #2:** The last day to drop classes is **15-Sep-2023**. Students must initiate this process; **not** faculty. **F**ailure to formally drop a course will result in a "WU" grade which is equivalent to "F", affecting detrimentally your GPA.

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**Important Notes:**

- The weekly tasks will be announced during the lecture and lab sessions.
  - By the third-fourth week into the semester, groups consisting of 4-to-6 members will be formed on a random basis.
  - Group research assignments will be given throughout the semester along with a final term project.
  - Class presentations should be expected.
  - Attend ALL lectures promptly --- Be motivated.
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**Academic Dishonesty:**

Academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form at California State University Northridge. All students involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension and/or expulsion from the University.

"Cheating or plagiarism in connection with an academic program at a CSU campus is listed in Section 41301, Title 5, California Code of Regulations as an offense for which a student may be expelled, suspended or given a less severe disciplinary sanction.

Academic dishonesty is an especially serious offense and diminishes the quality of scholarship and defrauds those who depend on the integrity of the University's programs." Please consult university policy regarding plagiarism and the consequences.

<https://catalog.csun.edu/policies/academic-dishonesty/>

Any student caught cheating or plagiarizing in this class will receive a zero for the assignment and may be referred to the dean's office for additional consequences.

Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person. The instructor reserves the right to submit your papers to [turnitin.com](https://turnitin.com) for identifying papers containing unoriginal material.

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## COURSE EVALUATION / GRADE SCALE

**\*\* plus/minus grading will be used \*\***

---Refer to the last page of the syllabus for more information on grades---

**Lecture** --- administered in class and via CANVAS:

- 5% - Attendance and participation in the class.
- 75% - Online quizzes (administered while in the lab, and possibly remotely too).
- 20% - Input to discussion topics and special assignments/presentations.

**Lab section** --- on-campus attendance is required:

- 5% - Attendance and participation in the lab.
- 30% - Lab assignments (a due date will be announced for each task).
- 30% - Midterm Project – “Ship the Chip” / Team Report & Group Presentation.
- 35% - Final Research and/or Design Project & In-Class Group Presentation.

### Letter-Grade Scale (NO CURVING!):

((Refer to the last page for more information on the grading criteria.))

|                  |                   |                   |
|------------------|-------------------|-------------------|
| $A \geq 90$      | $88 \leq A- < 90$ | $85 \leq B+ < 88$ |
| $80 \leq B < 85$ | $78 \leq B- < 80$ | $75 \leq C+ < 78$ |
| $70 \leq C < 75$ | $68 \leq C- < 70$ | $60 \leq D < 68$  |
|                  |                   | $F < 60$          |

**\*\*\* Course grades are due by 22-Dec-2023 \*\*\***

### Formats for Work:

1. Generally, assignments will be submitted via CANVAS: <https://www.csun.edu/it/canvas>
2. **If you miss fulfilling a given task, you simply lose it. No make-ups will be given --- No exceptions.**
3. Individual assignments and group projects will be utilized throughout the semester.
4. Each student must turn in his/her own homework, unless a group task is assigned by the instructor. All submissions are to be individual efforts with the exception of the team project reports.
5. The format for the project will be outlined in class. Written reports will be evaluated for compliance to the format requirements, the writing quality, timeliness, and content.

### **For Your Information: Grade Evaluation Criterion**

\* A grade range of A to A- is reserved for work that is exceptional. This means that it (1) is professional and reflects the writer's/s' careful consideration of audience and purpose; (2) shows perfect to near-perfect understanding of the necessary concepts and analytical tasks; (3) where appropriate, it shows the capacity to think creatively or to see implications beyond the immediate scope of the question; (4) contains all necessary information (invention); (5) is arranged in a logical manner (6), is memorable; (7) delivery is visually appealing; and (8) is free of mechanical errors and is formatted as specified. Work must be flawless to attain an A/A-. Work with minor flaws that is nonetheless excellent in other ways will earn an A-.

\* A grade in the B range means that the work is acceptable at the graduate level (B- range) to very good (B/B+). This work satisfies all (B+) or most (B/B-) of the requirements of the question & research tasks, shows the capability to think beyond the task by relating it to other areas of knowledge in or outside of the course; is neatly presented and shows above-average use of academic English. If the work is decently written, is formatted basically correctly, and covers most of the required content, but has several minor flaws or one major flaw, the grade is B-.

\* A grade in the C range means that the work, while covering much of the required ground, does not show graduate-level analytic and expressive ability. That is, major and minor items may be missing or incorrect; and while the language may communicate most points adequately, it does not qualify as above-average academic work.

\* A grade in the D range shows that the work does not, overall, achieve an acceptable level of coverage of the requirements AND/OR the language is insufficient to make the writer's points understandable to the reader. The content may be either incorrect to an unacceptable degree, or very incomplete.

\* A grade of F indicates that so little of the required content is covered that grading the paper is an exercise in futility. It may mean that very major points have clearly not been grasped or have been misunderstood by the student. An F may also indicate that the ideas are expressed in such a way that they are not at all understandable to the reader. A grade of F is also awarded when assigned work is not handed in, or not handed in by the set deadline.