

- Course Number and Title: M E 210. Electronics and Systems Engineering
- Catalog Description: Introduction to microcontrollers, measurement systems, motion actuators, sensors, electric circuits, and electronic devices and interfacing. Students required to work individually and in teams to design and test simple electromechanical systems.
- Credit Hours: 3 Credits (2+3P)
- Prerequisite(s) / Corequisite(s): Prerequisite(s): MATH 1521G or MATH 1521H or ENGR 190  
Corequisite(s): None
- Required: Required for BSME and BSAE Degrees
- Course Availability: Fall and Spring Semesters
- Instructor (Usual): Dr. Liang Sun (See <https://mae.nmsu.edu/people/faculty.html>)
- Textbook: Alexander, C. and Sadiku, M., *Fundamentals of Electric Circuits*, 7th Ed., McGraw Hill, 2020.
- Course Learning Objectives: After completing this course, a student should be able to:
  - 1) Define an electronic system and its primary elements.
  - 2) Exercise a computational model of electric circuits and evaluate the system response.
  - 3) Design and demonstrate a functional physical device that solve a practical problem while meets system requirements.
- Topics Covered:
  - Introduction to electric circuits and components
  - Introduction to analysis of RLC circuits
  - Introduction to microcontroller programming, hardware assembling and testing