EE 4082: Capstone Design II *Spring, 2024* WORKC 113 MW, 12:00-12:50

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Office Hours: TBD

Course Description: (*Brief description of the content of the course (catalog description)*)

- A continuation of the capstone design projects started in EE 4081. EE 4082 must be taken in the semester immediately following EE 4081 to maintain project continuity. The student teams provide status reports, a final presentation to faculty and reviewers, and a senior thesis, and bring their design projects to successful completion.

Pre-requisites:

- EE 4081 (Capstone Design I)

Place in Curriculum: This course is required for EE majors.

Course Learning Outcomes:

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- a) Specific outcomes of instruction By the end of this course students will be able to
- identify relevant topics from earlier courses and then apply knowledge of those topics to their design project;
- manage a project to include plans for a prototype, testing, evaluation, documentation and project's end;
- clearly communicate concepts and information; and
- work collaboratively and responsibly as an effective team.
- b) Student Outcomes addressed by the course.

Students in the electrical engineering program will demonstrate

- (SO3) an ability to communicate effectively with a range of audiences;

- (SO5) an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

Brief list of topics to be covered

- Engineering design
- Construct prototype/proof-of-concept
- Test and evaluate prototype/proof-of-concept
- Teams (dynamics, roles, social skills, constructive conflict)
- Communications (diagrams, presentations, reports, audience)

Text book, title, author, and year

None

Other supplemental materials

None

Course Requirements:

Attendance is required Group projects will be a key part of the course Cellphones set on vibrate

Tentative Grading:

Weekly Reports:	50%
Final Report:	50%

Academic Honesty: New Mexico Tech's Academic Honesty Policy for undergraduate and graduate students is found in the catalog (<u>https://www.nmt.edu/registrar/catalogs.php/</u>). Further information about academic honesty can be found on the Academic Affairs website: <u>https://www.nmt.edu/academicaffairs/avpaa/academic_honesty.php</u> You are responsible for knowing, understanding, and following this policy.

Student Resources

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[*Please feel free to add information on tutoring or other student success services in your department or elsewhere on campus*]

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You can contact SAS in person at the Fidel Center Room 245, call 575-835-6209, email <u>access@nmt.edu</u> or book through the link on our <u>website</u>.

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