The purpose of the two semester Electrical and Computer Engineering Senior Design Course (EE/CpE 415/423 and 416/424) is to expose students to the entire engineering design process: This includes the three essential steps of:

- Figuring out what to do,
- Doing it,
- Telling others what has been done.

Particularly, students will:

- identify a substantial, yet achievable, design problem,
- assemble a (potentially multi-disciplined) team to address the problem,
- identify design alternatives,
- estimate implementation costs,
- analyze market potentials for the design,
- plan all phases of the design,
- set realistic design schedules,
- identify component sources and obstacles in obtaining them,
- negotiate to obtain resources,
- meet agreed-to schedules,
- create a high-level as well as a detailed design,
- implement the design, and
- document the results, including status, progress, and final reports as well as a project presentation and demonstration.

ECE Senior Design projects are conducted with the guidance of a member of the ECE, CS or Engineering Physics faculty, potentially with significant input from engineers at sponsoring industry organizations. In essence, Senior Design should be viewed as a very detailed, realistic simulation of the real-world design process in an academic setting.