

Industry Sponsored Student Design Process

UC San Diego
Electrical and Computer Engineering Department
In ECE 291

ECE Department offers this course for the graduate students belonging to Engineering and Science departments in which one or two students design, build, demonstrate and document an engineering project. The projects originate from the actual need of industries in the general area of information technology. The project can count as a Masters Project. The projects are sponsored by industries and the students work with the industry sponsor. All students give weekly progress reports of their tasks and write a final report. The final report is examined by the instructor, another faculty member with relevant experience and the industry sponsor. The projects can continue for more than one quarter.

Some Salient Points of the Program:

- Student teams perform focused research and development work over one/two/three quarters.
- Student teams develop working prototypes using ECE state of the art laboratory facilities.
- Student teams perform numerical simulation using many highly advanced software packages available at ECE simulation laboratories
- Student teams perform testing and measurement of devices, and systems using a modem testing facility.
- Sponsoring companies receive the product of a highly creative and motivated engineering team working with faculty guidance.
- Students benefit from a real world design experience.

Projects can include electrical, optical, bio-engineering, opto-electronic, mechanical and thermal components (IC's, DSP, RF, IF, wireless chips, lasers, LED's, photo-detectors, robots, camera, networking sensors, propagation characteristics, etc.).

Projects begin in the first week of every quarter.

Sponsor will designate a technical contact. The student design team visits the sponsor to develop a design specification. The students maintain appropriate liaison with the technical contact during the project period.

The student teams will make a final, formal presentation for the project at the end of each quarter. Sponsors, and their guests, and also other students and industries are invited to the presentation.

For companies interested in sponsoring a project and for further details, please contact:

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