

Benefits of Industry Involvement in Senior Design Courses

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Senior design courses teach students about the product development process, project management, and teamwork. Industry involvement in senior design courses reinforces the importance of these processes and skills and benefits students, faculty, and participating companies.

Representatives from industry can participate in senior design courses as guest lecturers, curriculum advisors, and design project sponsors. As guest lecturers, practicing engineers provide a relevant, practical real-world perspective of their topic, reinforcing its importance to the practice of biomedical engineering. A periodic review of course objectives, lecture topics, and required deliverables by members of an industrial advisory committee can help fine-tune the course curriculum. Industry sponsorship of senior design projects is beneficial to the sponsoring companies, the university, and students.

Academic institutions benefit from industry sponsorship of senior design projects through the building of relationships with industry (which can lead to research collaborations and grants), maintenance of a high quality senior design course and project experience, and addition of resources available to students to complete their design projects.

Students benefit from industry sponsorship of senior design projects through the opportunity to work on real-world problems of importance to industry, experience with project management and the product development process, and familiarity with the requirements and constraints (economic, legal, and regulatory) affecting product design and development.