Engineering in Practice for a Sustainable Healthy Living Community

21st Century Engineering Challenges

Connecting Professional Engineering Practice with Education and Research

http://engineeringinpractice.utep.edu

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About the Program

The need of having engineers who are aware of on-going changes in the economic, social, and environmental conditions has increased in a world that is constantly evolving. Due to this need and the complexity of the problems faced in the modern world, a multidisciplinary engineering teaming approach is required to successfully address the challenges.

Engineering in practice is a program developed by the College of Engineering at the University of Texas at El Paso to foster a healthy living community by applying best engineering practices.

Engineering in practice means engineering to assist in solving current problems and anticipate future challenges that may pose a threat to a healthy community.

Objectives

- To provide undergraduate and graduate students the opportunity to interact with professional engineers, extending their education beyond the classroom.
- To merge education, research, and professional practice in a team composed of undergraduate and graduate students, faculty, and professional engineers.
- To propose solutions to engineering problems which pose a threat for a healthy living community.

How to Join the Program?

- Undergraduate and graduate students should have a cumulative 3.0 grade point average or above to be enrolled in this program, identify a focus group of interest, and contact the coordinator to look for topics and openings in the group.
- Faculty members can develop a focus group in coordination with the College of Engineering.
- Professional engineers who have identified a specific problem of interest can contact the focus group coordinator to join the program.

Benefits

- Undergraduate and graduate students are exposed to engineering practices and research techniques by interacting with professional engineers and faculty members. They will have the opportunity to participate in real projects and enhance their communication and managing skills.
- Faculty members are able to show students the application of topics lectured in class and demonstrate how research can be used to develop practical solutions.
- Professional engineers from organizations that participated in the program will increase their visibility in their area of expertise, and receive fresh feedback on methodologies available to solve engineering problems.

Advisory Committee

The Advisory Committee consists of faculty members and professional engineers who will provide guidance to the focus groups.

Nominations for the Advisory Committee are currently open.

Focus Groups

The program provides the means to develop focus groups composed of undergraduate and graduate students, faculty, and professional engineers. Focus groups look at current problems and future challenges to discuss and propose alternative solutions for a sustainable healthy living community.

Challenges are received by a focus group and the topic is included in the agenda for the next meeting. If the topic is selected, the focus group will invite the person presenting the challenge to attend a meeting and discuss the topic. Group visits to organizations interested in the program are also scheduled to increase awareness of best engineering practices.

Areas of expertise addressed by the focus groups include:

- Construction Practices
- Environmental Engineering
- Infrastructure
- Innovative Materials
- Pavements
- Transportation Systems
- Water Processing Sytems

For more information about the program, please visit our website at http://engineeringinpractice.utep.edu