Engineering in Practice for a Sustainable Healthy Living Community

“21st Century Engineering Challenges”

Connecting Professional Engineering Practice with Education and Research

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Engineering in practice is a program hosted by the College of Engineering at the University of Texas at El Paso (UTEP) to foster a healthy living community by applying best engineering practices.
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 with a team composed of faculty, graduate and undergraduate students to work with professional engineers.
- To propose solutions to engineering problems that pose a threat for a healthy living community.
Why this Program?

- The need of having engineers who are aware of ongoing changes in the economic, social, and environmental conditions has increased in a world that is constantly evolving.

- Address multidisciplinary engineering challenges.

Engineering in practice = Engineering in service
How to Join the Program?

- 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 for members in that group.

- Faculty members are encouraged to develop or join a focus group in his area of expertise.

- 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.
Focus Groups

- Focus groups will address different types of challenges for a sustainable healthy living community.
- The focus group will include undergraduate and graduate students, faculty members, and professional engineers from sponsor organizations.
- Focus groups will receive advice from professional engineers.
Focus Groups

- Focus groups are in the process of development. 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.
Focus Groups

- Construction Practices
- Environmental Engineering
- Infrastructure
- Innovative Materials
- Pavements
- Transportation Systems
- Water Processing Systems
How to Implement this Program?

A **teaming approach** is required to successfully implement this program.
How to Start?

- Visit our website and express your interest in a focus group
- Attend the presentations scheduled for keynote speakers
- Participate with ideas/challenges in your area of interest
Thank you!

Contact information: EngineeringPractice@utep.edu

http://engineeringinpractice.utep.edu