BS SDCET Program Mission, Objectives, and Outcomes

PENNSTATE Harrisburg

Structural Design and Construction Engineering Technology Mission Statement

The primary mission of the Structural Design and Construction Engineering Technology program is to prepare undergraduate students for successful careers in structural design, construction, and related industries in accordance with the principles and mission of Penn State Harrisburg.

To accomplish this mission, the program nurtures an environment conducive to academic excellence, executes a curriculum responsive to industry needs, and produces perceptive, socially responsible graduates for leadership positions in industry, private practice, and government. As effective educators, our faculty engage in scholarly activities to stay current and pursue new research initiatives in their fields of expertise.

The program functions as a cohesive faculty/staff-team to perform those service tasks essential to the operations of the School, the College, and the University and to enhance and promote the image of the program, the School, the College, the University and the global construction/structural design industry.

Building on the culture of its unique heritage, the program aspires to grow into a premier program - foremost in teaching, in research, and in service.

For our SDCET Graduates: Penn State Goals and ABET Objectives

The SDCET program is preparing graduates for professional careers where they will:

1. Possess skills necessary to maintain and advance careers in design or construction.
2. Be responsible practitioners and have an understanding of ethical and professional issues.
3. Function as interdisciplinary members and/or team leaders in addressing multiple facets of design and construction.
4. Have the ability to advance knowledge through professional development and educational opportunities.

The Program Educational Objectives are kept in the program's file and posted on the program's bulletin board as well as on the program's website.

For our SDCET Students: Penn State Objectives and ABET Outcomes

Students in SDCET at Penn State Harrisburg will demonstrate:

1. An ability to function efficiently on teams.
2. An ability to communicate effectively
3. Recognition of the need for and an ability to engage in lifelong learning.
4. An ability to comprehend professional, ethical, and social responsibilities.
5. A respect for diversity and a level of knowledge necessary to understand the impact of engineering solutions in light of contemporary professional, societal, and global issues.
6. A commitment to quality, timeliness, and continuous improvement.
7. An appropriate mastery and ability to apply current knowledge, techniques, skills, and professional engineering tools and adapt to emerging applications of mathematics, science, engineering, and technology.
8. An ability to identify, formulate, analyze, and apply basic technical concepts and productivity software to solve technical problems involving hydraulics, geotechnics, structures, surveying, as well as construction methods and materials, scheduling, estimating, management, and safety.
9. An ability to conduct laboratory experiments and to critically analyze, interpret, and apply experimental results to improve processes.
10. An ability to apply creativity in structural design of systems, components, or processes appropriate to program objectives.
11. An ability to perform standard analysis and design in at least one recognized technical specialty within structural design and construction engineering technology that is appropriate to the goals of the program.

For more information

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