### **Career Opportunities**

The graduates of BCE program have opportunities for employment in public and private sector companies such as the National Water Company, the Saudi Electricity Company, the General Establishment for Military Industries, King Abdulaziz City for Science and Technology (KACST), and ORAK.

## **Faculty Members**

The Civil Engineering Department at PSAU currently has 19 faculty members and one teaching assistant for 107 undergraduate students. Besides, 10 department members are currently pursuing post-graduate degrees on a scholarship in various countries like the United States of America, the United Kingdom, and Australia and going to join the department as faculty members after completion of their studies.

#### Laboratories

The Civil Engineering Department has the following laboratories with modern facilities and equipment:

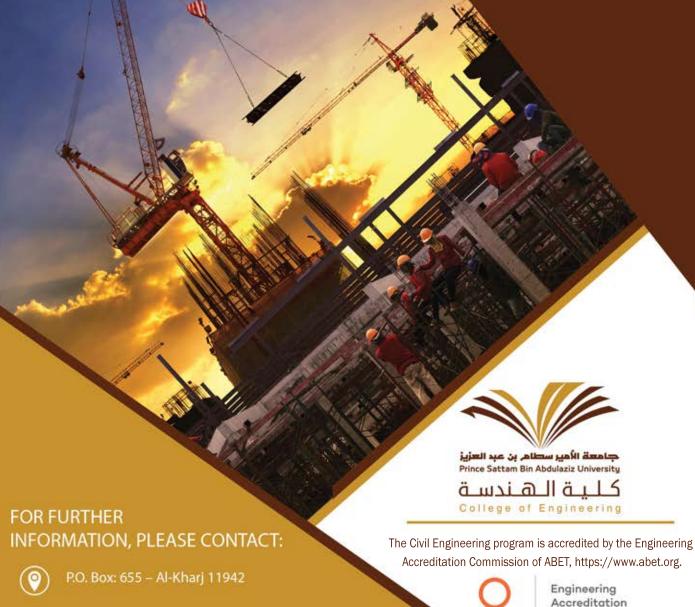
- Surveying
- Concrete Technology and Materials of Construction
- Fluid Mechanics and Hydraulics
- Geotechnical Engineering
- Sanitary Engineering
- Highway Engineering
- · Structural Mechanics
- Computer laboratory













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Accreditation Commission

Department of Civil Engineering



# **Civil Engineering Department**

The Civil Engineering Department was established at Prince Sattam Bin Abdulaziz University (PSAU) under the College of Engineering (Al-Kharj) in the academic year 1428-1429H/2007-2008G. The program offers integrated and comprehensive studies that provide a wide range of services to the society as well as to private and governmental agencies that allows the students to develop a solid foundation in various disciplines of Civil Engineering that includes: Structures and Materials. Water Resources, Transportation, Geotechnical and Survey, and Construction.

#### Mission

The Civil Engineering Program Mission is: "To provide quality education in Civil Engineering that prepares students to competitively and responsibly carry on technical and/or managerial missions in the public or private sectors throughout their career and to successfully undertake graduate-level studies while holding a commitment to professional ethics and the values of societal service".

# Degree

After completing 162 credit hours, the Civil Engineering Department awards the degree of Bachelor of Civil Engineering.

### Program

The Civil Engineering Department offers Bachelor of Civil Engineering (BCE) Program to meet the needs of the community. The program strengthens the ability of graduates; to conduct analysis and design as well as managerial tasks, to be the leaders, and contribute to the development of the local community.

Hence, the BCE program has been designed to provide the student with a general and balanced background in a different engineering discipline, with a strong emphasis on the areas. The program offers the main skills and knowledge in the following branches of Civil Engineering:

- · Structural Engineering
- Transportation Engineering
- · Water Resources and Hydraulics
- · Construction Engineering and Management
- Surveying
- · Geotechnical Engineering

The students are allowed to select a collection of four courses from a proposed list of 23 elective courses covering the following eight areas: Construction, Water Resources, Transportation, Environmental Engineering, Structural Engineering, Geotechnical Engineering, Special Topics in Civil Engineering and Computer Applications. The elective courses allow the students to achieve more depth in their preferred areas and some breadth in other areas of civil engineering.

# **Program Educational Objectives (PEOs)**

The BCE program is preparing its graduates to meet the following objectives:

• Program Educational Objective #1 (PEO1):

Have successful careers in Civil Engineering

• Program Educational Objective #2 (PEO2):

Possess leadership qualities and contribute to the development of Saudi society.

• Program Educational Objective #3 (PEO3):

Seek successfully graduate studies, new knowledge, and advanced technology in Civil Engineering.

## **Student Outcomes (SOs)**

The program's educational objectives are met by providing undergraduate students with an educational program that will result in the following outcomes by the time of graduation:

- 1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- 2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- 3. An ability to communicate effectively with a range of audiences.
- 4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- 5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- 6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- 7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.