

CE STRATEGIC PLAN 01



2021-2023

DEAN'S STATEMENT



Welcome to the College of Engineering at the Prince Sultan University (PSU). The College of Engineering at PSU has the vision to be the College of Engineering aspires to be the leading engineering college in the Middle East. PSU is striving for educational excellence in technology in engineering with its renowned cooperative work experiences.

The College of Engineering crafted a dynamic strategic plan designed to deliver quality programs that reflect excellence and leadership in higher education in Saudi Arabia and the region. The College of Engineering at PSU consists of five undergraduate programs; Construction Engineering Management, Production and Manufacturing Engineering Management, Communications and Networks Engineering, Electrical Engineering, Civil and Environmental Engineering. The College has established recently the Master in Engineering Management program. The College of Engineering graduates qualified and competent engineers for the local, regional and international job markets.

The College of Engineering has a strong cooperative (co-op) training program where the senior level student attends a comprehensive training program in the leading industrial company for a period of seven month.

Whether you are a prospective student, current student, alumni or practicing engineer

please take an opportunity to explore the College of Engineering webpage. You will have a better understanding of the undergraduate engineering degrees are offered. The College of Engineering are led by faculty who are passionate and committed toward about teaching, research and innovation.

The College of Engineering is working closely with the Research and Initiative Center which support commercialization of applied research by bridging the gap between the industry market, community and academia. The Research and Initiative Center established business incubators and business entrepreneurship centers. Awareness programs on investments and entrepreneurship for university's students is provided; freelance and business entrepreneurial culture will be cultivated. This Entrepreneurship unit work to offer the required entrepreneurial support to PSU students and alumni to recognize and groom their entrepreneurial potentials.

The College of Engineering success is predicated on the success of our graduates. We invite interested students to be part of the future with us.

Sincerely,

Dr. Abdulhakim A. Almajid Dean, College of Engineering



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COLLEGE OF ENGINEERING



The College of Engineering aspires to be the leading engineering college in the Middle East.

MISSION

The College of Engineering aims to provide engineering students with quality education in accordance with international standards, conduct high-impact scientific research, and commit to contribute to the sustainable development of society.







EDUCATIONAL EXCELLENCE





ACHIEVE EXCELLENCE IN ENGINEERING EDUCATION

OBJECTIVES

1. To recruit and retain high potential engineering faculty specialized in key areas

KPI: Faculty Ratio with Doctoral Qualifications

Actual 80% Target 90%

2. To enhance the multidisciplinary initiatives among stakeholders

KPI: Proportion of courses offered by each college with multidisciplinary components

Actual **7.4**% Target **12**%

3. To nurture and sustain a culture that supports and strengthens teaching and learning excellence

KPI: Students> Evaluation of quality of learning experience in the program

Actual **4.05** Target **4.3**

4. To broaden the curricula to keep engineering college at the cutting edge of teaching and learning

KPI:Number of curricula advancement initiatives in a program. (e.g. new courses introduced, programs, minors, and any general curriculum updates) in each college in an AY.

Actual 8

Target **10**







Goal 2

EXPAND STUDENT PARTICIPATION IN EXTRACURRICULAR AND CO-CURRICULAR ACTIVITIES

OBJECTIVES

1. To provide co-curricular and extra-curricular student activities within the academic programs

KPI: Number of extracurricular activities offered to students by a college.





Target **10**

2. To exploit national and international opportunities and experiences for students

KPI: The number of student participants in national and international educational opportunities

Actual 1



Target 3

3. To enhance students' experiential and life-long learning skills



2



MANAGEMENT, GOVERNANCE AND QUALITY ASSURANCE





MANAGEMENT, GOVERNANCE AND QUALITY ASSURANCE

Goal 1

SUSTAIN ENGINEERING COLLEGE ALIGNMENT TO NATIONAL AND INTERNATIONAL QUALITY STANDARDS OF ENGINEERING EDUCATION

OBJECTIVES

1. To implement, monitor and sustain continuous improvement recommendations and quality assurance measures.

KPI: Percentage of APR action plan recommendation items completed.



2. To acquire ABET accreditation

KPI: Percentage of Programs that pass ABET accreditation.









PROFESSIONAL DEVELOPMENT







Goal 1

PROVIDE OPPORTUNITIES FOR GROWTH OF ENGINEERING FACULTY

OBJECTIVES

- 1. To encourage faculty to have membership in professional societies and obtain credentials aligned with their programs.
- **2.** To promote professional growth for educational excellence KPI: Proportion of teaching staff who meet the minimum institutional requirements of 10 hours PD.









OUTREACH, MARKETING AND PARTNERSHIPS







OUTREACH, MARKETING AND PARTNERSHIPS

Goal 1

CREATE PARTNERSHIPS WITH ACADEMIA, INDUSTRY, AND GOVERNMENT FOR TRAINING AND RESEARCH

OBJECTIVES

1. To increase faculty and student involvement in community service events and programs

KPI: Proportion of full time teaching and other staff actively engaged in community service activities.



2. To expand community services

KPI: Satisfaction of beneficiaries with the community services.

Actual 0



Target 4.5







OUTREACH, MARKETING AND PARTNERSHIPS

Goal 2

PROMOTE COLLEGE OF ENGINEERING NATIONALLY AND INTERNATIONALLY

OBJECTIVES

1. To enhance CE image nationally, regionally and internationally KPI: Number of participants in engineering conferences.





Target 20

2. To promote all CE programs

KPI: Number of national/international competitions participated by engineering college faculty and students.





Target 2

3. To enhance relationships and agreements with stakeholders







WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES







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Goal 1

EXPAND AND IMPROVE ENGINEERING COLLEGE INFRASTRUCTURE THROUGH EMPLOYING STATE OF THE ART TECHNOLOGIES

OBJECTIVES

1. To acquire technologies for expanding educational experiences KPI: Stakeholder evaluation of technology-based learning and teaching platforms out of 5 for e-learning services

Actual **3.67**

Target 4







ECONOMIC SUSTAINABILITY





SUPPORT LONG-TERM ECONOMIC GROWTH WHILE CONSERVING SOCIAL, ENVIRONMENTAL, AND CULTURAL ASPECTS OF THE COMMUNITY

OBJECTIVES

Goal 1

1. To promote income of CE programs through research grants, continuing education, endowments and donations.

KPI: Amount of annual income from research grants, continuing education, endowments and donations.











RESEARCH AND INITIATIVES





WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES

Goal 1

ESTABLISH ENGINEERING RESEARCH LABS WITH UP-TO-DATE EQUIPMENT

OBJECTIVES

1. To establish focused engineering research labs

KPI: Number of publications per lab per year

Actual 5



Target 15







WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES

Goal 2

BOOST QUALITY SCALES OF THE ENGINEERING RESEARCH

OBJECTIVES

1. To increase the quantity and enhance the quality of research

KPI: The total number of scopus and ISI publications per annum.



2. To encourage collaborative publications with distinguished national and international entities

KPI: Proportion of external national collaborative research publications



3. To support faculty research exchange visits, conference participation and research sabbatical leaves

KPI: Number of papers or reports presented at academic conferences by full time equivalent faculty members







WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES

Goal 3

UTILIZING RESEARCH REVENUES TO CONTRIBUTE TO THE FINANCIAL DEVELOPMENT OF PRINCE SULTAN UNIVERSITY

OBJECTIVES

1. To promote engineering undergraduates and postgraduate research activities

KPI: Number of joint researches with students (minimum one per year at the college level).

Actual 1

Target 2

2. To contribute to the Saudi Arabia Vision 2030 through PSU research activities

KPI: Proportion of research or consultation projects aligned with Vision 2030

Actual 1



Target 2