

CCIS STRATEGIC PLAN 01



2021-2023

DEAN'S MESSAGE



I am pleased to present first strategic plan for the College of Computer and Information Sciences, Prince Sultan University. Our plan strives to benefit all stakeholders of the college viz. Students, Faculties, Administration, and Alumni. With our revised Vision, Mission and Goals, College of Computer and Information Sciences, aims to play a leading role in computing education and research, in the present challenging and changing times. Our strategic plan is fully aligned with the PSU's strategic plan which is described under the acronym EMPOWER (2018-23) and will contribute towards achieving its goals.

With our skilled faculty and staff in diverse areas of computing, we aim to push forward and be leaders in computing education and research in emerging computing technologies. With our state-of-the-art facilities and technological resources we aim to adopt the best teaching practices. As Cyber Security, Automated Systems and Deep Learning are going be computing areas where demand for trained manpower is going to increase in the near future, I hope with our dedicated research labs in these areas and excellent staff, this plan will keep us on the track and at a pace of development that is required to meet the demands of trained manpower.

DR. MOHAMED ALKANHAL

Dean, College of Computer and Information Sciences



TABLE OF CONTENTS

Dean's Message	02
CCIS's Vision and Mission	05
Theme 1: Educational Excellence	07
Theme 2: Management, Government and Quality Assurance	15
Theme 3: Professional Development	19
Theme 4: Outreach, Marketing and Partnerships	23
Theme 5: Wide-ranging Technologies and Expanding Resources and Facilities	29
Theme 6: Economic Sustainability	33
Theme 7: Research and Initiatives	37



VISION

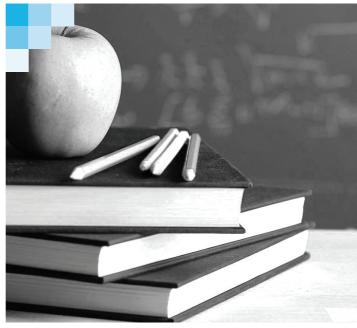
To be one of the most prominent schools in the region in the area of Computer and Information Sciences.

MISSION

The College of Computer and Information Sciences aims to offer internationally proven computing programs in an academic environment that promotes excellence and innovation in education, research and service to the community.







EDUCATIONAL EXCELLENCE

STRATEGIC THEME EDUCATIONAL EXCELLENCE

At PSU, educational excellence is the essence of creating innovative, cutting edge, interdisciplinary education that employs 21st Century skills and promotes values that carry our students forward to become the next generation of leaders. The goals of this theme place PSU at the forefront of advancing higher education in the Kingdom of Saudi Arabia and contributing to creating a knowledge-based economy.

Goals

- 1. Enhance the quality of faculty in the strategically important areas
- 2. Promote educational excellence
- 3. Develop a wider variety of learning strategies and tools for students
- 4. Expand student participation in extracurricular and co-curricular activities





Goal 1

ENHANCE THE QUALITY OF FACULTY IN STRATEGICALLY IMPORTANT ACADEMICS AREAS

OBJECTIVES:

1. Improve the ability to attract and hold on to the best faculty members in demanding majors.

KPI: Proportion of the faculty members with doctoral qualifications. *(Target: 80%)*

2. To enhance the multidisciplinary initiatives among CCIS stakeholders.

KPI: Number of courses offered by CCIS with multidisciplinary components.

(Target: 4)



PROMOTE EDUCATIONAL EXCELLENCE

OBJECTIVES:

1. Improving the strength of teaching and learning to improve the quality of offered programs

KPI: Students' evaluation of quality of learning experience in the courses (Target: Average Score for items 19, 20, 21 in Course Exit Surveys should be above 4 on 5 point scale and item 47 in the Program Exit Survey should be above 4 as well.)

2. Enhance students' experiential and life-long learning skills

KPI: Students evaluation of academic advising and career counseling and COOP evaluation

(Target: Average score on items related to the adequacy of academic and career counseling in the Program Exit Survey should be above 4 on 5 point scale.)

3. Broaden the curricula to keep CCIS at the cutting edge of teaching and learning

KPI: Number of curricula advancement initiatives in a program. (For example, new courses introduced, program minors, and any general curriculum updates in an academic year.)

(Target: The number of initiatives should be at least 3.)







Goal 3

DEVELOP A WIDER VARIETY OF LEARNING STRATEGIES AND TOOLS FOR STUDENTS

OBJECTIVES:

1. Utilize the most recent technology-based teaching strategies across the CCIS curricula.

KPI: Students satisfaction of recentness and usefulness of technology used for teaching and learning purposes.

(Target: Average evaluation of item 18 in Course Exit Survey related to resources usage and satisfaction should be above 3.5 on 5 point scale)

2. Provide all students with chances to engage in high-level activities such as study abroad, research, design projects, or internships.

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

(Target: More than 15% of CCIS students should participate)





Goal 4

EXPAND STUDENT PARTICIPATION IN EXTRACURRICULAR AND CO-CURRICULAR ACTIVITIES

OBJECTIVES:

1. Enhance student involvement in extracurricular activities

KPI: (1) The number of extracurricular activities offered to students by the college. (2) The proportion of students involved in extracurricular activities

(Target: (1) above 2 activities (2) 25% of the CCIS students)

2. Provide co-curricular student activities within the academic programs

KPI: Percentage of courses that have a co-curricular component (for example, certifications, industry visits, etc.)

(Target: Above 25% of the courses offer co-curricular activities)



2



MANAGEMENT, GOVERNANCE AND QUALITY ASSURANCE



MANAGEMENT, GOVERNANCE AND QUALITY ASSURANCE

Goodgovernance, decisive management and an effective quality assurance system are the pillars of PSU's vision to steer its move toward excellence. Through ongoing quality assurance, PSU will ensure full alignment with national and international quality standards and continuously improve the level of service to all stakeholders. At PSU, accreditation is the outcome of the established quality culture. Therefore, management and governance structures are set to uphold the best managerial practices, IT enablement, and informed decision making.

Goals

- 1. Sustain PSU alignment to national and international quality standards of higher education
- 2. Enhance quality culture and governance



MANAGEMENT, GOVERNANCE AND QUALITY ASSURANCE

Goal 1

SUSTAIN PSU ALIGNMENT TO NATIONAL AND INTERNATIONAL QUALITY STANDARDS OF HIGHER EDUCATION

OBJECTIVE:

1. Obtain ABET accreditation of all CCIS programs

KPI: The proportion of the accredited programs

(Target: 80% of the programs should be accredited)



MANAGEMENT, GOVERNANCE AND QUALITY ASSURANCE

Goal 2

ENHANCE QUALITY CULTURE AND GOVERNANCE

OBJECTIVE:

1. Obtain ABET accreditation of all CCIS programs

KPI: The proportion of the accredited programs

(Target: 80% of the programs should be accredited)

3



PROFESSIONAL DEVELOPMENT

STRATEGIC THEME PROFESSIONAL DEVELOPMENT

PSU will continue to provide a diverse variety of professional development and certification prortunities in line with the Kingdom of Saudi Arabia's vision to acquire and develop the highest-caliber national and International faculty.

Goal

1. Provide a variety of professional development opportunities for faculty and staff



PROFESSIONAL DEVELOPMENT

Goal 1

PROVIDE A VARIETY OF PROFESSIONAL DEVELOPMENT OPPORTUNITIES FOR FACULTY AND STAFF

OBJECTIVE:

1. Encourage CCIS faculty to have membership of professional societies and obtain credentials aligned with CCIS programs.

KPI: The proportion of faculty who are members of a professional society or have obtained credentials.

(Target: 85% of the faculty)

2. Enhance faculty members' skills to facilitate student success.

KPI: (1) The proportion of teaching staff who meet the minimum institutional requirements of 10 hours PD. (2) The number of PD events (for example, workshops, seminars, webinars etc.) with an external invited speaker.

(Target: (1) up to 85% of teaching staff (2) at least 5 events per academic year)







OUTREACH, MARKETING AND PARTNERSHIPS



We will develop the university's reputation and enhance its ranking internationally through high-quality relationships and agreements with stakeholders. Our students, staff and faculty will engage with our stakeholders to serve our community and society at large towards the fulfillment of the goals set out in Vision 2030.

Goals

- Develop and improve PSU community service and continuing education programs and initiatives
- 2. Promote PSU nationally and internationally
- Optimize PSU's role in national and international partnerships with key stakeholders





OUTREACH, MARKETING AND PARTNERSHIPS

Goal 1

DEVELOP AND IMPROVE PSU COMMUNITY SERVICE AND CONTINUING EDUCATION PROGRAMS AND INITIATIVES

OBJECTIVES:

1. Improve cooperation and exchange of knowledge with industry.

KPI: The number of community programs and initiatives offered (*Target: 2 programs/initiatives per year*)

2. Deliver specialized courses in contemporary IT related topics to members of the general community.

KPI: Satisfaction of beneficiaries with the community services.

(Target: Satisfaction rate 80%)





PROMOTE PSU NATIONALLY INTERNATIONALLY

OBJECTIVE:

1. Promote all CCIS programs

KPI: The number of marketing activities and events (for example, high school visits, social media and newspaper advertising, etc.) (*Target: at least 3 activities/events*)





OUTREACH, MARKETING AND PARTNERSHIPS

Goal 3

OPTIMIZE PSU'S ROLE IN NATIONAL AND INTERNATIONAL PARTNERSHIPS WITH THE KEY STAKEHOLDERS

OBJECTIVES:

1. Enhance relationships and agreements with stakeholders

KPI: (1) The number of active MOU agreements in the college. (2) The number of relationships developed with stakeholders in the community (for example, alumni and employer engagements)

Target: (1) at least 3 agreements (2) at least 3 relationships







WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES





WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES

PSU will provide the highest-quality institutional resources and facilities, which will lead to sustainable campus resources and a 21st century learning environment. Cutting-edge technology will cater to the needs of our 'online' generation of students.

Goal

1. Implement innovative and effective technologies to advance academic performance



WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES

Goal 1

IMPLEMENT INNOVATIVE AND EFFECTIVE TECHNOLOGIES TO ADVANCE ACADEMIC PERFORMANCE

OBJECTIVE:

1. Enhance the facilities and technology to facilitate student success.

KPI: Stakeholder evaluation of technology-based learning and teaching platforms obtained from Faculty Satisfaction Survey (average of questions 38-47 in the survey) and Program Exit Survey (average of questions 13-18 in the survey)

(Target: 3.75 on the 5 point scale)







ECONOMIC SUSTAINABILITY



Financial performance is the key measurement to understanding economic sustainability and contributes to strategic investment to optimize the achievement of PSU's mission.

Goal

1. Maintain and enhance overall financial strength





MAINTAIN AND ENHANCE OVERALL FINANCIAL STRENGTH

OBJECTIVE:

1. Strive to grow through increasing student numbers and income.

KPI: Percentage increase in the number of students enrolled in the college

(Target: 10% increase each year)







RESEARCH AND INITIATIVES





WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES

PSU will promote and advance societal research impact while building its reputation for ranking, research quantity, quality and innovation.

Goals

- 1. Establish an effective research infrastructure
- 2. Play a larger role in the advancement of research
- 3. Contribute to the socio-economic development of the Kingdom of Saudi Arabia through research and innovation





WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES

Goal 1

ESTABLISH AN EFFECTIVE RESEARCH INFRASTRUCTURE

OBJECTIVES:

1. Expand research facilities and resources.

KPI: Stakeholder (faculty and students) satisfaction rating for research facilities and resources obtained from Program Exit Survey (average of the questions related to research facilities in the survey) and Faculty Satisfaction Survey (average of questions 8-12 in the survey)

(Target: 4 on a 5 point scale.)



WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES

Goal 2

PLAY A LARGER ROLE IN THE ADVANCEMENT OF RESEARCH

OBJECTIVES:

1. Enhance the quality, quantity and impact of research.

KPI: (1) The percentage of publications per faculty member. (2) The citations rate in refereed journals per faculty member and measured by h-index. (3) The total number of Scopus and ISI publications per annum. (*Target:* (1) above 1 per year (2) above +1 (3) above 100 per year)

2. Strengthen research collaboration nationally and internationally

KPI: (1) The proportion of internal (either within the college or from another colleges) collaborative research publications. (2) The proportion of external national collaborative research publications. (3) The proportion of external international collaborative research publications.

(Target: (1) 30% (2) 25% (3) 30%)

3. Promote the involvement of undergraduate and postgraduate students in research

KPI: The proportion of research activities (for example, URF, conference proceedings, posters, journal articles, either by authoring or co-authoring) that involve students

(Target: 20% involve college students)





WIDE-RANGING TECHNOLOGIES AND EXPANDING RESOURCES AND FACILITIES

Goal 3

CONTRIBUTE TO THE SOCIO-ECONOMIC DEVELOPMENT OF THE KINGDOM OF SAUDI ARABIA THROUGH RESEARCH AND INNOVATION

OBJECTIVES:

1. To contribute to the Saudi Arabia Vision 2030 through CCIS research activities.

KPI: The proportion of research or consultation projects aligned with Vision 2030.

(Target: 15%)

2. Increase internal and external research funding in the college.

KPI: The proportion of research external funding to the total number of funded research during year.

(Target: 10%)

