

جامعة فهد بن سلطان  
FAHAD BIN SULTAN UNIVERSITY  
كلية الحاسب الآلي  
College of Computing



**Fahad Bin Sultan University**

**Strategic Operational Plan**

**College of Computing (CC)**

***2023-2028***

**Reported Progress**

**Up to 2023/2024 Academic Year**



## Introduction

The College of Computing (CC), the first to be established at FBSU in 2005, offers programs in the two major venues of informatics: Computer Science and Computer Engineering. The CC is structured around the two departments:

- The Computer Science Department offers the following programs:
  - A Bachelor of Computer Science with one track:
    - Computer Science in Cybersecurity
  - A Bachelor of Science in Information Technology with two tracks:
    - An Artificial Intelligence and Machine Learning track
    - A Data Science and Analytics track
  - A Master of Science in Computer Science
- The Computer Engineering Department offers the following programs:
  - A Bachelor of Sciences in Computer Engineering.
  - A Master of Science in Computer Engineering

Through its intensive undergraduate programs that emphasize the actual implementation of theories, real-world environments, and problems, the CC graduates experts in all walks of computing.

## Vision

To become a prominent computing college in the Tabuk region and the Kingdom offering undergraduate and graduate programs capable of equipping students with professional computing aptitudes, advanced research skills, and high ethics.

## Mission

The College of Computing at Fahad Bin Sultan University is committed to excellence in computing education, aligning with national and international standards. The college integrates advanced technology and diverse pedagogical methods to enhance scientific research and creative problem solving. The college aims to develop graduates proficient in computing and dedicated to community service and global betterment. The college strives to foster continuous learning and leadership in the students, preparing them to excel in a dynamic digital landscape.

The college focuses on efficiently utilizing and diversifying educational resources to contribute to the community through technology.

## Core Values

1. Reinforcement of national identity and cultural authenticity
2. The uncompromising pursuit of quality educational services to students in ways that cognitive skills, cultivate personality and help the development of character
3. Integrity and adherence to ethical behavior in all ways at all levels
4. Life-long learning and investment in self-renewal
5. Critical thinking and board exposure to major global currents
6. Community spirit and commitment to social service

## Themes

- |  |     |
|--|-----|
| 1. Theme 01 - <b>Enhancing Academic Excellence</b>             | 25% |
| 2. Theme 02 - <b>Promoting Quality Culture and Governance</b>  | 25% |
| 3. Theme 03 – <b>Strengthening Community Engagement</b>        | 20% |
| 4. Theme 04 - <b>Optimizing Resources and Facilities</b>       | 15% |
| 5. Theme 05 - <b>Building a Robust Research Infrastructure</b> | 15% |

#	Theme									
1	<b>Enhancing Academic Excellence</b>									
#	Goal									
1.1	Enhance the quality of faculty in strategically important academic areas									
#	Objective									
1.1.1	To improve the recruitment and retention of quality faculty members									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Enhance the forecasting and follow-up of recruitment needs across all programs	KPI-I-08	KPI-CC-08: Ratio of students to teaching staff	9.67	15	Forecasting tool	Forecast report	College chairs and deans	Fall 2023 – Fall 2028	-
2	Utilize more recruitment avenues to attract faculty	KPI-I-09	KPI-CC-09: Proportion of Faculty members with verified doctoral qualifications	4.08	5.33	Professional agency memberships & Head hunting	New recruitment initiatives	Chancellor and HR in collaboration with CC college	Fall 2024 – Fall 2028	-
3	Increase the recruitment of research-active faculty members across all disciplines	KPI-I-10	KPI-CC-10: Proportion of teaching staff leaving the college in the past year for reasons other than retirement	0	0	Job advertisements	Research action faculty	CC Dean and Department Chairs	Fall 2023 – Fall 2028	-

#	Objective									
1.1.2	To foster faculty development and professional growth.									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Expand internal and external faculty participation in professional development	SKPI-I-01	SKPI-CC-01: Proportion of teaching staff participating in professional development activities	0.5	4	Institutional support (Professional development budget)	Attendance reports	CC College and TLC	Fall 2024 – Spring 2028	None
2	Support faculty to obtain academic/industrial related certifications	SKPI-I-02	SKPI-CC-02: Proportion of faculty who join professional societies or obtain credentials	0.53	2	Institutional support (Professional development budget)	Professional Certification	CC Dean	Fall 2024 – Spring 2028	None
#	Goal									
1.2	Improve curriculum and teaching and learning process									
#	Objective									
1.2.1	To enhance the curriculum.									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Review and update the current curricula review process	SKPI-I-03	SKPI-CC-03: Proportion of programs that undergo	4.51	4.25	Program Specification, Budget for external	Updated curriculum review process	Curriculum review committees in collaboration	Fall 2023 – Spring 2028	-

			periodic curriculum review			reviewers		with chairs		
2	Introduce a variety of free electives	SKPI-I-03	SKPI-CC-03: Proportion of programs that undergo periodic curriculum review	4.51	4.25	Institutional support		Curriculum Review Committees, CC College Councils, and the UC	Fall 2023 – Spring 2028	-
3	Integrate research & projects into the curricula across all disciplines	SKPI-I-03	SKPI-CC-03: Proportion of programs that undergo periodic curriculum review	4.51	4.25	Institutional support	Revised curricula	Colleges & Curriculum review committees	Fall 2023 – Spring 2028	-
#	<b>Objective</b>									
1.2.2	To improve learning outcome assessment and review process.									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Review and update the current learning outcome review process	SKPI-I-04	SKPI-CC-04: Proportion of programs that complete their assessment cycle	2.32	4.25	Institutional support	Updated review process	CAAA in collaboration with CC	Fall 2023 – Fall 2024	-
2	Develop guidelines for assessing PLOs	SKPI-I-04	SKPI-CC-04: Proportion of programs that complete	2.32	4.25	Institutional support	Developed guidelines	CAAA in collaboration with CC	Fall 2024	-

#	Objective	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1.2.3	To utilize the most recent technology-based teaching strategies across the curricula.									
1	Expand blended learning across all disciplines	SKPI-I-05	SKPI-CC-05: Proportion of faculty/course s who actively utilize the e-Learning or other technology-based teaching strategies system	0.91	1	E-learning materials	Enhanced blended learning components	VCFAA in collaboration with CC college	Fall 2024 – Spring 2028	-
2	Establish high-tech lab with state-of-the-art equipment	SKPI-I-05	SKPI-CC-05: Proportion of faculty/course s who actively utilize the e-Learning or other technology-based teaching strategies system	0.91	1	Institutional support	Report on high-tech labs	CC dean and department chairs	Fall 2023 – Spring 2028	280,000

#	Goal									
1.3	Improve teaching and learning process									
#	Objective									
1.3.1	To enhance students' experiential and life-long learning skills.									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Improve COOP placement opportunities for students	KPI-I-03b	KPI-CC-03: Percent of students pursuing graduate studies	4.51	50%	Institutional support	Increased COOP opportunities	COOP office in collaboration with CC college	Spring 2024 – Spring 2028	-
2	Integrate research & projects into the curricula across all disciplines	KPI-I-02	KPI-CC-02: Students' evaluation of quality of learning experience in the programs	3.98	4.47	Institutional support	Revised curricula	CC College & Curriculum review committees	Fall 2023 – Spring 2028	-
#	Objective									
1.3.2	To enhance student involvement in extracurricular activities.									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Align student extracurricular activities with the college learning outcomes	SKPI-I-06	SKPI-CC-06: Proportion of students participating in extracurricular activities	4.23	2.3	ILOs, PLOs & CLOs	Aligned extracurricular activities	DSA and CC Dean	Fall 2023 – Spring 2028	-



			during the last year							
#	<b>Objective</b>									
1.3.3	To nurture and sustain a culture that supports and strengthens teaching and learning excellence.									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Review and update the academic advising and counseling policies	KPI-P-05	KPI-P-05: Students' performance in the professional and/or national examinations	28%	60%	Institutional support	Updated policies	DSA, PPC & UC	Fall 2024 – Spring 2024	-
2	Improve implementation of academic advising and counseling processes	KPI-I-02	KPI-CC-02: Students' evaluation of quality of learning experience	3.98	4.47	Institutional support	Improved process	DSA, CC Dean & Chairs	Fall 2024 – Spring 2028	-
3	Maintain optimal class sizes	KPI-I-05	KPI-CC-05: Satisfaction of beneficiaries with learning resources	4.1	4.47	Institutional support	Course appropriate class sizes	CC Dean & Chairs	Fall 2023 – Spring 2028	-
#	<b>Theme</b>									
2	<b>Promoting Quality Culture and Governance</b>									
#	<b>Goal</b>									
2.1	<b>Sustain CC alignment to national and international quality standards of higher education.</b>									
#	<b>Objective</b>									

2.1.1 To obtain international accreditation for eligible programs.										
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Assess all programs' eligibility for international accreditation	KPI-I-20	KPI-CC-20: Proportion of accredited programs	0	0	Consultant fee	Eligibility reports	CC College Deans and Chairs	Spring 2023 – Fall 2024	25,000
2	Apply for international accreditation for identified eligible programs	KPI-I-20	KPI-CC-20: Proportion of accredited programs	0	0	As per the requirements of the accreditation bodies	As per the requirements of the accreditation body	CC College Deans and Chairs	Fall 2024 - Fall 2025	25,000
3	Obtain NCAAA approval for the international accreditation body.	KPI-I-20	KPI-CC-20: Proportion of accredited programs	0	0	CC support	NCAAA approvals	CC Dean in collaboration with CS and CEN chairs	Fall 2024	-
4	Implement corrective actions to ensure the eligibility of programs	KPI-I-20	KPI-CC-20: Proportion of accredited programs	0	0	Expenditure on needed resources	As per the requirements of the accreditation body	CC College Deans and Chairs	Spring 2024 - Fall 2025	25,000
#	Objective									
2.1.2 To enhance national and international benchmarking processes.										
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Expand benchmarking activities with college partners on a regular basis	SKPI-I-10	SKPI-CC-10: Percentage of benchmarked programs	40%	60%	CC support	Benchmarking activity report	CC Dean in collaboration with CS and CEN chairs	2023 –2028	-

#	Goal									
2.2	Enhance quality culture and governance									
#	Objective									
2.2.1	To improve the implementation of CC Quality Management System (QMS).									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Assess the current QMS	KPI-I-07	KPI-CC-07: Students' satisfaction with the offered services	2.54	4.47	Institutional support	Gap analysis report	DQAA in cooperation with CC college and units	Fall 2024	-
#	Objective									
2.2.2	To foster the accessibility and usage of college key information to relevant stakeholders.									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Identify and define the key information and their end users	SKPI-I-12	SKPI-CC-12: Stakeholder satisfaction of information accessibility	3.93	4.39	CC support	CC key information booklet	CC Dean in collaboration with CS and CEN chairs	2023 –2028	-
#	Objective									
2.2.3	To improve CC's academic and administrative governance.									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Follow-up on NCAAA college review recommendations	KPI-I-01	KPI-CC-01: Percentage of achieved indicators of the CC strategic plan	62%	64%	Institutional support	Progress reports, Completion reports	DQAA in collaboration with all relevant units	Spring 2023 – Spring 2024	-

#	Goal	objectives								
2.3	<b>Provide a variety of professional development opportunities for faculty and staff</b>									
#	<b>Objective</b>									
2.3.1	To promote professional growth of administrative staff.									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Expand internal and external participation in professional development	SKPI-I-15-b	SKPI-CC-15-b: Proportion of administrative staff participating in professional development activities during the past year	0.5	1	CC support & Budget	Attendance reports	CC Dean in collaboration with CS and CEN chairs	2023 –2028	75,000
#	<b>Theme</b>									
3	<b>Strengthening Community Engagement</b>									
#	<b>Goal</b>									
3.1	<b>Develop and improve FBSU’s community service and education programs and initiatives</b>									
#	<b>Objective</b>									
3.1.1	To increase faculty and student involvement in community service events and programs									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
2	Enhance communication and increase collaboration	SKPI-I-17	KPI-CC-05: Satisfaction of beneficiaries with learning		70%	Institutional support	Mechanism and collaboration report	CCSCS, CC Dean & PO	Fall 2024 – Spring 2028	-

	with regional institutions		resources							
3	Enhance communication and increase collaboration with the private sector	SKPI-I-17	KPI-CC-05: Satisfaction of beneficiaries with learning resources		70%	Institutional support	Mechanism and collaboration report	CCSCS, CC Dean & PO	Fall 2024 – Spring 2028	-
4	Enhance communication with alumni	SKPI-I-17	KPI-CC-05: Satisfaction of beneficiaries with learning resources		70%	Institutional support	Enhanced communication	DSA & CC Dean	Fall 2023 – Spring 2028	-
5	Enhance communication and increase collaboration with the employers	SKPI-I-17	KPI-CC-05: Satisfaction of beneficiaries with learning resources		70%	Institutional support	Enhanced communication	DSA & CC Dean	Spring 2023 – Spring 2028	-
#	<b>Theme</b>									
4	<b>Optimizing Resources and Facilities</b>									
#	<b>Goal</b>									
4.1	<b>Provide high quality college resources and facilities</b>									
#	<b>Objective</b>									
4.1.1	To continue the improvement of the campus for college development									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Expand academic and research facilities	KPI-I-12	KPI-CC-12: Satisfaction of beneficiaries with technical	3.98	4.36	Allocated budget and materials	Completed facilities	CC Dean in collaboration with the Facility Unit	Spring 2023 – Spring 2028	280,000

			services							
#	<b>Goal</b>									
4.2	<b>Transform IT infrastructure and application services</b>									
#	<b>Objective</b>									
4.2.1	To improve and maintain the university website									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Maintain the FBSU website content on a regular basis	SKPI-I-26	SKPI-CC-26: Stakeholders satisfaction of CC's portal	4.23	4.55	Institutional support and I.T. support	Updated website	CC QA Committee in collaboration with PR & ITC	Spring 2023 – Spring 2029	-
#	<b>Goal</b>									
4.3	<b>Deliver quality library services to stakeholders</b>									
#	<b>Objective</b>									
4.3.1	To expand the library collections and technologies									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Review and update library policies and regulations (including copyright)	SKPI-I-28-a	SKPI-CC-28-a: Number of publications as a proportion of the number of programs offered	2.65	3.96	Institutional support	Library Policies	Central Library and UC in collaboration with CC college	Fall 2024 - Spring 2024	-
#	<b>Goal</b>									
4.4	<b>Maintain and enhance overall financial strength</b>									
#	<b>Objective</b>									

4.4.1	To diversify revenue sources to decrease reliance on tuition fees									
#	Initiatives	FBSUKPI #	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Deliver bespoke training, consultation, and executive education for organizations in the public and private sectors	KPI-I-11	KPI-CC-11: Percentage of self-income of the college	6%	10%	Institutional support	Training and consultation income per annum	CC Dean, AC	Fall 2023 – Spring 2028	-
#	Theme									
5	Building a Robust Research Infrastructure									
#	Goal									
5.1	Establish an effective research infrastructure									
#	Objective									
5.1.1	To expand research facilities and resources									
#	Initiatives	FBSUKPI	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Conduct assessment of needs for research facilities and resources	KPI-I-17	KPI-CC-17: Proportion of the research budget	0.2838	0.355	Feedback from stakeholders	Assessment report	CC Dean in collaboration with DGSR & AC	2023 –2028	-
#	Objective									
5.1.2	To promote the involvement of undergraduate and postgraduate students in research									
#	Initiatives	FBSUKPI	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Support student participation in	KPI-PG-12	KPI-PG-12: Percentage of	5%	10%	Institutional support and	Supported student	CC Dean, Chairs and	Spring 2024 – Spring	-

	research activities		graduate students' publication			Budget	research activities	DGSR	2028	
#	<b>Goal</b>									
5.2	<b>Play a larger role in the advancement of research and innovation</b>									
#	<b>Objective</b>									
5.2.1	To enhance the quality, quantity and impact of research									
#	Initiatives	FBSUKPI	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Review and update research policies and bylaws	KPI-I-13	KPI-CC-13: Percentage of publications of faculty members	66%	78%	Current policies	Updated research policies	DGSR, AC and UC	Spring 2023 – Spring 2028	-
2	Support participation in high-level conferences	KPI-I-14	KPI-CC-14: Rate of published research per faculty member	1.2	1.75	Budget	Increased conference attendance	CC Dean and Chairs	Spring 2023 – Spring 2028	- 5000
3	Expand external collaboration in research projects, groups, and labs with respect to national and international MOUs	KPI-I-15	KPI-CC-15: Citations rate in refereed journals per faculty member	25.58	31.33	Budget	Increased non-CC FBSU collaboration in research	CC Dean and Chairs	Spring 2023 – Spring 2028	-
#	<b>Objective</b>									
5.2.2	To provide an environment conducive to innovation									



#	Initiatives	FBSUKPI	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Provide state-of-the-art innovation labs and facilities	KPI-I-16	KPI-CC-16: Number of patents, innovations, and awards of excellence	2	3	Institutional support	Established innovation labs	CC College, DGSR & AC	Spring 2023 – Spring 2028	280,000
#	<b>Goal</b>									
5.3	<b>Contribute to the socioeconomic development of the Kingdom of Saudi Arabia through research and Innovation</b>									
#	<b>Objective</b>									
5.3.1	To contribute to the Saudi Arabia Vision 2030 through CC research activities									
#	Initiatives	FBSUKPI	CCKPI	Actual	Target	Required Resources	Deliverables	Responsible	Time Frame	Estimate (SR)
1	Identify key research areas/themes in line with Vision 2030	SKPI-I-36	SKPI-CC-36: Proportion of research or consultation projects aligned with Vision 2030	2.65	0.33	Institutional support	Research themes, CC Research Strategic Plan, Colleges Strategic Plans	CC College, DGSR & AC	Spring 2023 – Fall 2024	-
2	Advance specialized research groups/labs to address relevant social needs	SKPI-I-36	SKPI-CC-36: Proportion of research or consultation projects aligned with Vision 2030	2.65	0.33	Institutional support and Budget	Research groups/labs	CC College and DGSR	Fall 2024 – Spring 2028	280,000