



جامعة الفيصل
Alfaisal University

Approvals

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Strategic Plan 2020-2025

College of Science & General Studies

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Contents

| | |
|--|----|
| Highlights | v |
| 1. College of Science & General Studies: The setting | 1 |
| 1.1 Historical Context | 1 |
| 1.2. Alfaisal University & the College of Science & General Studies | 1 |
| 1.3 Strategy Planning Framework..... | 2 |
| 1.4 Vision | 2 |
| 1.5 Mission..... | 2 |
| 1.6 Themes..... | 3 |
| 2. SWOT Analysis for College of Science & General Studies, 2020-2025..... | 4 |
| 2.1 Conclusions based on SWOT Analysis | 7 |
| 3. Long Term Strategic Goals of the College of Science and General Studies | 8 |
| 3.1 Establishing Goals | 8 |
| 3.2 Moving from Themes & Strategic Goals to Strategic Objectives..... | 8 |
| 4. Establishing Strategic Actions & Key Performance Indicators for Period 2020-2025..... | 10 |
| 5. Timeline for the Implementation of Strategic Actions | 15 |
| 6. Nature of the Future of the College of Science & General Studies, 2020-2025 | 22 |
| 6.1. Projected Student Numbers, 2020-2025 | 22 |
| 6.2. Teaching Staff Projections, 2020-2025 | 23 |
| 6.3. Teaching & Administrative Support Staff Projections, 2020-2025 | 24 |
| 6.4. Anticipated Possible Future Initiatives | 24 |
| 6.4.1. New Academic Programs | 24 |

Figures

| | | |
|---|---|---|
| 1 | Schematic Diagram of Strategic Planning Framework for COSGS | 3 |
| 2 | Four Themes of the Strategic Plan | 3 |
| 3 | Schematic description of SWOT analysis | 4 |

Tables

| | | |
|----|--|----|
| 1 | List of identified Strengths, Weaknesses, Opportunities, & Threats for the college | 5 |
| 2 | Schematic Diagram to Represent SWOT 2020-2025 for COSGS | 6 |
| 3 | Themes and Long-Term Strategic Goals | 8 |
| 4 | Strategic Objectives aligned with corresponding Long Term Strategic Goals & Themes | 9 |
| 5 | List of Goals, Strategic Objectives, Strategic Actions and KPIs for Theme 1 | 10 |
| 6 | List of Goals, Strategic Objectives, Strategic Actions and KPIs for Theme 2 | 11 |
| 7 | List of Goals, Strategic Objectives, Strategic Actions and KPIs for Theme 3 | 13 |
| 8 | List of Goals, Strategic Objectives, Strategic Actions and KPIs for Theme 4 | 14 |
| 9 | Implementation schedule of Strategic Actions and KPIs 2020-2025 | 15 |
| 10 | Projected Undergraduates Student Numbers, 2020-2025 | 22 |
| 11 | Projected Graduate Student Numbers, 2020-2025 | 22 |
| 12 | Projected University Preparatory Program (UPP) Student Numbers, 2020-2025 | 22 |
| 13 | Student Projections for both Undergraduate (UG) & Graduate (G), 2020-2025 | 23 |
| 14 | Projected Overall Student Numbers (UG, G, & UPP), 2020-2025 | 23 |
| 15 | Teaching Staff Projections, 2020-2025 | 23 |
| 16 | Student to Teaching Staff Ratios, 2020-2025 | 23 |
| 17 | Projected Numbers of Teaching Support Staff & Administrative Support Staff | 24 |

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Highlights

- The *2020-2025 Strategic Plan* updates the previous five-year College Strategic Plan of 2013-2018, and establishes the trajectory of the College of Science & General Studies for the next five years.
- 2018 marked the 10th anniversary of both the University and the College of Science & General Studies, and the many accomplishments achieved in these years. In the case of the College, this includes Life Sciences having achieved top-tier rankings at the national, regional, and international level. Alfaisal has also been fully-accredited by the NCAAA, receiving the institutional maximum accreditation of seven years.
- The College of Science and General Studies is predominantly a service college providing instruction in the areas of science, humanities, and social sciences for all colleges within Alfaisal University. The College offers this service at three distinct, yet complementary levels: preparatory year and undergraduate & graduate levels.
- The Strategic Plan anticipates that the College needs to expand its offerings of stand-alone and joint-degree programs both at the graduate and undergraduate levels
- Recognized as a small institution, with a total enrollment around 3,000, making it difficult to recruit students. The College of Science & General Studies faces the challenge of making its programs more relevant to alleviate recruiting issues.
- The Strategic Plan uses innovative methods to identify challenges, to capitalize on opportunities, to adopt effective planning tools, to mobilize stakeholders, to provide a roadmap for implementation, and to evaluate performances.
- The Strategic Plan features four strategic themes, seven college goals, 13 strategic objectives, 22 strategic actions, and 33 key performance indicators (KPIs).

1. College of Science & General Studies: The setting

1.1 Historical Context

The King Faisal Foundation (KFF) which was established in 1976 by the heirs of the late King Faisal launched Alfaisal University as the premier coeducational institution for business, engineering, science, and medical education and research in the Kingdom and the region. The deeply held principle of KFF was that a well-educated population was the foundation for a strong nation. The Foundation has always promoted a pragmatic approach to furthering the opportunities for Saudi youth. The creation of a university that strives to achieve excellence in several fields is yet another important advance towards fulfilling its desire to enrich the country's enterprising individuals with the ability to compete on a global level. Financial support provided by the King Faisal Foundation has also produced the King Faisal School, Prince Sultan College for Tourism and Business, and Effat College (for women).

1.2. Alfaisal University & the College of Science & General Studies

Alfaisal was established with the aim of being a private not-for-profit world-class university that offers its students the latest knowledge in a state-of-the-art environment. Alfaisal espouses all the noble virtues that form the bedrock of the Foundation's educational activities: to promote learning, research, and the implementation of technology in a manner that promotes the Kingdom's employment and career objectives for its citizens. Education at Alfaisal is international in approach with instruction in the English language. The programs are student-centered, utilize problem-based learning and foster team-based skills. Alfaisal will enable its graduates to gain internationally recognized qualifications through an exclusive education imparted to them from within the Kingdom itself.

Plans for establishing Alfaisal University began in 1999. The first "Concept Paper" regarding the University was prepared in late 2000 with the support of the Carlyle Group. It was submitted to the Economic Offset Committee in February 2001 to qualify the University under the Economic Offset Program. Approval was received in July 2001. Four non-Saudi multinational companies agreed to become co-founders along with six Saudi organizations. In April 2003 the Offset Committee granted a multiple of eight offset credits to the non-Saudi co-founders for cash contributions. The Board of Trustees negotiated with the Ministry of Higher Education to secure an acceptable Charter that assured the independence of the University. The Charter (#10905) was approved by the Ministry on 10 July 2004 and unanimously ratified by the Board of Trustees on 25 October 2004.

The campus is situated on the beautiful grounds of the late King Faisal's Palace at Al Maathur in the center of Riyadh, a historical location ideal for academic pursuits. The first two campus buildings (Science and Business) were completed in 2008 and 2009, respectively. Students began University studies in Engineering, Business, and Medicine in October, 2008 with majors in the College of Science and General Studies beginning in September 2011. An MBA was initiated in 2010 and other graduate degrees in Engineering and Medicine were launched in 2012. The first females were admitted in September 2011. Today, the colleges of business, engineering, science, and medicine offer graduate programs within their respective colleges.

The College of Science and General Studies is predominantly a service college providing instruction in the areas of science, humanities, and social sciences for all colleges within Alfaisal University. The College offers this service at three distinct, yet complementary levels: preparatory year and undergraduate & graduate levels. The College offers an undergraduate program in Life Science & a graduate program in Nanoscience & Nanotechnology. Furthermore, a University Preparatory Program (UPP) which started as a separate entity ten years ago is now part of the University and is situated in the College of Science and General Studies.

1.3 Strategy Planning Framework

This document covers the next five-year term from 2020 to 2025. It is comprised of a number of major components.

Section 1 contains a brief history of the University and the College. The College Vision, Mission, and Core Values are presented in the same form as proposed by the University Strategic Plan as well as the Founders of the University. These basic tenets are as important today for the development of the University as they were when Alfaisal was first planned.

Section 2 is a pivotal point in the Strategic Plan as the focus moves from the past to the future. In this part of the Plan, a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis was done based on present conditions and current input.

Section 3 contains the long-term goals upon which the College will focus for 2020-2025. Based on the aforementioned SWOT analysis, 10 strategic objectives are listed under the six goals that were derived from the four themes as identified in the mission statement of the College.

Section 4 defines the College's trajectory for 2020 to 2025. This was derived by defining the necessary strategic actions that will lead to the achievement of the objectives. The actions themselves are to be assessed using a set of key performance indicators that are based on information collected at established intervals by the respective departments within the University.

Section 5 outlines the timetable for implementing the needed actions. Departments were consulted for their respective input in framing the future of the College of Science & General Studies.

Section 6 describes the nature of the future of the College of Science & General Studies including projected student numbers and teaching staff as well as possible future programs and tracks. The framework is summarized in Figure 1.

1.4 Vision

A student-centered college distinguished for its world-class education, research, and outreach services.

1.5 Mission

To create and disseminate knowledge by offering world-class academic programs, cutting-edge research, and outreach activities that serve national development and benefit humanity.

1.6 Themes

For the purpose of identifying key elements in the mission to be used as a reference in this strategic planning exercise, four strategic themes have been derived and are shown in the Figure 2.

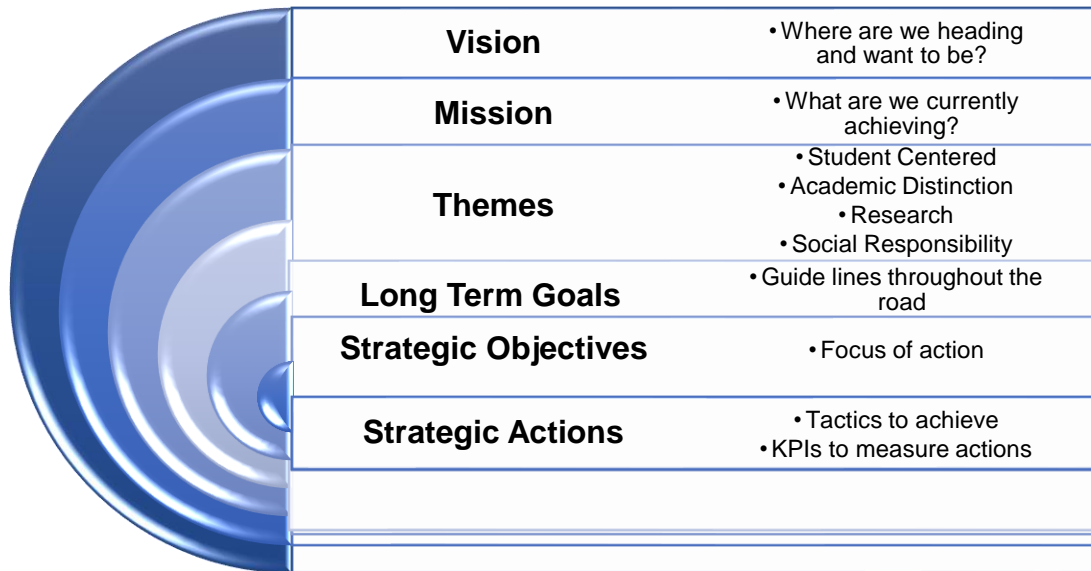


Figure 1. Schematic Diagram of Strategic Planning Framework for COSGS

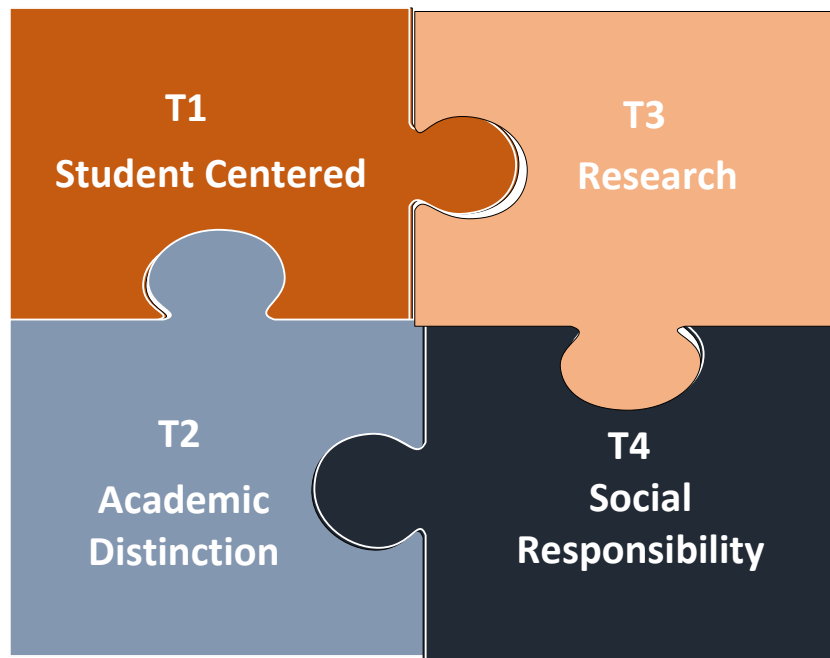


Figure 2: Four Themes of the Strategic Plan

2. SWOT Analysis for College of Science & General Studies, 2020-2025

The College of Science & General Studies was assessed in terms of its development as of 2019-2020 in relation to the University's accomplishments. This analysis was necessary to adjust the College's direction based on its achievements over the past 10 years. These include achieving high rankings at the national, regional and international levels.

The place to begin was to build a SWOT diagram in terms of current circumstances. As noted in the University Strategic Plan 2020-2025, given the 10 years of institutional experience, this exercise should be substantially more accurate than that which was done by the previous two plans. SWOT stands for 'Strengths, Weaknesses, Opportunities and Threats'. This is a method of analysis of the environment and the university's standing in it which can be classified into external and internal factors as shown Figure 3. The College and the University comprise the scope of what is internal, while elements beyond the University are considered external to the College's scope.

Strengths and opportunities are helpful factors, while weaknesses and threats are harmful factors. In the case of strengths and weaknesses, the college must build and enhance the strengths on the one hand while trying to resolve and reduce the weaknesses on the other hand. For opportunities and threats, even though they are called external but the college must work towards exploiting and expanding opportunities while trying to avoid threats (Tables 1 & 2).

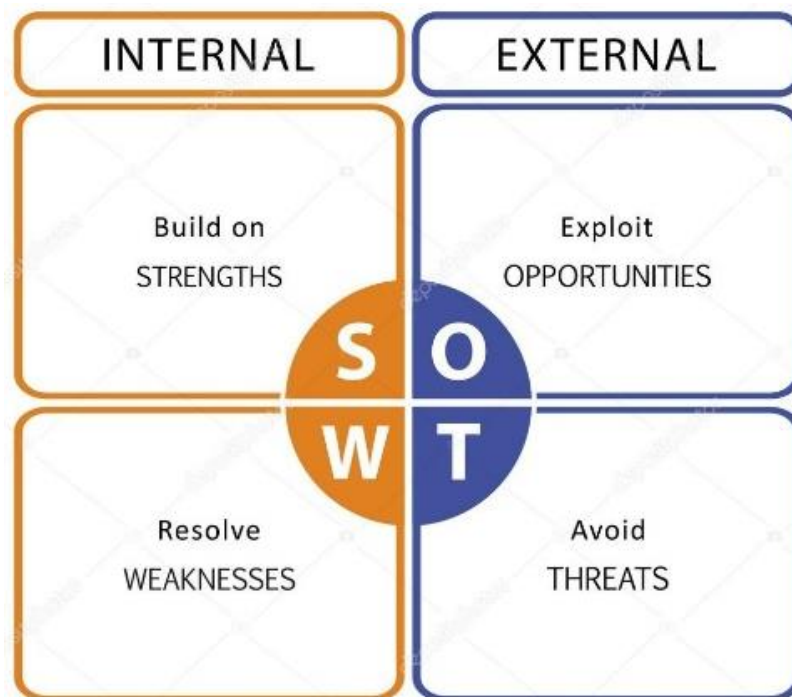


Figure 3 Schematic description of SWOT analysis

Table 1. List of identified Strengths, Weaknesses, Opportunities, and Threats for the college.

Strengths

1. Diverse, highly qualified faculty
2. Strong national, regional, and international recognition
3. Multi-disciplinary basic and applied research
4. Supportive, collegial work environment
5. Healthy learning environment
6. Quality instruction of service and elective courses

Weaknesses

1. Overfilled classes
2. Inadequate outside-classroom support
3. Limited undergraduate degree programs
4. Lack of publicity for the college's accomplishments
5. Lack of follow-up on major initiatives (Fulbright for instance)
6. Weak *intra-* and *inter-*college communication and absence of social gatherings
7. Inefficient and time-consuming scheduling each semester
8. Office issues for female faculty
9. Scarcity of lab space especially for research
10. Inequitable teaching loads, summer compensation compared with other colleges
11. Lack of financial support for conferences and professional development
12. Stagnant salaries and salary compression, coupled with higher teaching loads and increased inflation
13. Equity issues in compensation both within the college and compared with other colleges
14. duplicate of some course offerings in other colleges
15. lack of scholarships for students
16. ambiguity in certain areas such as titles and promotion schemes for instructors and staff (for example lecturer, senior lecturer versus instructor)

Opportunities

1. Utilize faculty expertise in establishing theme-oriented research centers (such as materials research center)
2. Utilize faculty expertise to deliver income producing workshops and training programs
3. Utilize faculty networking to establish lasting relationships with external entities to create opportunities for students and faculty
4. Create new degree programs
5. Work with external relations to create endowment for the College
6. Support commercial applications of Alfaisal patents
7. Increased summer offerings as student population grows

Threats

1. Uneasiness about dependent fees and taxes making long-term retention and recruiting of qualified faculty more difficult
 2. Recruiting and retaining western-educated faculty, especially women, is increasingly difficult in the region
 3. Difficulties with visa processing coupled with restrictions on hiring internationals
-

Table 2. Schematic Diagram to Represent SWOT 2020-2025 for COSGS

| | Strengths Helpful: Build & Enhance | Weaknesses Harmful: Resolve & Reduce |
|----------|---|--|
| Internal | <ol style="list-style-type: none"> 1. Diverse, highly qualified faculty 2. Strong national, regional, and international recognition 3. Multi-disciplinary basic and applied research 4. Supportive, collegial work environment 5. Healthy learning environment 6. Quality instruction of service and elective courses | <ol style="list-style-type: none"> 1. Overfilled classes 2. Inadequate outside-classroom support 3. Limited undergraduate degree programs 4. Lack of publicity for the college’s accomplishments 5. Lack of follow-up on major initiatives (Fulbright for instance) 6. Weak intra- and inter-college communication and absence of social gatherings 7. Inefficient and time-consuming scheduling each semester 8. Office issues for female faculty 9. Scarcity of lab space especially for research 10. Inequitable teaching loads, summer compensation compared with other colleges 11. Lack of financial support for conferences and professional development 12. Stagnant salaries and salary compression, coupled with higher teaching loads and increased inflation 13. Equity issues in compensation both within the college and compared with other colleges 14. duplicate of some course offerings in other colleges 15. lack of scholarships for students 16. ambiguity in certain areas such as titles and promotion schemes for instructors and staff (for example lecturer, senior lecturer versus instructor) |
| | Opportunities Helpful: Exploit & Expand | Threats Harmful: Avoid |
| External | <ol style="list-style-type: none"> 1. Utilize faculty expertise in establishing theme-oriented research centers (such as materials research center) 2. Utilize faculty expertise to deliver income producing workshops and training programs 3. Utilize faculty networking to establish lasting relationships with external entities to create opportunities for students and faculty 4. Create new degree programs 5. Work with external relations to create endowment for the College 6. Support commercial applications of Alfaisal patents 7. Increased summer offerings as student population grows | <ol style="list-style-type: none"> 1. Uneasiness about dependent fees and taxes making long-term retention and recruiting of qualified faculty more difficult 2. Recruiting and retaining western-educated faculty, especially women, is increasingly difficult in the region 3. Difficulties with visa processing coupled with restrictions on hiring internationals |

2.1 Conclusions based on SWOT Analysis

1. Create a university data center to enable data-driven strategies and decisions, and facilitate the accessibility and scope of data
2. Develop joint undergraduate and graduate programs with other colleges and with international institutions
3. Build a center of Excellence for Teaching and Research to synergize teaching and learning within the College.
4. Enhance community services thru a public relations committee to deliver high interest functions highlighting students' achievements, faculty research and opportunities available in the college
5. Reduce class size, especially in writing-intensive courses, necessary for superior instruction essential to the College's mission.
6. Introduce new graduate programs (based on market analysis), such as an M.A. in TESOL (Teaching English to Speakers of Other Languages)
7. Create and offer specialized, non-credit courses in languages (such as French, German, and Spanish) for the greater community
8. Recruit for, support, continuously enhance, and review the LSP curriculum
9. Strengthen efforts in prompting scholarly output, providing weekly seminars, encouraging consulting services
10. Build more research lab space
11. Resume merit-based salary increases to reward and encourage excellence to support the university's mission
12. Provide stronger tutoring and mentoring support services
13. Ensuring continuity and stability of the college's and UPP leadership

3. Long Term Strategic Goals of the College of Science and General Studies

3.1 Establishing Goals

Six long-term goals, denoted by Goals 1 to 6, were aligned with the four strategic themes derived from the mission statement (Table 3).

Table 3. Themes and Long-Term Strategic Goals

| |
|--|
| Theme 1: Student Centered |
| Goal 1: Increase recruitment & retention of academically gifted students |
| Theme 2: Academic Distinction |
| Goal 2: Attract & retain outstanding faculty by providing a supportive working environment & competitive career development opportunities |
| Goal 3: Enhance academic excellence in the College by strengthening & expanding degree programs. |
| Goal 4: Ensure institutional continuity, effective communication, & transparent governance of the College |
| Theme 3: Research |
| Goal 5: Intensify commitment to innovative research |
| Theme 4: Social Responsibility |
| Goal 6: Strengthen outreach & service activities locally, regionally & internationally. |

3.2 Moving from Themes & Strategic Goals to Strategic Objectives

Thirteen strategic objectives of the College of Science & General Studies, denoted by O-1 to O-13, were extracted and aligned with the corresponding six long-term goals of the College (Table 4).

Table 4. Strategic Objectives aligned with corresponding Long Term Strategic Goals & Themes

| Theme 1: Student Centered | |
|--|---|
| Goals | Strategic Objectives |
| Goal 1: Increase recruitment & retention of academically gifted students | O-1. Provide stronger tutoring & mentoring support services O-2. Develop joint undergraduate & graduate programs with other colleges & with international institutions |
| Theme 2: Academic Distinction | |
| Goals | Strategic Objectives |
| Goal 2: Attract & retain outstanding faculty by providing a supportive working environment & competitive career development opportunities Goal 3: Enhance academic excellence in the College by strengthening & expanding degree programs. Goal 4: Ensure institutional continuity, effective communication, & transparent governance of the College | O-3. Build a center of Excellence for Teaching & Research to synergize teaching & learning within College. O-4. Resume merit-based salary increases to reward & encourage excellence O-5. Introduce new graduate programs (based on market analysis), such as an M.A. in TESOL (Teaching English to Speakers of Other Languages) O-6. Reduce class size, especially in writing-intensive courses, necessary for superior instruction essential to College mission O-7. Recruit for, support, continuously enhance, & review LSP curriculum O-8. Create university data center to enable data-driven strategies & decisions, & facilitate accessibility & scope of data O-9. Ensuring continuity & stability of college & UPP leadership |
| Theme 3: Research | |
| Goals | Strategic Objectives |
| Goal 5: Intensify commitment to innovative research | O-10. Strengthen efforts in prompting scholarly output, providing weekly seminars, encouraging consulting services O-11. Build more research lab space |
| Theme 4: Social Responsibility | |
| Goals | Strategic Objectives |
| Goal 6: Strengthen outreach & service activities locally, regionally & internationally. | O-12. Enhance community services thru public relations committee to deliver high interest functions highlighting students' achievements, faculty research & opportunities available in college O-13. Augment participation of women in science & humanities |

4. Establishing Strategic Actions & Key Performance Indicators for Period 2020-2025

The following provides lists of recommended strategic actions & key performance indicators (KPIs) to be carried out during the life time of the strategic plan. Strategic actions & KPIs are aligned with their corresponding themes, goals and strategic objectives (Tables 5-8).

Table 5: List of Goals, Strategic Objectives, Strategic Actions and KPIs for Theme 1

| Theme 1: Student Centered | | | |
|---|---|---|--|
| College Goals: | | | |
| Goal 1: Increase recruitment & retention of academically gifted students | | | |
| Strategic Objectives | Strategic Actions | Key Performance Indicators (KPIs) | Initial Target (Details Ref. Table 9) |
| O-1. Provide stronger tutoring & mentoring support services | A-1. Revise and improve current advising and counselling services. | KPI-1. Student-to-advisor ratio. KPI-2. Student evaluation of academic and career counselling. | 1:23 ≥ 3.95 |
| | A-2. Automate advising and counselling procedure. | KPI-3. Percentage of students entering programs who successfully complete first year. KPI-4. Proportion of students entering undergraduate programs who complete those programs in minimum time. | ≥ 91 % ≥ 80 % |
| O-2. Develop joint undergraduate & graduate programs with other colleges & with international institutions | A-3. Develop new program tracks based on the national and international job market as well as research needs | KPI-5. Number of new programs developed (during strategic period). | ≥ 2 |

Table 6: List of Goals, Strategic Objectives, Strategic Actions and KPIs for Theme 2

| Theme 2: Academic Distinction | | | |
|---|--|---|--|
| College Goals: | | | |
| <p>Goal 2: Attract & retain outstanding faculty by providing a supportive working environment & competitive career development opportunities.</p> <p>Goal 3: Enhance academic excellence in the College by strengthening & expanding degree programs.</p> <p>Goal 4: Ensure institutional continuity, effective communication, & transparent governance of the College</p> | | | |
| Strategic Objectives | Strategic Actions | Key Performance Indicators (KPIs) | Initial Target (Details Ref. Table 9) |
| O-3. Encourage establishment of teaching & research centres in strategic fields. | A-4. Encourage productive mutually beneficial research collaboration with incentives for faculty and students | KPI-6. Total value of research grants awarded annually to faculty & students (SR) | ≥ 50 K |
| O-4. Recommence merit-based salary increases to reward & encourage excellence | A-5. Propose thru College Council to University Administration merit-based salary increases | KPI-7. Value of merit-based salary increase (%) | ≥ 0% |
| O-5. Introduce new graduate programs, such as an M.A. in TESOL (Teaching English to Speakers of Other Languages) | A-6. Propose new graduate programs | KPI-8. Number of new graduate programs/tracks | ≥ 1 |
| O-6. Reduce class size (especially in writing-intensive courses) | A-7. Monitor students' performance and graduation rate | KPI-9. Students' performance in national and international exams & competitions. KPI-10. Graduation rates of students. | Top 10% ≥ 75% |

| | | | |
|---|---|--|-------------------------|
| necessary for superior instruction essential to College mission | A-8. Attract, develop and retain more qualified faculty and staff members | KPI-11. Number of faculty recruited in relation to the total number of applications received/position. KPI-12. Number of professional development programs available for employees (teaching staff and supporting staff). | ≥ (1:50) ≥ 1 |
| | A-9. Monitor faculty and staff members' performance | KPI-13. Improvement in faculty members' performance (Course and instructor evaluations by students; overall average satisfaction must be with evaluation score >= 3.75 on a scale of (1 to 5)) KPI-14. .Number of papers and citations per year/faculty member a) Paper/faculty member b) Citation/faculty member | ≥ 3.75 ≥ 1 ≥ 20 |
| | A-10. Enhance Library offerings and services | KPI-15. Number of periodicals & database subscriptions in science & humanities | ≥ 50 K |
| O-7. Recruit for, support, continuously enhance, & review curriculum | A-11. Enhance and monitor UPP programs | KPI-16. Proportion of students entering UPP who successfully complete that program within the specified time | ≥ 80% |
| | A-12. Comply with the requirements of national and international accreditation entities. | KPI-17. College progress towards national & international accreditation | ≥ 50% |
| O-8. Encourage creation of university data centre to enable data-driven strategies & decisions | A-13. Enhance infrastructure and services | KPI-18. Students overall evaluation of the quality of their learning experiences at program level; average satisfaction must be with evaluation score >= 3 on a scale of (1 to 5). KPI-19. Number of students enrolled in science-related programs | ≥ 3.0 ≥ 90 |
| O-9. Ensuring continuity & stability of college & UPP leadership | A-14. Reduce turnover rate of staff | KPI-20. Annual turnover rate for: a) Amin. Staff b) Teaching staff c) Teaching support staff | ≤ 10% ≤ 15% ≤ 20% |

Table 7: List of Goals, Strategic Objectives, Strategic Actions and KPIs for Theme 3

| Theme 3: Research | | | |
|--|---|---|--|
| College Goals: | | | |
| Goal 5: Intensify commitment to innovative research | | | |
| Strategic Objectives | Strategic Actions | Key Performance Indicators (KPIs) | Initial Target (Details Ref. Table 9) |
| O-10. Strengthen efforts in boosting scholarly output, providing weekly seminars, encouraging consulting services | A-15. Increase effort to recruit and retain research active faculty | KPI-21. Number of publication per faculty per year KPI-22. Number of citations KPI-23. Annual turnover rate of faculty members | ≥ 1.0 ≥ 20 ≤ 10% |
| | A-16. Encourage faculty to apply for seed funding to spur research in multidisciplinary emerging areas | KPI-24. Total amount of funds spent on research in college (million SAR) | ≥ 3 |
| | A-17. Increase efforts to develop industry partnerships and attract funding sources | KPI-25. Number of publications with external collaborators | ≥ 4 |
| | | KPI-26. Number of agreements with industry partners | ≥ 2 |
| | A-18. Encourage enrolment in undergraduate research courses for qualified students. | KPI-27. Number of students registered in undergraduate research courses. | ≥ 20 |
| A-19. Encourage student participation in research-based training and activities. | KPI-28. Number of student publications | ≥ 5 | |
| | KPI-29. Number of research-based events attended by students. | ≥ 4 | |
| O-11. Encourage creation of more research lab space | A-20. Establish and strengthen in cost-effective ways core shared research facilities | KPI-30. Percentage of core research facility shared | ≥ 20% |

Table 8: List of Goals, Strategic Objectives, Strategic Actions and KPIs for Theme 4

| Theme 4: Social Responsibility | | | |
|---|---|---|--|
| College Goals: | | | |
| Goal 6: Strengthen outreach & service activities locally, regionally & internationally.. | | | |
| Strategic Objectives | Strategic Actions | Key Performance Indicators (KPIs) | Initial Target (Details Ref. Table 9) |
| O-12. Enhance community services to deliver high interest functions highlighting students' achievements, faculty research & opportunities available in college | A-21. Emphasize and highlight, thru public relations committee, societal issues in courses and student projects. | KPI-31. Program attainment levels in relevant learning outcomes. | ≥ 70% |
| O-13. Augment participation of women in science & humanities | A-22. Promote and celebrate participation of women in science. | KPI-32. Ratio of female to male: a) faculty, b) admin, c) students KPI-33. Number of events and activities geared towards women in science & humanities | ≥ 1 : 2 ≤ 5 : 1 ≥ 1 : 0.82 ≥ 3 |

5. Timeline for the Implementation of Strategic Actions

Table 9 provides a timeline for the implementation of the Strategic Actions that have been recommended. It should be noted that some of these are ongoing, in the sense that now that Alfaisal is operational, many of the activities currently taking place will be continued and then followed by an ongoing trend analysis and benchmarking against past years. Therefore, this may lead to some review and adjustment.

Table 9: Implementation schedule of Strategic Actions and KPIs 2020-2025

| Theme 1: Student Centred | | | | | | | |
|--|--|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Strategic Objectives | Strategic Action | KPIs | 2020-2021 | 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 |
| O-1. Provide stronger tutoring & mentoring support services | A-1. Revise & improve current advising & counselling services. | KPI-1. Student-to-advisor ratio. KPI-2. Student evaluation of academic and career counselling (Overall average satisfaction score must be ≥ 3.75 on a scale of (1 to 5)). | 1:23 ≥ 3.95 | 1:23 ≥ 3.95 | 1:20 ≥ 4.0 | 1:20 ≥ 4.0 | 1:18 ≥ 4.2 |
| | A-2. Automate advising and counselling procedure. | KPI-3. Percentages of students entering programs who successfully complete first year. KPI-4. Proportion of students entering undergraduate programs who complete those programs in minimum time. | $\geq 91\%$ $\geq 80\%$ | $\geq 93\%$ $\geq 82\%$ | $\geq 95\%$ $\geq 84\%$ | $\geq 97\%$ $\geq 85\%$ | $\geq 99\%$ $\geq 86\%$ |
| O-2. Develop joint undergraduate & graduate programs with other colleges & with international institutions | A-3. Develop new programs/ tracks based on national & international job market as well as research needs | KPI-5. Number of new programs / tracks developed (during strategic period). | ≥ 2 | ≥ 1 | ≥ 1 | ≥ 1 | ≥ 1 |

| Theme 2: Academic Distinction | | | | | | | |
|--|--|---|------------------|------------------|------------------|------------------|------------------|
| Strategic Goal | Strategic Action | KPIs | 2020-2021 | 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 |
| O-3 Encourage establishment of teaching & research centres in strategic fields. | A-4. Encourage productive mutually beneficial research collaboration with incentives for faculty and students | KPI-6. Total value of research grants awarded annually to faculty & students (SR) | ≥ 50 K | ≥ 55 K | ≥ 60 K | ≥ 65 K | ≥ 70 K |
| O-4. Recommence merit-based salary increases to reward & encourage excellence to support university's mission | A-5. Propose thru College Council to University Administration merit-based salary increases | KPI-7. Value of merit-based salary increase (%) | ≥ 0% | ≥ 0% | ≥ 1% | ≥ 1% | ≥ 1% |
| O-5. Introduce new graduate programs such as M.A. in TESOL (Teaching English to Speakers of Other Languages) | A-6. Propose new graduate programs. | KPI-8. Number of new graduate programs/tracks | ≥ 1 | ≥ 1 | ≥ 1 | ≥ 1 | ≥ 2 |
| O-6. Reduce class size, (especially in writing-intensive courses) necessary for superior instruction essential to College mission | A-7. Monitor students' performance and graduation rate | KPI-9. Students' performance in national and international exams & competitions. | Top 10% | Top 10% | Top10% | Top10% | Top 10% |
| | | KPI-10. Graduation rates of students | ≥ 75% | ≥ 77% | ≥ 79% | ≥ 80% | ≥ 82% |
| | A-8. Attract, develop and retain more qualified faculty and staff members | KPI-11. Number of faculty recruited in relation to the total number of applications received per position. | ≥ (1:50) | ≥ (1:55) | ≥ (1:60) | ≥ (1:65) | ≥ (1:70) |
| | | KPI-12. Number of professional development programs available for employees | ≥ 1 | ≥ 1 | ≥ 2 | ≥ 2 | ≥ 3 |

| | | | | | | | | |
|--|--|--|-------------|-------------|-------------|-------------|-------------|-------------|
| | | (teaching staff and supporting staff). | | | | | | |
| | A-9. Monitor faculty and staff members' performance | KPI-13. Improvement in faculty members' performance (Course and instructor evaluations by students; overall average satisfaction must be with evaluation score ≥ 3.75 on a scale of (1 to 5)). KPI-14. Number of papers and citations per year/faculty member a) Paper/faculty member b) Citation/faculty member | ≥ 3.75 | ≥ 3.75 | ≥ 3.75 | ≥ 3.75 | ≥ 3.75 | ≥ 3.75 |
| | A-10. Enhance Library offerings & services in science & humanities | KPI-15. Number of periodicals & database subscriptions in science & humanities | ≥ 50 K | ≥ 50 K | ≥ 55 K | ≥ 55 K | ≥ 60 K | ≥ 60 K |
| O-7. Recruit for, support, continuously enhance, & review curriculum | A-11. Enhance and monitor UPP program. | KPI-16. Proportion of students entering UPP who successfully complete that program within the specified time | ≥ 80 % | ≥ 82 % | ≥ 84 % | ≥ 85 % | ≥ 86 % | ≥ 86 % |
| | A-12. Comply with requirements of national & international accreditation entities | KPI-17. College progress towards national & international accreditation | ≥ 50 % | ≥ 60 % | ≥ 70 % | ≥ 80 % | ≥ 85 % | ≥ 85 % |
| O-8. Encourage creation of university data centre to enable data-driven | A-13. Enhance infrastructure and services. | KPI-18. Students overall evaluation of the quality of their learning experiences at program level; average satisfaction must be with evaluation | ≥ 3.0 | ≥ 3.2 | ≥ 3.4 | ≥ 3.6 | ≥ 3.8 | ≥ 3.8 |

| | | | | | | | |
|---|--|--|---|--|--|--|--|
| strategies & decisions, | | score ≥ 3 on a scale of (1 to 5). KPI-19. Number of students enrolled in science-related programs | ≥ 90 | ≥ 100 | ≥ 110 | ≥ 120 | ≥ 130 |
| O-9. Ensuring continuity & stability of college & UPP leadership | A-14. Reduce turnover rate of staff | KPI-20. Annual turnover rate for: a) Admin. Staff b) Teaching staff c) Teaching support staff | $\leq 10\%$ $\leq 15\%$ $\leq 20\%$ | $\leq 9\%$ $\leq 14\%$ $\leq 20\%$ | $\leq 9\%$ $\leq 12\%$ $\leq 18\%$ | $\leq 8\%$ $\leq 11\%$ $\leq 18\%$ | $\leq 8\%$ $\leq 10\%$ $\leq 16\%$ |

| Theme 3: Research | | | | | | | |
|---|---|--|-------------------------|------------------------|------------------------|------------------------|------------------------|
| Goal 5: Intensify commitment to innovative research | | | | | | | |
| A# | Strategic Action | KPIs | 2020-2021 | 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 |
| O-10. Strengthen efforts in boosting scholarly output, providing weekly seminars, encouraging consulting service | A-15. Increase effort to recruit and retain research active faculty | KPI-21. Number of publication per faculty per year KPI-22. Number of citations per faculty per year KPI-23. Annual turnover rate of faculty members | ≥ 1.0 ≥ 20 ≤ 10 % | ≥ 1.1 ≥ 20 ≤ 9 % | ≥ 1.2 ≥ 25 ≤ 9 % | ≥ 1.3 ≥ 25 ≤ 8 % | ≥ 1.4 ≥ 30 ≤ 8 % |
| | A-16. Encourage faculty to apply for seed funding to spur research in multidisciplinary emerging areas | KPI-24. Total amount of funds spent on research in college (million SAR) | ≥ 3 | ≥ 4 | ≥ 5 | ≥ 6 | ≥ 7 |
| | A-17. Increase efforts to develop industry partnerships and attract funding sources | KPI-25. Number of publications with external collaborators KPI-26. Number of agreements with industry partners. | ≥ 4 ≥ 2 | ≥ 5 ≥ 3 | ≥ 6 ≥ 4 | ≥ 7 ≥ 5 | ≥ 8 ≥ 6 |
| | A-18. Encourage enrolment in undergraduate research courses for qualified students. | KPI-27. Number of students registered in undergraduate research courses. | ≥ 20 | ≥ 25 | ≥ 30 | ≥ 35 | ≥ 40 |
| | A-19. Encourage student participation in research-based | KPI-28. Number of student publications KPI-29. Number of research-based events attended by students. | ≥ 5 ≥ 4 | ≥ 7 ≥ 5 | ≥ 9 ≥ 6 | ≥ 11 ≥ 6 | ≥ 13 ≥ 7 |

| | | | | | | | |
|--|--|--|-------|-------|-------|-------|-------|
| | training and activities. | | | | | | |
| O-11. Encourage creation of more research lab space | A-20. Establish & strengthen in cost-effective ways core shared research facilities | KPI-30. Percentage of core research facilities shared | ≥ 20% | ≥ 25% | ≥ 30% | ≥ 35% | ≥ 40% |

Theme 4: Social Responsibility

Goal 6: Strengthen outreach & service activities locally, regionally & internationally.

| Strategic Goal | Strategic Action | KPIs | 2020-2021 | 2021-2022 | 2022-2023 | 2023-2024 | 2024-2025 |
|---|---|--|---------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|
| O-12. Enhance community services to deliver high interest functions highlighting students' achievements, faculty research & opportunities available in college | A-21. Emphasize & highlight thru public relations committee societal issues in courses & student projects. | KPI-31. Program attainment levels in relevant learning outcomes. | >70% | >73% | >75% | >75% | >80% |
| O-13. Augment participation of women in science & humanities | A-22. Promote & celebrate participation of women in science & humanities. | KPI-32. Ratio of female to male: a) faculty, b) admin, c) students KPI-33. Number of events and activities geared towards women in science & humanities. | >1.0:2.0 <5.0:1.0 >1:0.82 | >1.1:2.0 <4.9:1.0 >1:.84 | >1.2:2.0 <4.8:1.0 >1:.86 | >1.3:2.0 <4.7:1.0 >1:0.88 | >1.4:2.0 <4.6:1.0 >1:0.90 |
| | | | >3 | >4 | >5 | >6 | >7 |

6. Nature of the Future of the College of Science & General Studies, 2020-2025

6.1. Projected Student Numbers, 2020-2025

The College plans provide the basic information needed for future Academic planning. The most important statistic is the projected student numbers Tables (10 - 14), as this in turn determines the number of teaching faculty and administrative staff. It is also used as a guide in projecting the needs for personnel in the University general administration. It is also crucial in estimating the future financial revenues and expenses. These are included in the final section of this Strategic Plan. The College is unique in that it is primarily a service college providing courses in Mathematics, Chemistry, Physics, Biology and Humanities to other colleges. In addition it has its own undergraduate and graduate programs in Life Sciences and Nanoscience & Nanotechnology, respectively. The data shown in Tables 10-11 are for the undergraduate & graduate programs in the College.

Table 10: Projected Undergraduates Student Numbers, 2020-2025

| Undergraduates | | | | | | % change in number of students | | | | |
|----------------|-----------|-----------|-----------|-----------|------------|--------------------------------|------------|------------|------------|------------|
| Program | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
| Life Sciences | 55 | 65 | 80 | 90 | 100 | * | 18% | 23% | 12% | 11% |
| TOTAL | 55 | 65 | 80 | 90 | 100 | * | 18% | 23% | 12% | 11% |

Table 11: Projected Graduate Student Numbers, 2020-2025

| Graduates | | | | | | % change in number of students | | | | |
|---------------------------|-----------|-----------|-----------|-----------|-----------|--------------------------------|------------|-----------|-----------|-----------|
| Program | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
| Master Nanosci & Nanotech | 15 | 20 | 20 | 20 | 20 | * | 33% | 0% | 0% | 0% |
| TOTAL | 15 | 20 | 20 | 20 | 20 | * | 33% | 0% | 0% | 0% |

Table 12: Projected University Preparatory Program (UPP) Student Numbers, 2020-2025

| University Preparatory Program (UPP) | | | | | |
|--------------------------------------|------------|------------|------------|------------|------------|
| | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
| UPP | 225 | 240 | 260 | 280 | 300 |

Table 13: Student Projections for both Undergraduate (UG) & Graduate (G), 2020-2025

| Total Undergraduate (UG) & Graduate (G) | | | | | |
|---|-----------|-----------|------------|------------|------------|
| | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
| Total UG & G | 70 | 85 | 100 | 110 | 120 |

Table 14: Projected Overall Student Numbers (UG, G, & UPP), 2020-2025

| Total Undergraduate (UG) & Graduate (G) | | | | | |
|---|------------|------------|------------|------------|------------|
| | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
| Total UG & G | 295 | 325 | 360 | 390 | 420 |

6.2. Teaching Staff Projections, 2020-2025

A university is only as good as its instructional faculty and staff. Therefore a central part of this strategic planning exercise was to determine the number of professors, instructional staff and administrators required to meet the projected teaching needs of the university. The following two tables deal with this issue. In Table 15, a projection is made of the required number of teaching staff needed to undertake the teaching of the expected students. The ratio of student to teaching staff is important to maintain excellent competitive world class learning and teaching environment. The projected ratios are shown in Table 16.

Table 15: Teaching Staff Projections, 2020-2025

| Teaching Staff (including all ranks and academic staff) | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
|---|-----------|-----------|-----------|-----------|-----------|
| COSGS (LS) | 14 | 14 | 14 | 14 | 15 |
| UPP | 24 | 25 | 26 | 27 | 28 |
| Total Faculty Members with UPP | 38 | 39 | 40 | 41 | 43 |

Table 16: Student to Teaching Staff Ratios, 2020-2025

| Change in Student – Teaching staff ratio UG | | | | | |
|---|------------|------------|-------------|-------------|-------------|
| College/Program | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
| Sci & Gen Studies | 3.9 | 4.6 | 5.7 | 6.4 | 6.7 |
| Ratio of UPP | 9.4 | 9.6 | 10.0 | 10.4 | 10.7 |

6.3. Teaching & Administrative Support Staff Projections, 2020-2025

In addition to effective teaching staff, a good university needs teaching support staff and a general administration which deals with logistical issues, organization, facilities and the day-to-day running of the university complex. The number of teaching support staff and administrative personnel must, however, increase if the university is to provide the same level of service to its students and support for its faculty. It is assumed here that the teaching support staff the general administrative staff of the university presented in Table 17 is linked to student numbers, and therefore the growth mirrors the growth in student numbers.

Table 17: Projected Numbers of Teaching Support Staff and Administrative Support Staff

| COLLEGE of SCI & G.STD. | AY : 2020/21 | AY : 2021/22 | AY : 2022/23 | AY : 2023/24 | AY : 2024/25 |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | <u>COUNT</u> | <u>COUNT</u> | <u>COUNT</u> | <u>COUNT</u> | <u>COUNT</u> |
| FACULTY | 14 | 14 | 14 | 14 | 15 |
| TEACHING SUPP STAFF | 7 | 7 | 7 | 8 | 8 |
| ADMIN SUP STAFF | 5 | 5 | 5 | 6 | 6 |
| UNIVERSITY PREP PROG. | AY : 2020/21 | AY : 2021/22 | AY : 2022/23 | AY : 2023/24 | AY : 2024/25 |
| | <u>COUNT</u> | <u>COUNT</u> | <u>COUNT</u> | <u>COUNT</u> | <u>COUNT</u> |
| FACULTY | 24 | 25 | 26 | 27 | 28 |
| TEACHING SUPP STAFF | 0 | 1 | 1 | 2 | 2 |
| ADMIN SUP STAFF | 1 | 1 | 1 | 2 | 2 |

6.4. Anticipated Possible Future Initiatives

6.4.1. New Academic Programs

- 1) Expand existing College of Science & General Studies with new programs/ concentrations/tracks:
 - Bachelor: new tracks under Life Sciences
 - Biomedical Sciences
 - Food Safety
 - Environmental Science & Sustainable Development
- 2) Develop plans to establish Ph.D. programs. Priority for multi-disciplinary programs:
 - Ph.D. Biomedical Sciences
 - Ph.D. Nanoscience & Nanotechnology