Annual Program Report

Program Name:	Bachelor of Science in Computer Science : BS(CS)
Qualification Level:	Level 7 (Bachelor Degree)
Department:	Department of Computer Science
College:	College of Computer Science and Information Technology
Institution:	Jazan University, Jazan, KSA
Academic Year:	2019-2020
Main Location:	Main Campus, Jazan University (For Boys) Girls College Complex Mahaliya, Jazan (For Girls)
Branches offering the Program:	Department of Computer Science, Sabya University College, Sabya , Jazan.

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A. Implementation of Previous Action Plan

Considering the recommendations of previous year annual report, list the planned actions and their status.

#	Planned Actions	Responsibility of Action	Planned Completion Date	Completed		If Not Completed	
				Yes	Not	Reasons	Proposed Actions
1.	Collaboration with other institutions and industry	Head, Cooperative Training & Community Services	May 2020		No	Due to pandemic situations unable to hold meetings with industry	Will hold in the upcoming semester
2.	Improving interpersonal skills of students.	Head, Cooperative Training & Community Services	May 2020		No	Unable to identify experts due to the pandemic situation	Skill development programs will be organized in the upcoming semester
3.	Involve in community services	Head, Cooperative Training & Community Services	May 2020		No	Due to pandemic situations unable to hold meetings with industry	Will hold in the upcoming semester
4.	Build industry relationship	Excellence Unit (College & Department)	May 2020		No	Budget	A separate budget for Industry Relationship is in process.
5.	Improving the teaching and assessment skills of faculty members	Excellence Unit / Research Unit (College & Department)	May 2020	Yes			
6.	Motivate to increase the number of research publications	Research Unit	May 2020	Yes			
7.	Involve students in research publication along with faculty	Research Unit / GP Unit	May 2020		No	Students are not enthusiasm to publish a paper	Students will be encouraged to take research based GP projects
8.	Conduct review/ survey from stakeholders periodically	Statistics and Survey Unit (SSU)	conducted annually	Yes			

9.	Exhibit graduation projects and mini projects	Graduation Project Committee	conducted bi-annually	Yes			
10.	Ensure students to use ONLINE resources	E-learning Unit	Continuous Process	Yes			
11.	Create an alumni database	Head, Alumni Association	Continuous process	Yes			Develop Alumni Management Software to keep track of Alumni
12.	Conduct workshops to promote research activities in various areas of IS and ICT	Research Unit	Continuous Process	Yes			
13.	Collect information about each faculty specialization and maintain a database based on their expertise.	Research Unit	Continuous Process	Yes			
14.	Identify specialized areas and conduct workshop/ training/seminars etc.	Research Unit	Continuous Process	Yes			
15.	Motivate the faculty members to apply for research projects from various funding agencies locally and internationally.	Research Unit	Continuous process	Yes			
16.	Procure adequate and latest software's to update the specialized labs	Research Unit / Lab Committee	Continuous process		Partially Complete	Due to technological advancements, we need new software	Required software have been identified and request sent to the university administration.
17.	Encourage participation in the conferences/seminars/ workshops for presenting research papers.	Research Unit	Continuous process	Yes			
18.	Recognize the innovative ideas in the field of research and development	Research Unit	Continuous process	Yes			
19.	Encourage various funded research projects	Research Unit	Continuous process	Yes			
20.	Access to the various digital resources in Saudi Digital Library	Research Unit	Continuous process	Yes			

No.								
21.	Build partnership with industries to provide professional training on industry based courses to the students.	Excellence Unit	Continuous Process	Yes				
22.	Identify the ICT experts in local and international industries and bringing them to deliver hands on workshop/training and prepare them for the job market.	Excellence Unit	Continuous Process	Yes				
23.	Conduct training programs and motivate students towards national and international certifications	Excellence Unit	Continuous Process	Yes				
24.	Organize/ Conduct seminars within the department.	Excellence Unit / Research Unit	Continuous Process	Yes				
25.	Invite domain experts from Industry.	Excellence Unit	Continuous Process	Yes				
26.	Organize faculty development programs frequently	Excellence Unit / Research Unit	Continuous Process	Yes				

B. Program Statistics

1. Students Statistics (in the year concerned)

No.	Item	Results
1	Number of students who started the program	**106+96+131= 333**
2	Number of students who graduated	**18+84+ 81= 183**
3	Number of students who completed major tracks within the program (if applicable)	
	a.	**Not Applicable**
4	**a.** Number of students who completed the program in the minimal time	183
5	**a.** Percentage of students who completed the program in the minimal time (Completion rate)	**Male Campus = 16.98** **Girls Campus = 87.5** **Sabya Campus = 61.8%** **Overall = 55 %**
6	Number of students who completed an intermediate award specified as an early exit point (if any)	**N/A**
7	Percentage of students who completed an intermediate award specified as an early exit point (if any)	**N/A**

Comment on any special or unusual factors that might have affected the completion rates:

The average completion rate is low in the male campus, but it is improved as compared to last year cohort. Students retention is also improved dropping in first year or transferring to other programs that need a serious review and to be monitored at the beginning. To avoid drop outs, proper advising should be done periodically and at the time of student Orientation Program.

2 . Cohort Analysis of Current Graduate Batch (2019-20)

Student Categories / Years		Total cohort enrollment	Withdrawn	Retained till year end	Not passed	Passed	Passing rate
1st Year	M	106	15	91	75	16	15.09 %
	F	96	1	95	17	78	81.25%
	Total	202	16	186	92	94	46.53%
2nd Year	M	91	20	20	71	11	12.08 %
	F	95	2	93	16	77	81.05 %
	Total	186	22	113	87	88	47.31 %
3rd Year	M	71	7	64	52	12	16.90 %
	F	93	1	92	26	66	70.96%
	Total	164	8	156	78	78	47.56 %
4th Year	M	64	6	58	55	3	4.69 %
	F	92	0	92	78	14	15.21 %
	Total	156	6	150	133	17	10.90 %
5th Year	M	58	2	33	33	18	31.03%
	F	92	0	8	8	84	91.03 %
	Total	150	2	41	41	102	68 %

Comment on Results: Overall Graduates (Male & Female) 102, Total No of students registered: 202
Male Graduates= 18, Male Pass Percentage = 18/106*100 = 16.98 %
Female Graduates= 84, Female Pass Percentage = 84/96*100 = 87.50 %

The completion rate for male campus is very low and mostly in the first year & second year students are dropping. The passing rate is also low that is the major reason for dropping the program. Students are transferring to other programs. These things have been monitored and corrective measures have been taken.

COHORT 2019-20 Graduate Batch Sabya Campus

Student Categories / Years		Total cohort enrollment	Withdrawn	Retained till year end	Not passed	Passed	Passing rate
1st Year	M						
	F	131	5	126	35	91	69.47%
	Total						
2nd Year	M						
	F	126	8	118	61	57	45.24 %
	Total						
3rd Year	M						
	F	118	7	111	52	59	50%
	Total						
4th Year	M						
	F	111	7	104	99	5	4.50 %
	Total						
5th Year	M						
	F	104	7	16	16	81	77.88%
	Total						

Comments on the results: Total No of female students registered the program: 131
Comments on the results: Overall Total Graduates = 81
Overall Completion Rate (Sabya Campus) = 61.83 %

3.Analysis of Program Statistics

(including strengths, areas for improvement, and priorities for improvement)

Strengths :
• The pass out rate of female campuses is high as compared to the male campus.   • Students retention rate is very good for female campuses.
Areas for Improvement:
• Male Campus Students pass out rate need to be analyzed, proper guidance and support should provide to improve the pass out rate.   • Annual Completion Rate and Retention Rate are main concerns, especially for the male campus.   • A lot of students are dropping in the male campus. These students are either dropping or mainly shifting to other programs. The student orientation program should concentrate on future job prospects.   • Students pass out percentage in 4th year is very low, need to know the reason and give them proper guidance to improve the result.   • Student advising committee should support students and strive to identify the reasons that impact students most so that the retention rate of the students should improve.
Priorities for Improvement:
Improvement of Annual Completion Rate and Retention Rate especially for male campus.

C. Program Learning Outcomes Assessment

1. Program Learning Outcomes Assessment Results.

#	Program Learning Outcomes	Assessment Methods		Perfor mance Target	Results		
		Direct	Indirect		Direct Assessm ent	Indirect Assessm ent	Overall Average
Knowledge							
K1	**Demonstrate** the sound knowledge of principles of Computing, Science and Mathematics required in the field of Computer Science.	Exams, Assignments	Exit Survey, Alumni Survey	4.0	3.68	4.13	3.91
K2	**Relate** recent trends and current research in the field of Computer Science.	Assignments, Mini Project, Case Studies,	Exit Survey, Alumni Survey	4.0	4.21	3.93	4.07
Skills							
S1	**Analyze** a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.	Exams, Assignments, Laboratory Exercises, Lab Exams, Final Project	Exit Survey, Alumni Survey	4.0	4.46	4.01	4.24
S2	**Design**, **implement** and **evaluate** a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.	Laboratory Exercises , Lab Exams, Case Studies, Mini Project	Exit Survey, Alumni Survey	4.0	4.22	4.1	4.16
S3	**Apply** computer science theory and software development fundamentals to produce computing-based solutions.	Laboratory Exercises, Lab Exams, Case Studies, Mini Projects,	Exit Survey, Alumni Survey	4.0	4.28	4.05	4.17

		Exam, Field Training Assessment,					
S4	**Communicate** effectively in a variety of professional contexts.	Mini Project Presentation, Final Projects Defense Viva & presentation.	Exit Survey, Alumni Survey	4.0	4.63	3.97	4.3
Competence							
C1	**Recognize** professional and social responsibilities and make informed judgments in computing practice based on legal and ethical principles.	Field Training Assessment, Community Services Participation	Exit Survey, Alumni Survey	4.0	4.25	4.03	4.14
C2	**Demonstrate** the ability to function effectively as a member or leader of a team engaged in activities appropriate to the field of Computer Science.	Group Assignments, Mini Projects	Exit Survey, Alumni Survey	4.0	4.66	4.24	4.45
C3	**Appraise** the need to engage in continuing professional development and entrepreneurship	Observations, and judgments about technology views, Mini Project Presentation	Exit Survey, Alumni Survey	4.0	4.23	4.1	4.17
Comments on the Program Learning Outcome Assessment results.							

Direct Assessment is done using the assessment methods defined in the program specification and indirect assessment calculation is based on student Exit Survey.

There are variations in results from various entities. There is an improvement in direct assessment but decline in indirect Assessment. Exam evaluations need to be verified to evaluate the direct assessments and ascertain the reason for the variation. In the second semester due to COVID 19 pandemic, in place of exams, assignments were given and students score good marks; therefore, overall variation is minimized.

2. Analysis of Program Learning Outcomes Assessment
(including strengths, Areas for Improvement:, and priorities for improvement)

ANALYSIS REPORT:
Overall achievements are exemplary does not reflect any weakness but in indirect assessment there are some areas that should be concerns. These areas are; ability to relate with latest trends, and knowledge of Computing and Mathematics.

Direct Assessment
a. Weak Points:
Overall achievements are exemplary. It does not reflect any weakness. Due to the COVID 19 pandemic the exams, quizzes and assignments were conducted and submitted online, due to that the students' performance was much better in second semester which improves overall result of the session.
b. Area of Concern
- **Demonstrate** the sound knowledge of principles of Computing, Science and Mathematics required in the field of Computer Science.

- **Relate** recent trends and current research in the field of Computer Science.

c. Strengths:
- **Analyze** a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- **Communicate** effectively in a variety of professional contexts.
- **Demonstrate** the ability to function effectively as a member or leader of a team engaged in activities appropriate to the field of Computer Science.

Analysis of the PLO assessment (Direct):
Students have shown good skills in core areas like analyzing, problem solving, communicating in professional context, designing and implementing computer based solutions and working as member of a team to solve numerous issues. Students need to be given specific care about Mathematics and English courses. Most students are facing difficulty in these courses. Students improved significantly in terms of PLO achievements in majority of PLOs but in few the decline is very minor. Overall the students progressed well. The PLO achieved in the first semester was up to the mark, but in second semester PLO achievement increases drastically. As exams, assignments and quizzes were conducted and submitted online due to COVID -19 pandemic. It has been observed that in few courses number of A and A+ achieved by the students are very high.

Indirect Assessment

a. Weak Points:
- **Relate** recent trends and current research in the field of Computer Science.
- **Communicate** effectively in a variety of professional contexts.

b. Area of Concern
- **Analyze** a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- **Design**, **implement**, and **evaluate** a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- **Apply** computer science theory and software development fundamentals to produce computing-based solutions.
- **Recognize** professional and social responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- **Appraise** the need to engage in continuing professional development and entrepreneurship

c. Strengths:
- **Demonstrate** the sound knowledge of principles of Computing, Science and Mathematics required in the field of Computer Science.
- **Demonstrate** the ability to function effectively as a member or leader of a team engaged in activities appropriate to the field of Computer Science.

Analysis of the PLO assessment:

The indirect assessment was conducted with the help of exit student survey. Students rated their accomplishments highly and acknowledged that they valued themselves, but they were barely aware of the requirements of the industry and the job market. But their communicational and programming skills need to be improved as per the industries requirements. Practical knowledge, trends and technology awareness, and current research areas should be clear to the graduating students.

Priorities for Improvement:

The major areas that have been highlighted are lack of awareness of recent trends, effective communication and continuous professional development and entrepreneurship, professional social responsibilities. Above discussed area need to be improved and planning is required to help the students to ameliorate their social, ethical, scientific, mathematical, and programming skills.

D. Summary of Course Reports

1. Teaching of Planned Courses / Units

List the courses / units that were planned and not taught during the academic year, indicating the reasons and compensating actions.

Course	Units/Topics	Reasons	Compensating Actions
231COMP-3 Operating Systems (Second Semester)	• Concurrency • Resource Allocation Graph • Demand Paging	Due to COVID-19 regular classes were suspended and 100% topics couldn't cover in online classes.	Additional video lectures on the blackboard system have been uploaded, particularly for the topics not covered during online classes.
241 COMP-3 Artificial Intelligence (Second Semester)	• Planning Problem		
315 COMP-3 Elective-I (Second Semester)	• Monitor class • Determining a thread state • Data Reader object • Data View object • Session Tracking		
324 COMP-3 Computer Data Security & Privacy (Second Semester)	• State of Worm Technology • Generic decryption technology • Intrusion detection		
323 COMP-3 Analysis and Design of Algorithm (Second Semester)	• Topological sorting • Dijkstra's Algorithm	Standard classes were suspended due to COVID-19 and 100 % per cent of the topics could not be discussed in online classes especially the courses having numeric problems.	To grasp the idea and concept of those topics video lectures and notes related to the subject that were not discussed on the blackboard system during online classes have been uploaded.
336 COMP-3 Computer Graphics (Second Semester)	• Mapping of clipping window to normalized viewport • Cavalier and Cabinet projections		
433 COMP-3 Theory of Compilers (Second Semester)	• Runtime environment • DAG and basic blocks		

2. Courses with Variations

List courses with marked variations in results that are stated in the course reports, including: (completion rate, grade distribution, student results, etc.), and giving reasons for these variations and actions taken for improvement.

Course Name &Code	Variation	Reasons for variation	Actions taken
114COMP-3 Programming in Probability & Statistics (First Semester)	Low grades	• No tutorial session for this course. • Attendance &Absenteeism • Students have no deep mathematical knowledge and skills lacking course prerequisite • English Proficiency lacking.	▪ Tutorial session should be arranged for students if they are facing difficulties. ▪ Teacher must encourage students to attend classes. ▪ Course must be revised according to student's level.
151COMP-3 Computational Geometry (First Semester)	Low grades	Sabya campus did not consider CLO 3.1 in there lab assignment, due to this average of CLO is below target.	It is recommended that every course teacher send assignment to course coordinator for approval.
221COMP-3 Algorithm & Data Structure -I (First Semester)	Low grades	Students had problem in understanding algorithm.	Students need to improve in sorting algorithm analysis.
222COMP-3 Algorithm & Data Structure -II (First Semester)	Low grades	Students had problem in understanding algorithm.	Mentors should foster students in conceptual understanding and analytical skills.
241 COMP-3 Artificial Intelligence (First Semester)	Low grades	Students have problem in recognizing ability.	More questions should be given in area of robotics to increase the recognizing ability of students at sabya campus.
323 COMP-3 Analysis and Design of Algorithm (First Semester)	Low grades	Lack of practice	Extra classes may be arrange for the students to explain the importance of algorithm and give extra questions for practice.
241 COMP-3 Artificial Intelligence (Second Semester)	More students are in A+ and A category	Evaluation was mainly based on assignments, so very few knowledge based questions were given to students.	Quiz or online exam should be conducted in place of Extra assignments

336 COMP-3 Computer Graphics (First Semester)	Low grade	Sabya campus achieved low grades.	Motivate students with more examples.
324 COMP-3 Computer Data Security & Privacy (Second Semester)	More students are in A+ and A category	Evaluation was largely focused on assignments, so very few questions were given to students based on knowledge.	Instead of extra assignments, a quiz or online test should be administered.

3. Result Analysis of Course Reports
(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths : The students have strong analytical and problem solving skills.
The capacity to work efficiently as a responsible member of a team engaged in various appropriate activities related to their domain.

Areas for Improvement:
• Need to consider the issues related with more students getting lower grades (i.e. D, D+) in some of the courses. • Students are weak in programming and algorithm concepts, additional classes should be provided or special attention should be given to the weak students.

Priorities for Improvement:
• Students should be taught using diagrams, charts, graphs and other such methods as they are weak in understanding theoretical concepts. • Students are lacking in language and mathematical skills so it is affecting the results, especially the courses that more oriented towards mathematical skills. Its needs a review of courses offered by other departments (English and Mathematics) and modifies the course contents and teaching strategies if required.

E. Program Activities
1. Student Counseling and Support

Activities Implemented	Brief Description*
CS students names distribution	**Date**: 17/02/2020 **Time**: 10:00 AM 308 computer science students assigned to 11 academic advisors where each advisor will handles 28 students. The advisor are Arabic speakers to ease the communication with students without any language barriers. The remaining 23 students were assigned to head of students advising committee as they didn`t get an Arabic advisor due to shortage of Arabic speakers staff member at Computer science department.
Low average students monitoring and observing	The number of low CGPA students below 2 were 35 students, cluttered in all groups but the majority of them are observed on entry levels the 1st and 2nd level of study. Where those students were under intensive advising and monitoring procedures in order to minimize all their problems and need that led them to earn low average GPA.

	By meeting them and writing all their problems carefully in order to solve them. The procedures for handling those students were as following: 1. Meetings conducted with them by their supervisors directly . 2. A detailed report was issued and sent to the head of advising committee in CS dept. 3. Arrange a meeting with all students below avg 2 to summarize their difficulties. **The result:** Most of these students belonging to entry levels of study 1st level and 2nd where problems existing in the following topics: ▪ Weakness in Mathematics. ▪ Weakness in understanding the English language ▪ Weakness in Physics. ▪ Other problems like (distance locations, health problems, family problems. Etc.)
Duties and rights of the students	The duties of advisors are sent to all of them via email at (24/02/2020) where the responsibilities and duties are explained clearly. The date varies from one advisor to another depending on the time addressed for advising. A form is distributed to each advisor to be filled by the student and signed by the advisor. Every advisor established sequence of meeting with his students in order to explain and clarify all the rules regarding the students' rights along with their duties.
Developing new reports templates	**Date:25/03/2020 Time: 11:00 AM** Google form was developed and published to the students along with their supervisor where the following questions were asked to be answered 1. Do you register in faculty of computer science depending in your desire? 2. Do you think to convert into another specialization? 3. What are the most difficult subjects from your point of view? 4. Did you face problems in exams? 5. Do you have health problems? 6. Do you live in far location? 7. Do you have pc at your home? 8. Do you prefer Arabic speaker teachers? The responses from the students were very low, just 26 response which gave a wrong indication for not getting the task of students` advising seriously. Some reports ware sent to the head of the advising committee.
Final report	Unfortunately, due to coronavirus pandemic the task of student advising was stopped due to communication difficulties between the students and their advisor due to the lockdown state. Owing to a lack of information regarding the advisory procedures, the final report was not released. Often due to the pandemic condition of the corona virus, which prevented the advisors and their students from progressing in the role of advising.

Advising week	**Date:** 23/02/2019 to 27/02/2019 **Time:** 12:00 PM In order to clarify the role and significance of this unit, the academic advisory committee of the CS department organizes academic advisory week and conducted several meetings with the students.

Comment on Student Counseling and Support **

Student's advising requires more enhancement as following:

- ❖ Develop a systematic procedure to observe and monitor the status of the students in continuous mode.
- ❖ "Student Advising helper" is a suggested graduation project for final CS students to ease monitoring, tracking, and reporting all cases of student by their advisors, the system suggested to be linked with student database to ease accessing directly to all student data.
- ❖ Considering the advising work as standard work for each staff member in which can be evaluated annually depending on his advancement on this task.

* including action time, number of participants, results and any other statistics.
** including performance evaluation on these activities

2. Professional Development Activities for Faculty and Other Staff

Activities Implemented	Brief Description*
Orientation:	**Topic: Faculty Orientation Program & Department Gathering** Presenter: Dr. Mousa Mohammed Khubrani (Head, Department of CS) and Faculty members of CS No. of Participants:40 Date : 04/02/2020 Venue : CS Meeting Room
Seminar	**Topic: CLOUD COMPUTIG AND ITS SERVICES** Resource Person: Ms. Fazeelatunnisa No. of Participants:3 Date : 30-10-2019
	Topic: Designing Scientific posters Resource Person: Ms. Hanan Murad Meeting room: 19 Date: 11-02-2020 Sabya university college staff
Faculty Development Seminar	**Topic: Introduction to Blackboard online platform** Resource Person: Mr. Goutam Adhuri No. of Participants:12 Venue : CS meeting room Date : 11-02-2020
	Topic: Blackboard Training Resource Person: Mr. Goutam Adhuri & Dr Mohd Saad No. of Participants:92 Venue : Open Theater Date : 10-03-2020

	Topic : AI Tools and Techniques in Education System Resource Person: Mr Shabbir Alam No. of Participants:16 Venue : CS meeting room Date : 26-02-2020
Extra-curricular	**SPORTS EVENING & GATHERING** No. of Participants: 60 Venue : Football ground ,Near University Residential apartment Date : 5/12/2019
Exhibition	**PROJECT EXHIBITION DAY** Trainer: Mr. Goutham Aduri No. of Participants:90 Students of Male & Female Campuses Date : 1/12/2019 Venue : central Lawn, near student affair unit
Workshop	**Introduction to Routing and Switching Essentials** Resource Person: Ms. Betty Elezebeth Samuel No. of Participants:3 Date: 12-09-2019, 15-09-2019 Venue: Female Campus
	Tech talk dialogue session in the field of robotics and health Resource Person: Ms. Alaa sairafi Atyaf Hussain Meeting Room 30 Date: 02/03-10-2019 Participants: Staff of the University College in Sabya
	How to deliver an efficient, attractive and a productive presentation Resource Person: Mr. Imad Al Sheikh No. of Participants:10 Date: 8/10/2019 Venue: F175
	GAME UTILITY PROGRAMMING Resource Person: Mr. Khaja Rouf No. of Participants:40 Date: 27/02/2020 and 05/03/2020 Venue: S291
Comment on Professional Development Activities for Faculty and Other Staff **	
Faculty members are encouraged to participate and contribute more in professional development activities.	

3. Research and Innovation

Activities Implemented	Brief Description*
Research Publications	**Total 42 Publications** ▪ 23 research articles have been published in reputational international journals (ISI/SCI Indexed, Springer, Scopus, etc.) ▪ 19 research articles have been presented and published in various international conferences (IEEE, Springer, etc.).

Research Seminar	Topic : **"Guidelines to prepare & publish Research Papers from the Graduation Project"** Date & Day : 01/10/2019 & Tuesday Time : 10.30AM- 11.15AM Venue : 342 & Academic Female Campus(1), Jazan University Presenter : Dr. A.Saahira banu Targeted Group **:** Level 10 Students (to be Graduated), No. of attendees: 22 Overall all of our students who were participated in this event they obtained knowledge to develop their skills.
	Topic: **"How To Write A Scientific Research Paper"** Day & Date **:** Thursday & 21/11/2019 Time **:** 12.00 to 12.45PM Venue **:** Auditorium, Academic Campus for Girls(1) Presenter **:** Dr. A. Saahira banu Targeted Group **:** Students from Computer Science department, No. of attendees: 26 Results: Students got subject ideas for their Masters and to publish any research papers.
Research Talk	**A new era of life computing: Social media mining and modeling** Resource Person: Dr. Essa Ali Alhazmi No. of Participants:17 Venue : Room No- F152 Date : 08-10-2019
Seminar	**GUIDANCE TO CREATE A CITATION LINK** Day & Date **:** Wednesday &19/02/2020 Time : 12.15PM to 12.45PM Venue **:** Room no.437 , Academic Campus for Girls(1) Targeted group : FACULTY MEMBERS **Presenter :** Dr. Shermin Shamsudheen **No. of attendees** : 11 **Results:** The faculty members are encouraged to publish the research paper in a high indexed journals under the name of Jazan university

Comment on Research and Innovation **

Faculty members published their research articles in reputed international journals.
Faculty members and students of the department had been encouraged & motivated to involve more research activities in the current academic year and future.

4. Community Partnership

Activities Implemented	Brief Description*
Webinar on "Information Technology Applications for Disaster Management in the Covid 19 Virus Pandemic".	**Presenter:** Dr. Shadab Alam Ahmed (Asst. .Professor, Department of Computer Science) on 13th April 2020. There were 136 attendees mainly Teaching Staff from Jazan universty were present. It has about the disaster management due to Covid 19 pandemic. It was open to all the faculty of jazan University.
Webinar: A semantic ontology for disaster trail management system	**Presenter:** Mr Ashfaq Ahmed on 21/04/2020. Total no of attendees who attended the workshop were 45, it was open to all university staff.

Community Services: Social networking sites and the dangers of electronic games on children.	**Location:** Rashid Mall 800 Mall visitors Nov 28, 2019
Workshop on Skills of using computer	**Presenter:** Dr. Mawahib Bush, Ms. Afnan Sumaili, Ms. Amal Alshehri, Ms. Atyaf Hussain Audience: Administrative staff of Sabya university college Date: 19-01-2020 to 23-01-2020.
How to register into jazan university.	**Presenter:** Ms Maha Shaabi Oct 25, 2019

Comment on Community Partnership **

There should be a Committee for Community Partnership and a separate budget also . Department has organize only a webinar, it is also effected due to Covid 19 pandemic.

5. Analysis of Program Activities
(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :

A good number of activities were conducted during the academic session 2019-20 and the focus area was Research. A total of 19 events conducted out of which 3 events were aimed at research and development.

Areas for Improvement:

More workshop for faculty development and events related with Community Partnership need to be organized.

Priorities for Improvement:

- A committee should be formed for Community Partnership Activities.
- Faculty Development / Training programs on Teaching and evaluation strategies need to conducted on priority basis.
- Need to form a group of faculty's area of specialization, to achieve more research publication.

F. Program Evaluation
1. Evaluation of Courses

All the courses have been evaluated. Students provide their feedback in form of Course Evaluation Survey and other committees like Curriculum Review Committee (CRC), Quality Assurance Unit (QAU) as well as faculty members teaching the course provide feedback by filling detailed forms specified by QAU.

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
101 CSC-3	Introduction to Computing	Yes	Faculty/CRC/ QAU	Programming Foundation content should be added in this Course.
011 COMP-3	Programming-1	Yes	Faculty/CRC/ QAU	Programming-I, Programming-II & OOP

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
112 COMP-3	Programming-2	Yes	Faculty/CRC/QAU	course should be reviewed with the help of CC & TL and need to be aligned.
151 COMP-3	Computational Geometry	Yes	Faculty/CRC/QAU	Course is appropriate. More Problem should be discussed
114 COMP-3	Programming of Statistics and Probability	Yes	Faculty/CRC/QAU	There must be Lab for this course but because of Mathematics' Department teaching this course, it is not possible.
213 COMP-3	Object Oriented Programming	Yes	Faculty/CRC/QAU	Programming-I, Programming-II & OOP course should be reviewed with the help of CC & TL and need to be aligned.
221 COMP-3	Algorithms & Data Structures - 1	Yes	Faculty/CRC/QAU	1. Lab manual will be in Java from the next semester. 2. Appropriate Text book should be selected with the help of CC &TL
222 COMP-3	Algorithms & Data Structure - II	Yes	Faculty/CRC/QAU	Lab manual will be in Java after one semester.
231 COMP-3	Operating Systems	Yes	Faculty/CRC/QAU	Course syllabus is appropriate, no need to remove any topics.
241 COMP-3	Artificial Intelligence	Yes	Faculty/CRC/QAU	Mini Project should be added in this course.
252 COMP-3	Data Modeling and Simulation	Yes	Faculty/CRC/QAU	Exercise Problems at the end of each and every chapter should be given as assignments and solutions should be provided to students either through email or through blackboard for clear and concise understanding.
315 COMP-3	Elective - I	Yes	Faculty/CRC/QAU	Syllabus should be updated based on ACM Guidelines.
323 COMP-3	Analysis & Design of Algorithm	Yes	Faculty/CRC/QAU	More problems must discussed in Theory
324 COMP-3	Computer Data Security & Privacy	Yes	Faculty/CRC/QAU	Lab manual will be updated including more problems.
332 COMP-3	Advanced Operating System	Yes	Faculty/CRC/QAU	Course content and lab manual is appropriate.
336 COMP-3	Computer Graphics	Yes	Faculty/CRC/QAU	Course content and lab manual is appropriate.

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
390 COMP-3	Summer Training	Yes	CRC/QAU	1. There must be a committee to contact IT Companies for the student summer training. 2. Student should develop some apps and web application. 3. There must be a committee to contact IT Companies for the student summer training.
433 COMP-3	Theory of Compilers	Yes	Faculty/CRC/ QAU	1. Arrange Lab manual program properly. 2. In Ch-3 & Ch-4, some topic must be deleted with the help of TL.
471 COMP-3	Elective - II	Yes	Faculty/CRC/ QAU	Advance Java Topics should be added in this course
495 COMP-3	Final Project	Yes	Faculty/CRC/ QAU	Some Extra classes should be provided for Programming and Designing the Project.

2. Students Evaluation of Program Quality

Every year Program evaluation survey is conducted by SSU and data is collected from exit students (graduating) survey. Based on this survey the program evaluation is done by QAU and Program Assessment Committee.

All Campuses (Overall)

Evaluation Date : Spring Term (2019-20)	Number of Participants: 147
Students Feedback	**Program Response**
Strengths: • All aspects of the evaluation is satisfactory. • Facilities for students like Laboratories, Extracurricular Activities, religious observance improved. • Study material in course were up to date.	The survey report is satisfactory.
Areas for Improvement: • Overall none but there are some variations among different campuses that need to be reviewed and improved.	Program Assessment Committee will review the aspects and prepare improvement plan. Meantime the workload and student to faculty ratio is high in female campuses specifically on Sabya campus. Male members are to be sent to share the workload but need some plan to address these issues on long term and permanent basis.

Suggestions for improvement:	
• Sabya Campus need some plan for improvement and Faculty Development programs to improve and motivate the faculty members.	Faculty Improvement Program for faculty Members.

* Attached survey report on the students' evaluation of program quality

Main Campus (Boys)

Evaluation Date : Spring Term (2019-20)	Number of Participants: 16
Students Feedback	**Program Response**
Strengths: • All aspects received excellent evaluation except library resources and facilities for extracurricular activities. • Instructors are highly motivated, paying sufficient attention to students and having sound knowledge of the field. • Facilities for computing, religious observance and administration support is good. • Student Field experience programs (cooperative training) must improve to develop their skills. • Student communication skills.	Main campus (boys) having sufficient faculty members and lab resources and will try to provide more skills and training to students with help of Excellence Unit and Student Club.
Areas for Improvement: • Library resources are not sufficient • Student Field Experience	Request already communicated to university administration regarding library resources.
Suggestions for improvement: • Need to procure books and learning resources for college library. • Provide more resources for extracurricular activities, guide and motivate students to participants in various clubs at college level as well as university level.	The facilities for extracurricular activities will be reviewed and more facilities will be provided to students.

* Attached survey report on the students' evaluation of program quality

(Girls Campus)

Evaluation Date : Spring Term (2019-20)	Number of Participants: 74
Students Feedback	**Program Response**
Strengths: • All aspects received satisfactory evaluation except facilities for extracurricular activities. • Students improved their collaboration skills.	
Areas for Improvement: • Facilities for extracurricular skills are not sufficient.	The facilities for extracurricular activities will be reviewed and more facilities will be provided to students.
Suggestions for improvement: • Provide more resources for extracurricular activities, guide and motivate students to participants in various clubs at college level as well as university level.	

* Attached survey report the students' evaluation of program quality

(Sabya Campus)

Evaluation Date : Spring Term (2019-20)	Number of Participants: 57
Students Feedback	**Program Response**
Strengths: • The review is average and a chance for improvement.	
Areas for Improvement: • Instructors need to improve skills and, aside from classrooms, instructors should have ample time to consult and counsel students. • Students computing facilities are not up to the marks and need improvement.	• In the Sabya campus, the workload and student to faculty ratio is high, which requires some strategy to resolve these problems and share the workload. • To strengthen and inspire the faculty members, Faculty Development programs should be provided.
Suggestions for improvement: • Provide more teaching staff / qualified faculty • Provide more computer resources • Provide text books for improving the students level	

* Attached survey report on the students' evaluation of program quality

3. Other Evaluations

Alumni Feedback		
Evaluation method : Survey	**Date: 4th May 2020**	**Number of Participants : 20**
Summary of Evaluator Review		**Program Response**
Strengths: • Teamwork based tasks helped the students to adapt working environment. • Presentations opportunities provided in mini-projects helped in language development, communication with people and self-reliance. • Courses have proven very useful in developing • self-development through practice.		
Points for Improvements:: • New curriculum plan as per industry requirements.		• Latest BS(CS) Degree Plan revised and launched from Fall (2020-21).
Suggestions for improvement • Focus on courses especially the programming courses as per the industry requirement. • Emphasis on professional and technical aspects more instead of theoretical side. • Applications for smart devices Android and iOS, adding the latest programming languages.		• Suggested modifications were discussed elaborately at internal level and incorporated as per agreement in new curriculum plan.

Advisory Committee Feedback		
Evaluation method : Meeting	**Date: 20-02-2020**	**Number of Participants : 09**
Summary of Evaluator Review		**Program Response**
Strengths: • Well organized committee structure.		• Committee includes Dean , Vice Dean and Industry Experts.
Points for Improvements:: • New curriculum plan as per industry requirements • Emphasis must be given on graduation projects • Computer club must be more functional.		• Curriculum plan prepared as industry requirement.
Suggestions for improvement • Students must be introduced about specializations of job market. • Suggested addition and modification of some contents in the proposed curriculum plan as per industrial requirements.		• Suggested and modifications were discussed elaborately and incorporated as per agreement.

* Attach independent reviewer's report and stakeholders' survey reports (if any)

4. Key Performance Indicators (KPIs)

List the results of the program key performance indicators (including the key performance indicators required by the National Center for Academic Accreditation and evaluation)

No	KPI	Target Benchmark	Actual Value	Internal Benchmark	Analysis	New Target Benchmark
KPI-P-01	Percentage of achieved indicators of the program operational plan objectives	80 %	74.17 %	77%	Stable	80 %
KPI-P-02	Students' Evaluation of quality of learning experience in the program	4.0	4.07	4.15	Positive Trend	4.5
KPI-P-03	Students' evaluation of the quality of the courses	4	3.98	4.06	Stable	4.5
KPI-P-04	Completion rate.	50 %	55.5%	28 %	Positive Trend	60 %
KPI-P-05	First-year students retention rate	90 %	93 %	82%	Positive Trend	95 %
KPI-P-06	Students' performance in the professional and/or national examinations	Not Applicable				
KPI-P-07	Graduates' employability and enrolment in postgraduate programs	60%	28.4	66.7%	Positive Trend	60%
KPI-P-08	Average number of students in the class	25	20.87	14.2	Negative Trend	25
KPI-P-09	Employers' evaluation of the program graduates proficiency	4.0	3.26	4	Negative Trend	4.0

KPI-P-10	Students' satisfaction with the offered services	3.5	3.14	2.62	Stable	3.5
KPI-P-11	Ratio of students to teaching staff	20:1	38.33:1	16:1	Negative Trend	20:1
KPI-P-12	Percentage of teaching staff distribution based on academic qualification (doctoral degree) PhD to Non-PhD ratio	Prof = 5% Assoc. Prof = 10% Asstt. Prof = 15% Lecturer = 70%	Prof = 0 % Assoc. Prof = 0 % Asstt. Prof = 12.33% Lecturer = 87.66 %	Prof = 0% Assoc. Prof = 0% Asstt. Prof = 18% Lecturer = 82%	Positive Trend	Prof = 5% Assoc. Prof = 10% Asstt. Prof = 15% Lecturer = 70%
KPI-P-13	Proportion of teaching staff leaving the program	5%	2%	9.09%	Positive Trend	5%
KPI-P-14	Percentage of publications of faculty members	25 %	19.10%	12.12 %	Positive Trend	25 %
KPI-P-15	Rate of published research per faculty member	0.5 : 1	0.30:1	0.69: 1	Positive Trend	0.5 : 1
KPI-P-16	Citations rate in refereed journals per faculty member	10:1	14.08:1	20.02:1	Positive Trend	15:1
KPI-P-17	Satisfaction of beneficiaries with the learning resources	3.5	3.43	3.77	Positive Trend	3.5

Comments on the Program KPIs and Benchmarks results :
There are some areas of concern that need to be resolved, that are mainly apparent completion rate and research activities.

5. Analysis of Program Evaluation
(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :
- Percentage of achieved indicators of the program operational plan objectives
- Improvement in Completion rate and First year retention rate of the student .
- Graduates' employability and enrolment in postgraduate programs.

Areas for Improvement:
- Faculty student ratio.
- Students' satisfaction with the offered services.
- Percentage of publications of faculty members.
- Satisfaction of beneficiaries with the learning resources.

Priorities for Improvement:
- Students' satisfaction with the offered services.
- Improve Completion rate.
- Percentage of publications of faculty members.

G. Difficulties and Challenges Faced Program Management

Difficulties and Challenges	Implications on the Program	Actions Taken
Lack of PhD Faculty Member	Less Research Publication in the Program	Request sent to higher authorities in this regard
Lack of original/latest software in the Labs	Student are unable to do Lab properly	Request sent to higher authorities in this regard
Non Availability of Hard Copy of Text Book	Students and concerned Faculty face difficulties in course material for further references	College Library is under Construction

*Internal and external difficulties and challenges

H. Program Improvement Plan

No.	Priorities for Improvement	Actions	Action Responsibility	Date		Achievement Indicators	Target Benchmark
				Start	End		
1	Collaboration with other institutions and industry	Collaborate with different industrial programs to provide technological training	Head, Cooperative Training & Community Services	Sep 2020	May 2021	No. of industrial training programs conducted.	1 per semester
2	Improving interpersonal skills of students.	Conduct training programs to improve their interpersonal skills	Head, Cooperative Training & Community Services	Sep 2020	May 2021	No. of programs conducted	1 per semester
3	Involve in community services	Conduct awareness programs, workshops for the society with the help of stakeholders	Head, Cooperative Training & Community Services	Sep 2020	May 2021	No. of programs conducted	1 per semester

		Build partnership with industries to provide professional training on industry based courses to the students	Excellence Unit (College & Department)	Sep 2020	May 2021	No. of MOUs for training/ workshops conducted.	1 MOU per year
4							
5	Build industry relationship	Identify the ICT experts in local and international industries and bringing them to deliver hands on workshop/training and prepare them for the job market.	Excellence Unit (College & Department)	Sep 2020	May 2021	No. of programs conducted	1 per semester
6	Improving the teaching and assessment skills of faculty members	Organize faculty development programs frequently	Excellence Unit / Research Unit (College & Department)	Sep 2020	May 2021	No. of programs conducted	2 per semester
7	Motivate to increase the number of research publications	Recognize the innovative ideas in the field of research and development	Research Unit	Sep 2020	May 2021	KPI-P-15	1 per semester
8	Involve students in research publication along with faculty	Encourage students to participate in research activities and publish research work	Research Unit /GP Unit	Sep 2020	May 2021	No. of research publications by students	1 per semester
9	Motivate students to participate in technical competitions and conferences	Encourage students to participate in research activities	Programming Committee/ GP Unit	Sep 2020	May 2021	No. of research publications by students	1 per semester

I. Report Approving Authority

Council / Committee	DEPARTMENT COUNCIL
Reference No.	10572/33/42
Date	27/1/1442 H

J. Attachments :

- A separate cohort analysis report for male and female sections and for each branch
- A report on the program learning outcomes assessment results for male and female sections and for each branch (if any)
- A report on the students evaluation of program quality
- Independent reviewer's report and other survey reports (if any)