Annual Program Report

Program Name:	**Bachelor of Science in Information Technology**
Qualification Level:	**Level 6 Bachelor**
Department:	**Information Technology**
College:	**College of Computing and Informatics**
Institution:	**Prince Musaid Bin Abdulrahman University**
Academic Year:	**2019/2020**
Main Location:	**Riyadh**
Branches offering the Program:	• **Dammam** • **Jeddah** • **Medina** • **Abha** • **Jazan** • **Tabuk** • **Qasim**

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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	Level of Completion		If Not Completed	
			Completed	Not Completed	Reasons	Proposed Actions
1. Continuing the lab support for all courses requiring practical training at all level of undergraduate program.	Department chair & courses coordinators	2020/2021		No	The deadline has not yet been reached.	
2. Continuing the IT industry collaboration to be initiated with active participation of students and faculty members for current concepts and understanding.		2021/2022		No	It is a continuous process.	
3. Continuing the content development and feedback from faculty members should be carried out for each semester.	Department chair & courses instructors.	2020/2021		No	The deadline has not yet been reached.	
4. Faculty incentives for more research contribution should be announced, such as publishing fees compensation.	Deanship of Scientific Research	2019/2020	Yes			

B. Program Statistics

1. Students Statistics (in the year concerned)

No.	Item	Results
1	Number of students who started the program	**2799**
2	Number of students who graduated	**212**
3	Number of students who completed major tracks within the program (if applicable)	
	a.	
	b	
	c.	
4	**a.** Number of students who completed the program in the minimal time	**41**
5	**a.** Percentage of students who completed the program in the minimal time (Completion rate)	**1.9%**
6	Number of students who completed an intermediate award specified as an early exit point (if any)	
7	Percentage of students who completed an intermediate award specified as an early exit point (if any)	
Comment on any special or unusual factors that might have affected the completion rates:		

2. Cohort Analysis of Current Graduate Batch

Student Categories / Years		Total cohort enrollment	Withdrawn	Retained till year end	Not passed	Passed	Passing rate
2016	M	1459	882	577	189	388	67.3%
	F	663	335	328	167	161	49%
	Total	2122	1217	905	356	549	60.7%
2017	M	512	277	235	127	108	45.9%
	F	327	169	158	77	81	51.3%
	Total	839	446	393	205	189	48.1%
2018	M	263	53	210	120	90	42.9%
	F	159	16	143	76	67	46.9%
	Total	422	69	353	196	157	44.5%
2019	M	214	35	179	157	22	12.3%
	F	147	15	132	113	19	14.4%
	Total	361	50	311	253	41	13.2%

Comments on the results:

As PMAU students are majority studying while working and our program is design for full time students, in the first academic year (University unified common year), majority of students have underestimated the work load of full time students and overrated their ability to balance the load between studying and working full time. Thus, many students drop during the first year of the program. Similar situation is reoccurring when student get to the second year of the program where they will start taking higher number of courses per semester and more advance courses.

2016 is the first academic year for student(Common First year) and there are some requirements to pass in this year . The students should pass in STEP exam to continue in the program, because of that, the passing rate is low in this year. After Common first year, the students start enrolling the courses under CCI college,

* add more rows for further years (if needed)

** attach separate cohort analysis report for each branch

3. Analysis of Program Statistics

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

Strengths :

The passing percentage rate in 3rd and 4th academic years are high and acceptable.

Areas for Improvement:

Doing extra workshops about time management between work and study because the majority of students in the program studying while working

Priorities for Improvement:

Doing extra workshops about time management between work and study because the majority of students in the program studying while working

C. Program Learning Outcomes Assessment

1. Program Learning Outcomes Assessment Results.

#	Program Learning Outcomes	Assessment Methods (Direct and Indirect)	Performance Target	Results
Knowledge				

K1	Explain the concepts and technologies related to information technology.	Q1.2, 1.8-1.9, 1.12-1.13, 1.20-1.27, 1.29-1.30 in final exam (System Integration)	70%	98.16%
K2	Demonstrate the ability to use state of art tools in practice based on the obtained skills.	Q1.1-1.3, 1.6-1.7, 1.11, 1.13, 1.16-1.17 and Q2.3-2.5, 2.8, 2.13, 2.16, 2.20 and Q3 in final exam (IT Security and Policies)	70%	96.6%
K3	Recognize the evaluation and assessment of tasks performed as IT professionals.	Q1.1, 1.13, 1.15, 1.29 and Q2.1, 2.5 in final exam (Senior Project 1)	70%	86.08%
K4	Apply the concepts, methods, tools and technologies mastered during the academic program.	Q1.4-1.7, 1.23, 1.25-1.27 and Q2.7 in final exam (Enterprise Systems)	70%	98.89%
Cognitive Skills				
S1	Analyze a problem, identify and define the computing requirements appropriate to its solution	Q1.8, 1.18, 1.23-1.26,1.30 and Q2.7 in final exam (Senior Project 1)	70%	86.9%
S2	Apply theories in modelling and designing IT systems using cutting edge technologies.	Q1.1-1.3, 1.13-1.23, 1.25-1.27 and Q2.2-2.6, 2.8 in final exam (Enterprise Systems)	70%	90.45%
S3	Apply analysis, design, implementation and testing principles of IT solutions to fit industrial requirements.	Q1.9-1.10, 1.13-1.22 and Q2.2-2.6 in final exam (Enterprise Systems)	70%	86.03%
Interpersonal Skills & Responsibility				
I1	Function effectively on teamwork activities to accomplish a common goal.	Q1.8-1.9, 1.11-1.12, 1.24, 1.28-1.30 and Q2.1, 2.9 in final exam (Enterprise Systems)	70%	92.72%
I2	Carry out projects in group structure and collaborate with group members.	Q1.3, 1.13, 1.16, 1.18-1.21, 1.24-1.28, 1.30 and Q2.4-2.7 in final exam (Mobile Application Development)	70%	100%
I3	Identify the needs for continuous development of professional skills with the ability to engage all group members.	Q1.11, 1.30 and Q2.9 in final exam (Professional Issues in IT)	70%	100%
Communication, IT, Numerical				
C1	Carry out the assignments with quality of work in accordance with international standards.	Q1.1, 1.5-1.6, 1.10, 1.19 and Q2.4, 2.6, 2.9-2.10 in final exam (System Integration)	70%	89.46%
C2	Communicate effectively, both orally and in written form, using appropriate media.	Q1.8-1.9, 1.12-1.14, 1.26-1.27, 1.29 and Q2.3 in final exam (Professional Issues in IT)	70%	88.5%

Comments on the Program Learning Outcome Assessment results.

All PLOs achievement rates are satisfactory. The above results of measurements were relied on the IT assessment plan shown here , which presents the alignment of PLOs with program courses.

* Include the results of measured learning outcomes during the year of the report according to the program plan for measuring learning outcomes

** Attach a separate report on the program learning outcomes assessment results for male and female sections and for each branch (if any)

2. Analysis of Program Learning Outcomes Assessment

(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :

The target for all program learning outcomes are achieved with high percentages.

Areas for Improvement:

Concern more teamwork activities by adding projects in most courses
Priorities for Improvement:
Enhance the types of activities in the courses to support teamwork between students

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. **Courses across all branches were given as planned.**

Course	Units/Topics	Reasons	Compensating Actions
N/A	N/A	N/A	N/A

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.

No variation noticed**. Ask Vice Rectorate about percentage of variation.**

Course Name &Code	variation	Reasons for variation	Actions taken
N/A	N/A	N/A	N/A

3. Result Analysis of Course Reports

(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :

- The contents of courses across all branches were covered as schedules.
- All teaching staff participates in updating course portfolios for all the courses taught during each semester. A record of current and previous syllabi, projects, exams and other assessments is maintained every academic semester including statistical report about student grades, rate of completion and general performance.
- Individual course reports are used for evaluation of course as well as the program. The course reports are prepared by the course instructors at the end of every semester where they state their problems or concerns if encountered with respect to all aspects of planning and delivery of the course including student learning outcomes, teaching and learning facilities and services to support the learning. Based on the feedback from the

program report, necessary adjustments are made in the program to ensure continuing relevant and quality program.

- The course is being assessed by using:
  a. Direct Rubrics to assess the CLOs achieved by the students.
  b. Course Evaluation Survey: Assess the overall quality of course delivery.
- The respective course groups analyze assessment results based on the chosen assessment tools and consolidate a report of the recommendations and submit it to QA Committee for improvement.
- The QA Committee compiles all the recommendations from the course groups and various assessment tools and submit to the Department council.
- Department council reviews recommendations and approve changes to improve program.
- The approved recommendations are then finally sent to the course instructors for their immediate implementation which in turn should be followed up with the appropriate course groups. The Quality Assurance Committee monitors the improvement in the course learning outcomes and in turn takes an action for further program improvement in the next academic semester.

Areas for Improvement:

- Attending practical parts for students in some courses should be mandatory.
- There is a need to review and update some course materials to include latest technologies.
- Review the syllabus for some courses and update it to be suitable with the length of the academic semester.
- Some textbooks are old and need to be updated.
- Increase the number of exercises in the lab session to cover more topics.
- Some courses need to add practical part to their syllabus.

Priorities for Improvement:

The priority for the improvement is as follow:

1. There is a need to review and update some course materials to include latest technologies.
2. Review the syllabus for some courses and update it to be suitable with the length of the academic semester
3. Some textbooks are old and need to be updated.

E. Program Activities

1. Student Counseling and Support

Activities Implemented	Brief Description*
Announcing important students services	An on-line Student Services icon is always available on the PMAU's website that offers tremendous support.
Assigning office hours	Faculty members announced their contact information as well as office hours on Blackboard.
Open-door meeting policy	The department adopted an open-door policy, according to which a student is free to meet the department chairman, Dean of Student Affairs, Dean or advisor at any time.
Dealing with student's issues	The Student and academic Affairs Committee is responsible for handling students' issues and complaints as they arise.
Solving technical issues	On-line Da'am System is always available to solve any technical issues faced by students.
Participating in university activities	Student had the right to enjoy the benefit of the services provided in the university, and can participate in the student activities.
Assigning Academic Advisors	Students can get help on their academic plan, understand the pre-request courses and choosing their courses by emailing their academic advisor.
Conducting Dean meetings	The Dean of the college held a meeting with students of the college at the branch level, in order to talk with students about electronic exams,

	and a number of aspects were discussed (method and type of questions, the duration of the exam). The Dean also answered the students 'inquiries about everything related to electronic tests. The Dean of the college, Dr. Abdulaziz Al-Bishr, held a number of internal meetings at the college level with faculty members to discuss the following: 1. Emphasis on the internal procedures and regulations followed for faculty members within the college, in addition to specifying the tasks of the faculty members. 2. Develop plans for the course of academic subjects during the academic semester by making a course plan for each subject that the course coordinator performs and then submits it to the committee for approving study plans. 3. Meetings for electronic exams. The mechanism for conducting electronic tests and the correct way to put questions for such tests were discussed. The grading distribution mechanism was also discussed, and the tasks of the college's branch coordinators were discussed to conduct the tests in their branches.
Graduation projects guides	The IT Program held an awareness lecture for its students about graduation projects, project registration steps and project groups at the beginning of each semester.
Updating academic curricula based on quality requirements	• A committee works on applying the highest standards and updating the academic curricula periodically in line with the development of technology and the needs of the labor market based on studying the labor market and following up developments in the technical field from scientific sources such as books and published scientific papers and analyzing student, faculty and coordinators' questionnaires.
Seeking students' rights and responsibilities	The university seeks to guarantee students' rights and seeks to educate them about their rights and responsibilities. Therefore, the university established two committees to protect students' rights: • Sub-Committee for the Protection of Student Rights: o It considers all educational and administrative grievances and complaints of students, except for administrative matters outside the framework of the college. • Main Committee for Student Rights Protection: o It considers all students 'grievances and complaints filed against the administrative authorities at the university and grievances coming from the sub-committees.

Comment on Student Counseling and Support **

Different activities and services were implemented at the PMAU and IT department levels to support students during their study journey. For example, the PMAU has efficient Student care center portal contains all necessary units the student needs, such as the social counseling unit, Mental Health Support Unit, The academic advising unit, The career counseling and career support unit, The scholarship and aid unit, Talent and Creativity Unit, and the Disabilities Support Unit. **This Student care center portal can be reached via** https://seu.edu.sa/aasa/en/student-care-center

* 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*
Improving teaching skills	Encourage the teaching staff to attend courses and workshops related to the development of their teaching skills.
Reviewing faculty performance	Audited, annually, teaching performance for faculty members.
Guiding teaching performance	Provide advice and guidance to improve and enhance the performance of teaching.
Providing workshops	Encourage members to enroll in the training courses and workshops in other areas.
Joining conferences and symposia.	Encourage faculty members to attend conferences and symposia.
Indorsing scientific contact	Promote scientific contact through visits and visiting professors.
Ongoing education	Encourage faculty members to enroll in continuing education programs.
Employee training courses	The employees of the administrative of the college, at the level of male or female students, have received a number of training courses with a total of 31 courses. This was reflected positively on the employees, as that includes developing their managerial and professional skills that contribute to developing business in the college in particular and the university in general.
Comment on Professional Development Activities for Faculty and Other Staff **	
By the above points, the teaching staff have the opportunity to pursue professional development of their teaching and research skills. In addition, administrative staff has been supported by different training courses to improve their managerial and professional skills.	

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

3. Research and Innovation

Activities Implemented	Brief Description*
Publishing researches and articles in journals and scientific conferences	The total number of published work is 161 divided between journals articles, scientific conferences and books. The total number of published journals articles are 122, the total number of conferences articles are 34, and 5 published books.
Participating in scientific conferences, competitions, etc.	**Scientific Conferences:** The teaching staff participated in 34 conferences. **Competitions:** The teaching staff contributed and still actively contributing in various competitions in their domain areas. For this year the college contributed in 8 competitions with a total of 14 teams. CCI competed in the Cyber Saber Hackathon 2019, The 12th Undergraduate Research Conference in UAE, Cyber Hub competition, Homathon, Hope Hackathon, Home Design competitions, Middle East & North Africa Information Security Conference and NEOM competitions which is still in progress. The teams competed successfully and achieved higher ranks and positive recognitions in the competitions.
Joining and conduction training courses	**Joining Training Courses:** There were 7 training courses focused in the developing and enhancing the soft skills in the computing and information technology domains. The topics delivered were in Artificial Intelligence, Programming in Python, Data Security and privacy, scientific literature writing, designing and developing mobile application network security and control and designing, and developing voice recognition system using python. The audience feedback were positive and encouraging in proceeding with similar training activates for the coming academic year.

	Conducting Training Courses: Faculty members have contributed in delivering training courses in different areas including IT, AI, Computing, and Professional and Research Writings. **Students Participation:** Students were invited and encouraged to participate in competitions and conference.
Joining National and International Workshops	The CCI participates in different areas to enhance, improve and develop the skills required in professional settings. That including programming, artificial intelligence, big data analytics, information systems, information technology, cyber security, Cloud computing and Blockchain. Business, Managements, Health, Tourism, Energy and Transportations are some examples of the domains covered.

Comment on Research and Innovation **

This year has significant improvement in the number of publications and attended conferences. Journals publications is increased by 65% and conferences publications in increased by 20%. We recommend to activate the research groups at the department to further improve the research process.

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

4. Community Partnership

Activities Implemented	Brief Description*
Students training courses	The College provided professional training for its students in cooperation with IBM to implement a training course entitled (Blockchain Developer). The college is keen to develop students' scientific skills and work in a way that contributes to raising their level of knowledge qualification and raising their opportunities to compete in the labor market.
Official international speakers	The faculty members of the college participated in official speeches at the second Gulf Cybersecurity Conference and Exhibition held in Kuwait during the period 13-14 November 2019, under the generous patronage of the Prime Minister, His Highness Sheikh Jaber Al-Sabah and the presence of the Kuwaiti Minister of Oil, Electricity and Water, a group of experts and interested people, and many governmental and private agencies. Dr. Abdulaziz Al-Bishr, the college dean, participated in the first session of the first day, entitled "Preparedness of the Gulf Cooperation Council Countries in the Field of Cybersecurity", while Dr. Hazza Al-Sharif, a faculty member, participated in the second session of the first day, which was titled "Security of Cloud Services : Obstacle or reality". In addition, Dr. Marwa Al-Masry participated in the third session of the second day of the conference under the title Cybersecurity in Emerging Technology. At the end of the meeting, the faculty members who participated in the conference were honored and the delegation received a shield of appreciation from the Cultural Attaché in Kuwait.
Training courses	The College held a number of training courses that were professionally designed and of high quality during the second semester of the academic year 2019/2020, provided by faculty members. These courses were aimed at all those interested in the field of computing and informatics. The Dean of the college confirmed that these courses aimed to develop the technical

	skills required in the labor market, and raise awareness of the mechanism of using modern technologies in daily life and vital projects. **The sequence of sessions was as follows:** • **The first session:** The first session of the series of courses offered by the college was held on Thursday 3/23/2020 with the title "Practical Introduction to Artificial Intelligence". • **The second session:** "Using Python to apply machine learning techniques". This session was held in two parts, the first part on Thursday, 1/30/2020, and on Saturday, 1/2/2020. • **The third session:** "Step-by-step methods of securing and protecting your private data", on Thursday 6/2/2020. • **The fourth session:** "How to write a summary of previous studies: a practical guide", on Thursday, 2/13/2020. • **The fifth session:** "Step-by-step course for designing and building mobile applications", on Saturday 3/15/2020. • **The sixth session:** "Network security and access control", on Thursday 2/20/2020. • **The seventh session**: "Building a speech recognition system using the Python language", on Thursday 27/2/2020.

Comment on Community Partnership **

Different professional training courses were implemented for teaching staff and students to improve their professional and research skills. In addition, the teaching staff participated in a number of speeches locally and globally.

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

5. Analysis of Program Activities

(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :

- All activities have been implemented as planned. The teaching staff had attended several courses and workshops during this academic year in order to improve their teaching and research skills. More attention was given to new members who are briefed on policies and regulations. In addition, new faculties had undertaken the Orientation Course. Coordinators also met their group instructors and briefly explained to them the teaching strategies assessment methods.
- For students, the dean of the college held a meeting with them and discussed a number of aspects related to teaching and exams. In addition, students had participated in several competitions such as the competition of selecting the best graduation projects at the level of all branches of the university.
- The low achievers got support through assigning an academic advisor to assist them to overcome their obstacles.
- This year had significant improvement in the number of publications and attended conferences. Journals publications is increased by 65% and conferences publications in increased by 20%.

Areas for Improvement:

- Activating academic Advising system across all branches.
- Improve the communication with the alumni through the following actions:

- ✓ Academic departments should also be involved in organizing events for alumni.
- ✓ To activate alumni association by having at least two meetings in a year.
- ✓ CCI College should also identify the need of the trainings/workshops for Alumni.
- ✓ CCI college should collaborate with the Student Affairs office to organize regular workshops for unemployed alumni.
- ✓ To provide counseling to the unemployed alumni.
- ✓ To develop network with the alumni working in companies which can help in finding job places for the coop and unemployed graduates.
- ✓ To promote graduate programs offered at PMAU among the alumni
- ✓ To host annual alumni re-union event.
- ✓ To revise the alumni questionnaire which will help to improve the programs offered at CCI College.
- ✓ To conduct online alumni surveys.

• Activate the research groups at the department to further improve the research process.

Priorities for Improvement:

• Activating academic Advising system across all branches.
• Activate the research groups at the department to further improve the research process.

F. Program Evaluation

1. Evaluation of Courses

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
ENG001	English language Skills	Yes	Course Instructors	- None.
CS001	Computer Essentials	Yes	Course Instructors	- Adding Ms. Access to the curriculum
COMM001	Communication Skills	Yes	Course Instructors	- None.
MATH001	Fundamentals of Math	Yes	Course Instructors	- None.
CI001	Academic Skills	Yes	Course Instructors	- Strengthening strengths and addressing weaknesses in the new textbook
CS140	Computer Programming I	Yes	Course Instructors	- Illustrate how to write programs inside lectures - Changing the textbook is recommended. Use a better book covering latest version of JDK and Java APIs. - Improve the lecture slides.
IT101	Introduction to IT & IS	Yes	Course Instructors	- Add tests to encourage students to keep up with this intensive course.
MATH150	Discrete Mathematics	Yes	Course Instructors	- Upgrading the use of the Blackboard tools - Provide Supporting Material.
ENG103	Technical Writing	Yes	Course Instructors	- None.
IT110	Computer Organization	Yes	Course Instructors	- None.
ISLM101	Islamic Culture (1)	Yes	Course Instructors	- None.
CS141	Computer Programming II	Yes	Course Instructors	- One programming practice session should be included with F2F classes. - Use websites and videos. Use other references for elaborate understanding and add up to date contents. - Slides need to be updated with more elaborations.

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
MATH251	Linear Algebra	Yes	Course Instructors	- Provide Supporting Material - Provide resources for online self-study
IT242	Software Engineering	Yes	Course Instructors	- Stress on writing pseudocodes and do complexity measurements. - Update the blackboard by adding the improved chapters - Slides that explain the same concepts content should be merged. - Conduct domain-expert sessions.
IT241	Operating Systems	Yes	Course Instructors	- Add more examples to the slides to make the concepts more clear.
MGT101	Principals of Management	Yes	Course Instructors	- Upgrade of the Course/PPT to 8th edition. - Rephrase of Course Learning Outcomes.
ISLM102	Islamic Culture 2	Yes	Course Instructors	- None.
IT243	System Analysis and Design	Yes	Course Instructors	- Increase the number of lectures covering the concept of object oriented modeling using UML. - Include a practical component that demonstrate the use of UML tools (e.g. Rational Rose). - The syllabus and textbook should be updated providing treatment of latest topics in the area. - Improve the lecture slides using the latest design tools available in PowerPoint.
IT244	Introduction to Database	Yes	Course Instructors	- Some chapters do not need more than a week like Ch2, while some need more than a week like Ch3 and Ch4.
IT201	Human Computer Interaction	Yes	Course Instructors	- None
IT210	Computer Networks	Yes	Course Instructors	- Add some labs as assignments.
STAT101	Statistics	Yes	Course Instructors	- Update the power point presentations.
IT344	Database Management Systems	Yes	Course Instructors	- Improve the course contents.
IT230	Web Technologies	Yes	Course Instructors	- The 3 weeks contents on PHP should be adjusted in 2 weeks.
IT270	IT Project Management	Yes	Course Instructors	- New edition of the textbook should be adopted. - The curriculum should be updated to be in line with PMI standard. - Computer labs should be provisioned with the best IT project management tools.
IT340	Network Management	Yes	Course Instructors	- None.
E-COM101	E-Commerce	Yes	Course Instructors	- Improve the course PowerPoint slides. - Find Examples about e-commerce businesses in MENA region. - Add more discussion topics in discussion boards and case studies in Saudi Arabia with practical parts.
ISLM103	Islamic Culture 3	Yes	Course Instructors	- Support contents by videos.
IT490	Senior Project I	Yes	Course Instructors	- Better supervisor feedback. - Across Branch Evaluation Team.
IT440	System Integration	Yes	Course Instructors	- Design case study assessments.

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
IT342	Enterprise Systems	Yes	Course Instructors	- More illustrations should be included in lectures. - Change textbook with a recent edition. - Computer labs should be provisioned with a tool to help students deign huge EIS. IBM Rational Rose Enterprise Edition is the best due to its capability to integrate all EIS design phases into one tool, besides a powerful UML tool embedded within it.
IT446	Data Mining & Data Warehousing	Yes	Course Instructors	- Weeks 10 and 12 contents need to be modified. - Title of week 14 should be changed.
IT448	Mobile Application Development	Yes	Course Instructors	- Update the teaching materials. - Add practical sessions. - Remove iOS app development part from the content.
ISLM104	Islamic Culture 4	Yes	Course Instructors	- None.
IT491	Senior Project II	Yes	Course Instructors	- The supervisors need to put more stress on student participation in group meetings. - The supervisors should work more on polishing presentation skills of the students under their supervision. - Concentrate more on providing hardware projects.
IT445	Decision Support Systems	Yes	Course Instructors	- Real life case studies should be included in the assessments. - Machine learning tools (e.g., Weka) must be made available to students so that they can practice with different algorithms and observe the difference each one makes.
IT 441	Multimedia Systems Development	Yes	Course Instructors	- Design a course project that involves knowledge gained by the students in this particular course as well as reusing the skills acquired in the preceding courses. For example, students can be asked to design a computer/android game using Java multimedia technology. - Improve the slides for content and presentation.
IT407	Professional Issues	Yes	Course Instructors	- None
IT409	IT Security and Policies	Yes	Course Instructors	- To continue the case study as a group project. - Focus more on local policies than US policies. - More local case studies should be introduced.
IT499	Practical Training	Yes	Course Instructors	- The supervisors need to put more stress on student participation in group meetings. - The supervisors should work more on polishing presentation skills of the students under their supervision. - Concentrate more on providing hardware projects.

2. Students Evaluation of Program Quality

Evaluation Dates : 12/12/2019 and 30/04/2020	**Number of Participants: 3013**
Students Feedback	**Program Response**
Student Surveys can be accessed from here: **Strengths:** • The instructors use blackboard tools effectively.	The department encourages instructors to establish good communication with their students and use technology effectively to increase the befits of using technology to deliver course content more efficiently.

• The instructors were fully committed to the delivery of the course contents. • Course plan was made clear to me at the beginning of the course. • The instructors have good interaction with students.	
Areas for Improvement: • Some courses did not help students to improve the ability to think and solve problems. • Overall, students are not satisfied with the quality of some courses. • Overall, students did not find that courses develop their teamwork skills.	The department continuously evaluates courses and their contents to assure enabling students the ability to develop thinking and solving problems skills.
Suggestions for improvement: • Add more critical thinking teamwork assessments. • Enhancement to some courses contents are needed.	The department continuously evaluates courses and updates IT Program curriculum.

* Attach report on the students evaluation of program quality

3. Other Evaluations

(e.g. Evaluations by independent reviewer, program advisory committee, and stakeholders (e.g., faculty members, alumni, and employers)

Evaluation method: Feedback from employers	**Date: Semester 2 – 2019/2020**	**Number of Participants: 12**
Summary of Evaluator Review		**Program Response**
Strengths: • Students have a good knowledge of basic skills in networking, databases, and different programming techniques. • Students can work under pressure with many tasks and short timeline. • Students acts very well in teamwork.		Positive feedback reflects the strength of contents covered in the program courses.
Points for Improvements: • Advanced programming languages. • Multiplatform software development.		A new plan for the four programming courses have been developed and introduced to the IT Program. In addition, multiplatform programming language has been added to the course "Mobile Application Development". The IT department should work on adding latest technologies to the IT Program curriculum.
Suggestions for improvement • New and advanced programming techniques, need to be introduced to students. • Adding more Labs and practical tasks to students to improve their skills.		Plans to introduce lab sessions in Database and Network courses have been developed. The IT department should also work on adding latest technologies and lab sessions to the IT Program curriculum.

* 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)

The full analysis of KPIs for the IT program in 2019/2020 & 2020/2021 can be accessed Ref.2.36.

No	KPI	Target Benchmark	Actual Value	Internal Benchmark	Analysis	New Target Benchmark
1	Percentage of achieved indicators of the program operational plan objectives	100%	100%	90%	Achieved	100%
2	Students' Evaluation of quality of learning experience in the program	4.00	3.8	3.63	Students showed great appreciation for inclusion of practical work in the form of lab courses. The practical spec of the courses is being further extended to develop new hand on practices for more courses.	4.0
3	Students' evaluation of the quality of the courses	3.8	3.8	3.6	The students see that the courses were delivered effectively, with full commitment and good interaction. Also, the students reflect that the overall assessments were fear and aid them to do well in the course.	3.9
4	Completion rate	5%	Male: 1.5% Female:2.9% Total:1.9%	Male: 1.1% Female:1.2% Total:1.2%	In the common first year, there are some requirements to pass. The students should pass in STEP exam to continue in the program, because of that, the completion rate is low.	5%
5	First-year students retention rate	39%	Male: 35.1% Female:49.3 % Total:39.5%	Male: 33.1% Female:46.5% Total:36.8%	There is a significant improvement in the number of First-year students.	42%
6	Students' performance in the professional and/or national examinations	N.A	N.A	N.A	N.A	N.A
7	Graduates' employability and enrolment in postgraduate programs	Number of graduates who are employed = 40% Number of graduates who are enrolled in postgradu ate = 5%	Number of graduates who are employed = 45% Number of graduates who are enrolled in postgraduate = 0%	N.A	Achieved partially	Number of graduates who are employed = 60% Number of graduates who are enrolled in postgradu ate = 5%
8	Average number of students in the class	Male: less than 25 student per class Female: less than 25 student per class	Male:14.8 Female:17.4	Male:16 Female:18	The new value satisfies the value set by the Ministry of Education	Male: less than 25 student per class Female: less than 25 student per class

9	Employers' evaluation of the program graduates proficiency	4	4.07	3.86	Achieved	4.25
10	Students' satisfaction with the offered services	3.5	2.6	2.46	There is an improvement in the students satisfaction	3.5
11	Ratio of students to teaching staff	Male: less than 25 Female: less than 25	Male :20.2:1 Female:17.5:1	Male :21:1 Female:20:1	The new value satisfies the value set by the Ministry of Education	Male: less than 25 Female: less than 25
12	Percentage of teaching staff distribution	Assoc. Pro. = 10% Assist. Pro. =70% Lecturer = 20%	Assoc. Pro. = 4.23% Assist. Pro. =74.03% Lecturer = 20.19%	Assoc. Pro. = 2% Assist. Pro. =73% Lecturer = 25%	The distribution of teaching staff is well distributed and is expected to increase with joining assistant professors.	Assoc. Pro. = 10% Assist. Pro. =70% Lecturer = 20%
13	Proportion of teaching staff leaving the program	1%	0.96%	1.69%	There are some non-Saudi teaching staff who would like to go back to their countries.	1%
14	Percentage of publications of faculty members	70%	59.4%	N.A.	The result shows promising result about the publications for faculty members. It is increasing every year and this is due to the University and the college strategies in encouraging and enabling research and publications.	70%
15	Rate of published research per faculty member	2:1	1.5:1	N.A.	The rate is increasing and is expected to increase every year. The university and the college research and publication strategies seems to encourage and motivate facility members in collaborating in research and publication.	2.1
16	Citations rate in refereed journals per faculty member	9:1	9.11:1	N.A.	The result shows promising result about the publications for faculty members. This is expected to increase further due the university support in aiding and encouraging research and publication.	12:1
17	Satisfaction of beneficiaries with the learning resources	4.00	3.9	3.84	The level of satisfaction is improving due to training sessions and staff collaboration in utilizing the learning resources. Also, this is shown from the students survey feedback.	4.0

Comments on the Program KPIs and Benchmarks results :

The result of the KPIs analysis seems to show satisfactory results across all KPIs; Not to forget the strong impact of COVID-19 epidemic, still the KPIs shows that CCI and their faculty members were committed in delivering quality teaching experience for the students, as well in proceeding in research and publications.

5. Analysis of Program Evaluation

(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :

- The IT Program instructors use the Blackboard tools effectively.
- The IT Program instructors are fully committed to the delivery of the course.
- The IT Program instructors have good interaction with students.

Areas for Improvement:

- Monitor the quality of teaching and learning activities and regularly review the received feedbacks from the involved stakeholders (students, trainers, and employers) to improve the program outcomes and its KPIs and therefore strengthening the current curriculum.
- Updating the program curriculum according to the latest ACM/IEEE 2013 curriculum guidelines.

Priorities for Improvement:

- Improve the program outcomes and its KPIs and therefore strengthening the current curriculum based on the received feedbacks from the involved stakeholders (students, trainers, and employers).

G. Difficulties and Challenges Faced Program Management

Difficulties and Challenges	Implications on the Program	Actions Taken
The need to update the program curriculum to reflect the latest technologies.	More efforts were spent to keep the curriculum on the correct track.	Meetings were conducted with courses groups to update the syllabuses.
The need to update some course syllabuses due to adopting new textbooks for some course.	More efforts were spent to keep the curriculum on the correct track.	Meetings were conducted with courses groups to update the syllabuses.
Conducting labs issues	The procedures and manuals of lab sessions should be implemented.	Meetings were conducted with courses groups to identify the courses that need labs.
Equipments of labs in branches.	Labs with suitable number of computers equipped with podiums and data shows should be implemented in branches.	Not yet.

*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	Conducting more outreach to employers	Contact employers	Head of Department	Sep 2020/ 2021	Jun 2020/ 2021	Number of the employers	5

2	Activating academic Advising system across all branches	Form the advising groups	Dean & head of departments	Sep 2020/ 2021	Jun 2020/ 2021	Percentage of students with assigned academic advice	100%
3	Activate Research groups	Form the research groups	Dean & head of department	Sep 2020/ 2021	Jun 2020/ 2021	Number of research group	3
4	Offering extra tutorial classes for low achievers to improve their performance	Collect the names of low achievers	Head of department	Sep 2020/ 2021	Jun 2020/ 2021	Number of courses that have tutorials	10
5	Updating the program Curriculum according to the latest ACM/IEEE 2013 curriculum guidelines	Review the IT Program Curriculum	Head of department	Sep 2020/ 2021	Jun 2020/ 2021	Percentage of alignment	100%
6	Adding lab sessions for particular courses	Review the IT Program	Head of department with courses groups	Sep 2020/ 2021	Jun 2020/ 2021	Number of courses with labs	3

I. Report Approving Authority

Council / Committee	CCI Quality and Academic Accreditation Committee
Reference No.	01/2020
Date	8-September-2020

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)**