

COMPUTING ACCREDITATION COMMISSION

Summary of Accreditation Actions

2019-2020 Accreditation Cycle

Imam Abdulrahman Bin Faisal University Dammam, Saudi Arabia

Computer Information Systems (Bachelor of Science in Computer Information Systems)

Accredit to September 30, 2024. A request to ABET by January 31, 2023 will be required to initiate a reaccreditation evaluation visit. In preparation for the visit, a Self-Study Report must be submitted to ABET by July 1, 2023. The reaccreditation evaluation will be a comprehensive general review.

Cyber Security and Digital Forensics (Bachelor of Science in Cyber Security and Digital Forensics)

Accredit to September 30, 2024. A request to ABET by January 31, 2023 will be required to initiate a reaccreditation evaluation visit. In preparation for the visit, a Self-Study Report must be submitted to ABET by July 1, 2023. The reaccreditation evaluation will be a comprehensive general review.

This is a newly accredited program. Please note that this accreditation action extends retroactively from October 1, 2018.



COMPUTING ACCREDITATION COMMISSION

IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

DAMMAM, SAUDI ARABIA

FINAL STATEMENT OF ACCREDITATION

2019-20 ACCREDITATION CYCLE

IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

Dammam, Saudi Arabia

ABET COMPUTING ACCREDITATION COMMISSION

FINAL STATEMENT

VISIT DATES: DECEMBER 1-3, 2019 ACCREDITATION CYCLE CRITERIA: 2017-2018, 2019-2020

INTRODUCTION & DISCUSSION OF STATEMENT CONSTRUCT

The Computing Accreditation Commission (CAC) of ABET has evaluated the Bachelor of Science in Computer Information Systems program at Imam Abdulrahman Bin Faisal University during the 2019-20 cycle for possible accreditation under the CAC/ABET "Criteria for Accrediting Computing Programs" dated October 29, 2016. It has also evaluated the Bachelor of Science in Cyber Security and Digital Forensics program during the 2019-20 cycle for possible accreditation under the CAC/ABET "Criteria for Accrediting Computing Programs" dated November 2, 2018.

The statement that follows consists of two parts: the first addresses the institution and its overall educational unit, and the second addresses the individual programs.

A program's accreditation action is based upon the findings summarized in this statement. Actions depend on the program's range of compliance or non-compliance with the criteria. This range can be construed from the following terminology:

- **Deficiency** A deficiency indicates that a criterion, policy, or procedure is not satisfied. Therefore, the program is not in compliance with the criterion, policy, or procedure.
- Weakness A weakness indicates that a program lacks the strength of compliance with a criterion, policy, or procedure to ensure that the quality of the program will not be compromised. Therefore, remedial action is required to strengthen compliance with the criterion, policy, or procedure prior to the next review.
- **Concern** A concern indicates that a program currently satisfies a criterion, policy, or procedure; however, the potential exists for the situation to change such that the criterion, policy, or procedure may not be satisfied.
- **Observation** An observation is a comment or suggestion that does not relate directly to the current accreditation action but is offered to assist the institution in its continuing efforts to improve its programs.

REVIEW TEAM

The programs listed above were evaluated by the peer review team shown below.

- Program Evaluator Daniel Wayne Yoas, Pennsylvania College of Technology
- Program Evaluator Sutap Chatterjee, Verizon
- Visit Team Chair Hazem Said, University of Cincinnati-Main Campus
- Editor 1 Barbara Doyle, Jacksonville University
- Editor 2 Cary Laxer

Please note that program accreditation decisions are made solely by the respective Commissions of ABET. Reference to the professional affiliations of the volunteer peer evaluators in no way constitutes or implies endorsement or recommendation of the programs by the listed professional affiliations.

INFORMATION RECEIVED AFTER THE REVIEW

- Seven-Day Response No information was received in the seven-day response period.
- **30-Day Due-Process Response** Information was received in the 30-day due-process response period relative to the Computer Information Systems and Cyber Security and Digital Forensics programs.

INSTITUTIONAL SUMMARY

The Imam Abdulrahman Bin Faisal University, located in Dammam, Kingdom of Saudi Arabia, is a state-supported university under the general jurisdiction of the Ministry of Education. The history of the University goes back to 1975 when it was established as a branch of the King Faisal University in Dammam (KFU-Dammam). After thirty-four years, in September 2009, it became an independent university under the name of the "University of Dammam." Since that date, the University has grown into a leading research university with 21 colleges spread throughout the Eastern Province and a student population of over 45,000. On November 28, 2016 by the Royal Decree no. 29402, the name of the "University of Dammam" was modified to "Imam Abdulrahman Bin Faisal University" (IAU). In 2018, the University launched its 2018-2025 strategic plan to embody the choice of a "comprehensive university" model as a vehicle for achieving its mission of serving the country in general and the Eastern Province of Saudi Arabia in particular. The plan seeks to raise the level of organization of academic, research and community work in four separate but interconnected clusters: Health, Engineering, Sciences and Management, and Arts and Education. The University has separate campuses for female students and male students. Female faculty have offices on the Female campus and male faculty have offices on the Male campus. Administrative services are offered on both campuses under one organizational structure.

The College of Computer Science and Information Technology (CCSIT) is part of the sciences and management cluster. Since its establishment in 2010 the College has been committed to providing its students with an innovative and state-of-the-art computer science curriculum. The College offers four undergraduate BS programs: Computer Science; Computer Information Systems; Cyber Security and Digital Forensics; and Artificial Intelligence, which was launched in 2019. The College also offer an MS in Computer Science and plans to launch the MS in Computer Science and Analytics in 2020.

All undergraduate students in the College share the first two years of instructions with specific program courses offered in years three and four. In fall 2019, there were 1,464 undergraduate students enrolled across all programs in the College. The College has 73 full time faculty members.

Computer Information Systems

Bachelor of Science in Computer Information Systems Program

Evaluated under CAC Program Criteria for Information Systems and Similarly Named Computing Programs

INTRODUCTION

The BS in Computer Information Systems (CIS) is the sole program administered by the Department of Computer Information Systems. The CIS program was started in 2010, concurrently with the founding of the College. As of fall 2018 there are 235 students in the program and 58 students graduated. There are 30 faculty members in the CIS department.

PROGRAM WEAKNESS

Criterion 5. Curriculum

Recent curriculum revisions that (a) ensure that students can attain an understanding of and an ability to support the use, delivery and management of information systems within an information systems environment, (b) include technical and professional requirements of at least one year of up-to-date coverage of fundamental and advanced topics in the computing discipline associated with the program, and (c) include one-half year of course work in an information systems environment have not yet been fully implemented.

Progress Since Last Review

Actions Taken: The institution provided evidence that a new curriculum for the Computer Information Systems program (CIS) has been approved. The new curriculum includes three new required courses, replaces six required courses, modifies content for eleven required courses, and creates five new elective courses. Documentation verifying that the new curriculum has been approved through the institution's curriculum change process were provided. The institution provided the 2018-2019 course catalog that shows the new curriculum. The institution provided documentation that the old curriculum is still active for students until the 2020-2021 academic year. The new curriculum is deployed only to students enrolled in the first two common years during the 2018-2019 academic year. Due to prerequisite requirements, students enrolled in years three and four, the specialization years, remained under the old curriculum.

Evaluation: The new curriculum satisfies the requirements of Criterion 5 of the General Criteria and the Information Systems Program Criteria. However, four of the new courses, Enterprise Architecture, Organizational Behavior, Business Strategy, and Organizational Performance Management, will not be available until the second semester of the 2019-2020 academic year and the 2020-2021 academic year. As the new curriculum will not be fully implemented until after the 2020-2021 academic year, the potential exists for the curriculum to not meet all the requirements of this criterion.

The program weakness is now cited as a program concern.

30-Day Due-Process Response

Summary: The program provided the syllabi for two of the courses: Enterprise Architecture and Organizational Behavior. In addition, the program provided documentation that these two courses were offered in the Spring 2020.

Evaluation: The program is on track to complete the implementation of the new curriculum. However, two of the new courses (Business Strategy and Organizational Performance Management) will not be available until the 2020-2021 academic year. Until the full curriculum is implemented, the potential exists for the curriculum to not meet all the requirements of this criterion.

Status

The program concern is unresolved.

Cyber Security and Digital Forensics

Bachelor of Science in Cyber Security and Digital Forensics Program

Evaluated under CAC Program Criteria for Cybersecurity and Similarly Named Computing Programs

INTRODUCTION

The Cyber Security and Digital Forensics program is administered by the Department of Computer Science and it is in the process of moving to a new department of Computer Networks. In addition to the BS in Computer Security and Digital Forensics major, the Department of Computer Science administers an ABET accredited BS degree in Computer Science and a Master's degree in Computer Science. All programs are appropriately distinguished in publications.

In the fall of 2019, 90 students were enrolled in the Cyber Security and Digital Forensics program (years three and four). The program graduated 50 students since its inception in the 2016-2017 academic year. There are 44 faculty members in the department.

PROGRAM CONCERNS

1. Criterion 4. Continuous Improvement

This criterion requires that the program must regularly use appropriate, documented processes for assessing and evaluating the extent to which the student outcomes are being attained. The program uses performance indicators (PI's) to measure the attainment of each of the student outcomes (SO's) using direct and indirect methods. The program uses a mathematical average to aggregate the attainment of each PI into a numerical value representing the attainment of the SO. However, each PI measures a separate component of the SOs and as such a mathematical average may not appropriately indicate how each PI contributes to the SOs. While the program does evaluate the attainment of each PI independently, the potential exists that the attainment

of the SO may not be correctly evaluated.

30-Day Due-Process Response

Summary: The program updated the reporting process and eliminated the use of the mathematical average to aggregate the attainment of each PI into a value representing the attainment of the SO. The program provided updated assessment data for each SO and its associated PI.

Evaluation: The updated process ensures that the attainment of the SO is correctly evaluated.

The program concern has been resolved.

2. Criterion 6. Faculty

The following factors contribute to this concern:

a. The criterion states that the faculty serving in the program must be of sufficient number to maintain continuity, stability, oversight, student interaction, and advising. The College has grown by 60% in the last four years and the program has doubled its enrollment in the last year. The University has allocated resources to recruit new faculty and offers scholarships to its graduates to obtain advanced degrees. While the number of faculty members in the program is currently sufficient, the continued growth of the program has the potential to outpace the rate of hiring of new faculty leading to insufficient number of faculty supporting the program.

b. The criterion also states that the competence of faculty members must be demonstrated by such factors as education, professional credentials and certifications, professional experience, ongoing professional development, contributions to the discipline, teaching effectiveness, and communication skills. The faculty are engaged in some level of discipline-based professional development and the University established a Deanship for Academic Development that offers various professional development activities to faculty that focus on teaching and learning. However, the need for discipline-based professional development for current faculty is not at the same level of priority. As the skills for the Cyber Security and Digital Forensics discipline continue to evolve rapidly, the potential exists for faculty members to miss on new advances or best practices.

30-Day Due-Process Response

Summary: Factor a: The program provided evidence that it approved and posted advertisement for three new faculty positions in the area of Cybersecurity and Forensics and nine new positions for the general courses (first two years courses).

Factor b: The program created plans to initiate discipline-based professional development activities through the Teaching and Learning unit and the research groups within the college. In addition, the program indicated that the Deanship of Scientific Research has allocated funding to cover travel for approved research projects.

Evaluation: Factor a: Once hired, the three new faculty positions will increase the number of faculty members in the program. However, the faculty have not been hired yet and as such, the potential exists for the faculty supporting the program to be of insufficient number.

Factor b: The new discipline-based professional development activities has the potential to ensure faculty members remain current in the discipline. However, the activities have not started yet.

The program concern is unresolved.

3. Criterion 7. Facilities

The following factors contribute to this concern:

a. The criterion states that classrooms, offices, laboratories, and associated equipment must be adequate to support attainment of the student outcomes and to provide an atmosphere conducive to learning. The program has separate buildings for female and male students and faculty. The male students and faculty recently moved to a new building that offers more than adequate facility. However, the building allocated to the female students and faculty has reached its capacity. In the fall of 2019, 71% of the students in the program were female. With the current growth rate for the college and the program, the potential exists for the facilities allocated to female students and faculty to no longer be adequate to provide an atmosphere conducive to learning.

b. The criterion states that modern tools, equipment, computing resources, and laboratories appropriate to the program must be available, accessible, and systematically maintained and upgraded to enable students to attain the student outcomes and to support program needs. The program offers general laboratories that are available 24/7. However, these labs do not have the advanced tools and computing resources required for the Cyber Security and Digital Forensics courses. The program continues to grow and the need for students to have continued access to the specialized labs to practice their skills continues to grow. Students indicated that they currently have access to the specialized labs during class time and in the presence of instructors. However, with the growth of the program, the potential exists that the students may not have sufficient access to modern tools and computing resources to attain the student outcomes.

30-Day Due-Process Response

Summary: Factor a: The program provided documentations that shows university approval of the construction of a new building for the female students and faculty. In addition, the program indicated that the institution will assign the unused space on the male campus to female faculty and students.

Factor b: The program provided documentation indicating that the software packages installed in the specialized labs are now installed in the general labs as well.

Evaluation: Factor a: the institution has a plan to ensure adequate facility for the female campus to accommodate enrollment growth.

Factor b: the availability of the computing resources and advanced tools in the general labs will ensure that students have access to the resources they need to attain the student outcomes.

The program concern has been resolved.

4. Criterion 8. Institutional Support

This criterion states that institutional support and leadership must be adequate to ensure the quality and continuity of the program. The Dean of the College is currently carrying the responsibilities of the Chair of the Department in addition to the duties of the Dean. With the current rate of growth of the College, this combined responsibilities may have the potential to impact the quality and continuity of the program.

30-Day Due-Process Response

Summary: The program shared a restructuring plan to split the Computer Science department into three departments with three different chairs. The plan will ensure distribution of responsibilities between the Dean and the chairs.

Evaluation: When implemented, the restructuring plan will ensure that the leadership support for the program is adequate to ensure its quality and continuity. However, the restructuring plan has not been completed yet.

Status

The program concern is unresolved.

IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

Dammam, Saudi Arabia

ABET COMPUTING ACCREDITATION COMMISSION

FINAL STATEMENT

VISIT DATES: DECEMBER 1-3, 2019 ACCREDITATION CYCLE CRITERIA: 2017-2018, 2019-2020

SUMMARY

The following is a summary of this evaluation for Imam Abdulrahman Bin Faisal University during the 2019-20 cycle:

Computer Information Systems Program

Program Concerns:

Criterion 5, Curriculum. Until the full curriculum is implemented including the Business Strategy and Organizational Performance Management courses, the potential exists for the curriculum to not meet all the requirements of this criterion.

Cybersecurity and Digital Forensics Program

Program Concerns:

Criterion 6, Faculty. The continued growth of the program has the potential to outpace the rate of hiring of new faculty leading to insufficient number of faculty supporting the program.

Criterion 8, Institutional Support. In addition to the responsibility of the College, the Dean currently oversees the Department of Computer Science as well. With the current rate of growth of the College, this combined responsibility may have the potential to impact the quality and continuity of the program.