Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic
Accreditation Accreditation Department

Strategic Guide Cyber Security Technique

2025

Introduction:

The educational program is considered a coordinated and organized package of academic courses that includes procedures and experiences organized in the form of academic vocabulary, the main purpose of which is to build and refine the skills of graduates, making them qualified to meet the requirements of the labor market. It is reviewed and evaluated annually through internal or external audit procedures and programs such as the external examiner program.

The description of the academic program provides a summary of the main features of the program and its courses, indicating the skills that students are working to acquire based on the objectives of the academic program. The importance of this description is evident because it represents the cornerstone of obtaining program accreditation, and the teaching staff participates in writing it under the supervision of the scientific committees in the scientific departments.

This guide, in its second edition, includes a description of the academic program after updating the vocabulary and paragraphs of the previous guide considering the latest developments in the educational system in Iraq, which included a description of the academic program in its traditional form (annual, quarterly), in addition to adopting the description of the academic program circulated according to the book of the Department of Studies 3/2906. On 10/1/2025 about programs that adopt the Bologna Process as a basis for their work.

In this area, we can only emphasize the importance of writing descriptions of academic programs and courses to ensure the smooth conduct of the educational process.

Concepts and terminology:

Academic program description: The academic program description provides a summary of its vision, mission, and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course description: It provides a necessary summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he has made the most of the available learning opportunities. It is derived from the program description.

Program vision: An ambitious picture for the future of the academic program to be an advanced, inspiring, motivating, realistic and applicable program.

Program message: It briefly explains the objectives and activities necessary to achieve them and identifies the program's development paths and directions.

Program Goals: They are statements that describe what the academic program intends to achieve within a specific period and are measurable and observable.

Curriculum structure: All courses/study subjects included in the academic program according to the approved learning system (semester, annual, Bologna track), whether it is a requirement (ministry, university, college, or scientific department), along with the number of study units.

Learning Outcomes: A compatible set of knowledge, skills, and values that the student has acquired after successfully completing the academic program. The learning outcomes for each course must be determined in a way that achieves the program objectives.

Teaching and learning strategies: They are the strategies used by a faculty member to develop student teaching and learning, and they are plans that are followed to reach learning goals. That is, it describes all curricular and extracurricular activities to achieve the learning outcomes of the program.

Academic Program Description Form
Name of the University: College/Institute: Ibn Khaldun University College
Scientific Department: Cybersecurity Engineering Technologies
Name of the Academic or Professional Program: Bachelor's Degree in Cybersecurity Engineering Technologies
Name of the Final Certificate: Bachelor's Degree in Cybersecurity Engineering Technologies
Study System: Bologna Process
Date of Preparing the Description: January 2, 2026
Date of Completing the Form: January 2, 2026

Signature:

Name of the Assistant Dean for Scientific Affairs:

Date:

Signature:

Name of the Head of the Department:

Date:

Reviewed by the Quality Assurance and University Performance Division
Name of the Director of the Quality Assurance and University Performance Division: Assistant Professor Dr. Mohsen Abdulredha Al-Himyari
Date:
Signature:

Approval of the Dean
Signature:

1. Program vision
The program vision is to achieve excellent quality andleadership in; all academic and professional aspects of aeronautical, community service and research activities in the field of Aeronautical engineering.

2. Program message
The program message is that the department's graduates should contributes to meet the country's needs in the field of Aeronautic engineering technology (academic and research) and all public and other private sectors.

3.Program objectives
The program objective is to prepare engineering cadres in specialty of Aeronauticaltechnology engineering, who are responsible for studying the country's need for development and progress. To provide the labor market and industry sectors with professional engineers that can pursuing postgraduate studies to adapt to modern technical development.

4.Programmatic accreditation
AICBA

5. Other external influences
Laboratories, library

6.Program structure				
Program structure	Number of courses	Unit of study	percentage	Notes*
Organization requirements	1	4	%9	Basic
College requirements	6	21	%11	Basic
Department requirements	23	111	%60	Basic
summer training	2			
Other				

*

All of these values are identical to the Department of cyber security Engineering/ Electrical Engineering Technical College / Middle Technical University - Baghdad, because we are the university affiliated with them.

Certificates and Credit Hours	Program Structure				
	ECTS	Module Name	Module Code	Level / Year	
Bachelor's Degree Requires (174) Credit Hours	5	Linux Administration	BCYSCE105-S1	First Semester	First Stage \ Bologna System
	7	Fundamentals of Programming	BCYSCE102-S1		
	6	Fundamentals of Electrical Engineering	BCYSCE104-S1		
	3	Introduction to Sociology	BCYSCE103-S1		
	2	Human rights and Democracy	NTU100		
	5	Mathematic	BCYSCE100-S1		
	2	English Language	NTU101		
	30				
	7	Digital Electronics	BCYSCE101-S2	Second Semester	
	5	Introduction to Probability and Statistics	BCYSCE106-S2		
	2	Computer	NTU102		
	7	Object oriented programming	BCYSCE107-S2		
	7	Introduction to cyber security Engineering	BCYSCE108-S2		
	2	Arabic Language	NTU103		

	2	Physical Education	NTU104		
	30				

Certificates and Credit Hours	Program Structure				
	ECTS	Module Name	Module Code	Level / Year	
Bachelor's Degree Requires (174) Credit Hours	4	Computer Electronics	BCYSCE200-S1	First Semester	Second Stage \ Bologna System
	4	Discrete Math	BCYSCE205-S1		
	4	Database Systems	BCYSCE202-S1		
	5	Python Programming for Cyber Security	BCYSCE204-S1		
	4	Operating System	BCYSCE203-S1		
	2	Bath Party Crimes	NTU203		
	2	English Language	NTU200		
	5	Computer Networks	BCYSCE200-S1		
	30				
	4	Data Structures	BCYSCE205-S2	Second Semester	
	5	Database Security	BCYSCE202-S2		
	5	Computer Organization and Architectures	BCYSCE304-S2		
	6	Networks Security	BCYSCE203-S2		
	2	Arabic Language	NTU202		
	2	Cyber Security Professional ethics	NTU204		
	4	Network Administration and Infrastructure	BCYSCE201-S1		
	2	Computer	NTU201		
	30				

7. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Learning outcome

a) Knowledge and Understanding outcome: People graduated from the program have the following skills;

a-1- A high level of understanding and knowledge in building, analyzing and developing Aeronautical Engineering ideas.

a-2- They are able to analyze engineering and scientific problems by applying suitable laws in science, mathematics and engineering and to abide by the instructions for any effectiveness in the organizational and administrative framework in the implementation of a project or facing an engineering problem, solving and evaluating it and submitting a proposal or a plan or reformulating it, translating or interpreting it.

a-3- The student should be able to speak and write in an effective scientific and engineering style in Arabic and English.

a-4- Motivating our students to actively participate in the renaissance and progress of society through holding seminars, conferences, continuing education, and providing academic consultations in the fields of Aeronautical Engineering Technique.

a-5- The student should be able to do, scientific and applied research, in Aeronautical techniques fields for the purpose of solving industrial problems.

b) Subject-specific skills.

b-1 - The ability to use the techniques and tools of Aeronautical engineering in its two branches of networks, and electronics.

b-2 - Analyzing technical problems and providing a suitable solution.

b-3 - Scientific investigation and evaluation.

c) Thinking skill

c1 - Using brainstorming to bring out the creative ideas of some gifted students.

c2 - Developing scientific research skills using the internet to broaden the horizon of knowledge.

c3 - Encouraging the development of engineering thinking for students in memorization and guessing and motivating it towards critical thinking before rememberingat certain stages.

c4 - Presenting the engineering problem or design and asking to think about all possible solutions and developments.

d)other skills

d1- Connection, communication, and information technology skill.

d2 – Co-operation and teamwork skill.

d3 – English and Arabic Language skill (include reading, writing, and listening) which can help in the art of listing, persuasion and dialogue.

d4 – Acquiring leadership quality, memory power, fast intuitive and ability to predict and extrapolate.

B. Teaching and Learning Methods

There are many teaching and learning methods used in the Department of Aeronautical Engineering Technique. The learning is done through practical applications, and theoretical lectures using traditional board teaching, PPT presentation, discussion groups, and seminars, and student is always asked to investigate topics and problems through the internet. The method of Bologna System will apply starting this academic year.

C. Assessment methods

1. Seminars.
2. Academic debate, oral dialogue, semester and final theoretical and practical written examinations.
3. Writing and submitting reports and taking notes on the technical expertise gained in the field visits.

The department has relied on clear and high-quality assessment methods and tools in order to

maintain the good quality and high scientific reputation of the graduation. The quality of the graduateis very important since it constitutes the final product of the educational process.The most important methods of assessment usedin the department are:

a) Objective tests: The goal of the test is to measure the ability of students to recognize and assimilate engineering facts. This can be done using the followings:

a-1- True and False Questions.
a-2- Multiple choice questions.
a-3- Interview questions (blank questions).
a-4- Completion questions.

b) Engineering tests: the goal of the test is to measure the ability of student to understand scientific subjects and engineering principles, recall, relate and interpret as well as the ability to analyse data and use it to diagnose engineering problems. This can be done using the followings:

b-1- Connectivity Test / Open Questions.
b-2- Questions that have a definite answer.

c) Other tests:

c-1- Seminars.
c-2- Academic debate, oral dialogue, semester and final theoretical and practical written examinations.
c-3- Writing reports
c-4- Field visits.

8. The teaching staff							
Teaching staff							
Academic rank	specialty		Special requirements/skills (if applicable)				
	general	Exact			employee	lecturer	
Assist Lecturer. Muslem Hamadi	ComputerEngineering	Software			√		
Assist Lecturer. Rana majeed	Computerand Electronic Engineering	Artificial intelligence			√		

9. Professional development
Orienting new faculty members
Training and development of professors: By providing training programs and workshops for faculty members to develop their educational skills and update their academic knowledge in the field of refrigeration and air conditioning. Which enhances the quality of teaching and learning in the specialty.
Professional development for faculty members
Professional development for faculty members is considered important to enhance their competence and improve their performance in the field of teaching. Faculty can develop their skills by attending workshops and training courses, and participating in educational seminars and conferences. They can also exchange knowledge and experiences with colleagues in the field, and use technology to improve the teaching process. This helps them innovate and improve the quality of education they provide to students.

10. Acceptance criterion
Students in the Department of Aeronautical Polytechnic Engineeringare accepted from graduates of preparatory studies in its scientific stream, with a grade of 60%, and the graduation requirements are: - Performing 136 course hours over the years of study - Passing the prescribed exams with a grade of 50% or more - Performing summer training before the final stage. - Submitting graduation research in one of the specialty topics.

11. The most important sources of information about the program
Iraqi government universities and international universities related to the specialty.

12. Program development plan
Analyze the current situation: by evaluating the current curriculum and analyzing its strengths and weaknesses. Search for opportunities for improvement and identify areas that need development. Setting goals: Setting the main goals for developing the academic curriculum is considered one of the most important steps in developing any program, as the goals can include increasing educational quality, improving the student experience, and enhancing academic development and personal development. Continuous evaluation and review: By conducting periodic evaluation and review of the curriculum and teaching methods and communicating with students and professors to collect observations and comments. Use this feedback to improve and enhance your academic curriculum.

13. Curriculum Skills Map

please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

Thinking Skills				Subject-specific skills		Knowledge And understanding				Core / Option	Course Title	Course Code	**Year/ Level**
C4	C3	C2	C1	B2	B1	A4	A3	A2	A1				
√	√	√	√	√	√			√	√	**S**	Mathematics		**first Year**

												CS101
√	√		√	√	√	√	√	√	√	**B**	Linux Administrator	CS102
√	√	√	√	√	√	√		√	√	**B**	Fundamentals of Programming	CS103
√	√		√	√	√	√	√	√	√	**C**	Fundamentals of Electrical Engineering	CS104
	√	√	√		√	√	√	√	√	**C**	Introduction to Sociology	CS105
	√	√	√	√	√	√	√	√	√	**C**	Human rights and Democracy	CS106
√	√	√	√	√		√	√	√	√	**B**	**Digital**	**CS107**

											Electronics		
	√	√	√	√	√	√	√		√	**C**	**Introduction to Probability and Statistics**	**CS109**	
√	√	√	√	√	√	√	√	√	√	**C**	**Object oriented programming**	**CS108**	
		√	√		√	√	√		√	√	**B**	Introduction to Cyber security Engineering	**CS110**
			√	√	√	√	√	√	√	√	**B**	**Computer**	**CS111**
		√	√	√	√		√	√	√	√	**B**	**Arabic**	**CS112**

•Please check the boxes corresponding to the individual learning outcomes from the program subject to evaluation