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

Academic Program and Course Description Guide

2024

Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

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

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have 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 sophisticated, inspiring, stimulating, realistic and applicable.

Program Mission: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

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

Curriculum Structure: All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

Teaching and learning strategies: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

Academic Program Description Form

University Name: University of Technology

Faculty/Institute: Computer Science

Scientific Department: Multimedia

Academic or Professional Program Name: Multimedia

Final Certificate Name: B.Sc. in Computer Science / Multimedia

Academic System: Courses

Description Preparation Date: 20/2/2024

File Completion Date: 20/3/2024

Signature:

Head of Department Name:

Rana Mohammed Hassan Zeki

Date: 1/4/2024

Signature:

Scientific Associate Name:

Abeer Tariq Maolood

Date: 2/4/2024

The file is checked by: Nada Najeel Kamal

Quality Assurance and Performance Evaluation Division

Director of the Quality Assurance and Performance Evaluation Division

Date: 1/4/2024

Signature:

Approval of the Dean

Prof. Dr. Alaa Kadhim Farhan

2024/4/4

1. Program Vision

The department aspires to prepare and qualify competencies in the field of multimedia, making it a leading model to be emulated in the field of multimedia.

2. Program Mission

The branch's mission is to prepare distinguished cadres to meet the requirements of the labor market and are able to interact with other scientific fields by providing students with basic skills in using, designing, and analyzing multimedia applications (texts, audio, images, and video).

3. Program Objectives

1. Graduating students qualified to work in the field of multimedia and able to compete in the labor market.
2. Understand and support the relationship of multimedia with community needs.
3. Developing the field of knowledge
4. Encouraging scientific research in the fields of theoretical and practical multimedia.
5. Introducing students to methodological methods in analyzing and designing multimedia applications.

4. Program Accreditation

nothing

5. Other external influences

Desk research - extracurricular activities - volunteer activities - awareness activities - others

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	6	Depending on the course between 3 and 1	14%	Basic
College Requirements	15	Depending on the course between 2 and 3	33%	Basic
Department Requirements	21	Depending on the course between 2 and 3	50%	Basic
Summer Training	yes	-	-	-
Other	1	3	%3	Basic

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
Second year/first semester	CSCL2112	Object Oriented Programming I	2	2
	CSCL2114	Data Structures	2	2
	CSCL2116	Mathematics III	2	2
	CSCL2118	Database Foundation	2	2
	CSCL2123	Baath party crimes	2	–
	CSMM2104	Information Theory	2	–
Second year/second semester	CSCL2213	Object oriented programming II	2	2
	CSCL2215	Sorting and Searching Algorithms	2	2
	CSCL2217	Numerical Analysis	2	2
	CSCL2219	DataBase Design	2	2
	CSCL2224	Human Rights and democracy	2	–
	CSC2222	English Language II	2	–
	CSMM2205	Software Engineering II	2	2
	CSMM2206	Coding Techniques	2	–
	CSCL3123	Microprocessor	2	2

Third year/first semester	CSCL3125	Computation Theory	2	2–
	CSCL3131	Image processing I	2	2
	CSCL3133	English Language III	2	–
	CSMM3107	Intelligent Search Methods	2	2
	CSMM3108	2D Computer Graphics	2	2
	CSMM3109	Digital Signal Processing	2	–
	CSMM3110	Animation	2	–
Third year/second semester	CSCL3224	Computer Architecture	2	2
	CSCL3226	Compiler Design	2	2
	CSCL3232	Image processing II	2	2
	CSMM3211	3D Modelling and Rendering	2	2
	CSMM3212	Geographic Information System	2	–
	CSMM3213	Digital Audio	2	–
	CSMM3214	Adaptive systems	2	2
Fourth year/first semester	CSCL4134	Static Web Programming	2	2
	CSCL4136	Operating System I	2	2
	CSMM4115	Multimedia Security I	2	2
	CSMM4117	Computer Network	2	2
	CSMM4118	Data Compression	2	2
	CSMM4119	Digital Video	2	–
fourth year/second	CSCL4235	Dynamic Web Programming	2	2
	CSCL4237	Operating System II	2	2
	CSCL4242	English Language IIII	2	–

semester	**CSMM4216**	**Multimedia Security II**	**2**	**2**
	CSMM4220	**Multimedia Communication Network**	**2**	**2**
	CSMM4221	**Multimedia Data Compression**	**2**	**2**
	CSMM4222	**Pattern Recognition**	**2**	–
	CSCL444	**Project**	**2**	**2**

8. Expected learning outcomes of the program

Knowledge	
A	1- To learn programming languages 2- It enables the student to gain knowledge in basic subjects In addition to basic information related to program implementation through understanding the operation of the computer. 3- The student will gain knowledge in basic subjects, especially computer science and multimedia sciences (image - audio - text - video) and keep up with the study subjects. 4- Increase the student's knowledge of implementing the basic system by understanding the computer's work process

Skills	
B	1- Theoretical 2- Practical 3- Summer training 4- Graduation research
Ethics	
C	1- Committing to ethics. 2- Learning of team work. 3- Producing innovative solutions the serve the community. 4- Serving the community through producing beauty with the digital products.

9. Teaching and Learning Strategies

1- Theoretical lectures (explaining the scientific material to students in detail).

2- Practical laboratories (application of programs within the laboratory)

3- Discussion groups within practical lessons

4- Research and investigation

5- Students' participation in solving additional homework assignments

6- Discussion and dialogue about vocabulary related to the topic

7- Graduating a student who is a lifelong learner

10.Evaluation methods

1- Attendance and oral and written examinations

2- Individual or group reports

3- Class discussions

4- Assess assignments and discussions

5- Weekly, monthly and daily exams and the end of the year exam

6- In addition to extracurricular reports and activities.

11.Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Mr.	0	3				
Assistant Professor	0	2				
Teacher	1	3				

assistant teacher	2	3				

Professional Development

Mentoring new faculty members

−Urging them to participate in the Continuing Education Division's courses and other scientific activities and academic workshops

−Supporting them to participate in external conferences and various community service activities

− Conduct weekly seminars and presentations to develop the skill of teaching members in giving lectures or scientific research and methods of effective communication with the audience.

Professional development of faculty members

−Participation in the teaching competency course

−The college works to improve the performance of the teaching staff and enhance their progress by urging them to publish sound scientific studies

Contributing to the establishment of courses and seminars or supervising their organization −

− Cooperating with other institutions to establish educational activities aimed at addressing gaps in knowledge and skills

12.Acceptance Criterion

Central admission from the Ministry of Higher Education and Scientific Research based on the student's grades in the sixth grade. There are also multiple channels for admission, including (general admission − the distinguished channel − the families of the

martyrs – the parallel channel – the foreign students channel, in addition to direct admission channels such as the elite channel and the first in professional institutes)

13.The most important sources of information about the program
1- Course resources for the Computer Science Department/Multimedia Branch 2-The website of the Department of Computer Science/Multimedia Branch/University of Technology in Arabic and English https://cs.uotechnology.edu.iq/index.php/ar/branches/mu 3-The website of the Ministry of Higher Education and Scientific Research https://mohesr.gov.iq/ar/research_centers 4- Computer Science Department page on social networking sites https://cs.uotechnology.edu.iq/index.php/ar 5- Advertisements installed in the department's corridors

14. Program Development Plan
Updating and developing curricula according to the requirements of the labor market through the work of committees responsible for updating curricula. - Directing students' research towards applied projects that address societal problems.

− Methodological books − Resources (Internet and library) − Lectures supported by illustrative examples − Theoretical lectures − Practical laboratories − Practical tasks − Using modern devices to present practical ideas to students (show data−board electronic)

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
Second Year – First Semester	CSCL2112	Object Oriented Programming I	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSCL2114	Data Structures	Basic		✓		✓	✓				✓	✓	✓	✓
	CSCL2116	Mathematics III	Basic		✓	✓	✓	✓	✓			✓	✓		✓
	CSCL2118	Database Foundation	Basic	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
	CSCL2123	Baath party crimes	Basic					✓				✓	✓	✓	✓
	CSMM2104	Information Theory	Basic	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
Second Year – Second Semester	CSCL2213	Object oriented programming II	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSCL2215	Sorting and Searching Algorithms	Basic	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
	CSCL2217	Numerical Analysis	Basic	✓	✓			✓	✓		✓	✓	✓	✓	✓
	CSCL2219	DataBase Design	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSCL2224	Human Rights and democracy	Basic					✓				✓	✓	✓	✓
	CSCL2222	English Language II	Basic					✓				✓	✓	✓	✓
	CSMM2205	Software Engineering II	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM2206	Coding Techniques	Basic	✓	✓	✓	✓	✓				✓	✓	✓	✓

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Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
Third Year – First Semester	CSCL3123	Microprocessor	Basic	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
	CSCL3125	Computation Theory	Basic	✓	✓	✓	✓	✓				✓	✓	✓	✓
	CSCL3131	Image processing I	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSCL3133	English Language III	Basic		✓			✓				✓	✓	✓	✓
	CSMM3107	Intelligent Search Methods	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM3108	2D Computer Graphics	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM3109	Digital Signal Processing	Basic	✓	✓	✓	✓	✓				✓	✓	✓	✓
	CSMM3110	Animation	Basic	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓

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Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
Third Year – Second Semester	CSCL3224	Computer Architecture	Basic	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
	CSCL3226	Compiler Design	Basic	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
	CSCL3232	Image processing II	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM3211	3D Modelling and Rendering	Basic	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM3212	Geographic Information System	Basic	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
	CSMM3213	Digital Audio	Basic	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
	CSMM3214	Adaptive systems	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
Fourth Year – First Semester	CSCL4134	Static Web Programming	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSCL4136	Operating System I	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM4115	Multimedia Security I	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM4117	Computer Network	Basic	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM4118	Data Compression	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM4119	Digital Video	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
Fourth Year – Second Semester	CSCL4235	Dynamic Web Programming	Basic	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓
	CSCL4237	Operating System II	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSCL4242	English Language IIII	Basic					✓				✓	✓	✓	✓
	CSMM4216	Multimedia Security II	Basic	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓
	CSMM4220	Multimedia Communication Network	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM4221	Multimedia Data Compression	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CSMM4222	Pattern Recognition	Basic	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
	CSCL444	Project	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓