Republic of Iraq
Ministry of Higher Education & Scientific Research
Supervision and Scientific Evaluation Directorate
Quality Assurance and Academic Accreditation
International Accreditation Dept.

Academic Program Specification Form for the Academic Year 2020-2021

University: University of Technology
College : Computer Sciences Department – Information Systems
Number Of Departments in The College : 6
Date of Form Completion: 9-6-2021

Programme Mager's Name :
Assit. Prof. Dr. Shatha Habeeb Ja'afar
Date: June 2021
Signature

Quality Assurance and Evaluation Correction director: Nada Najeel Kamal
Date: June 2021
Signature:

Dean's Name: Dr. Aliaa Karim Abdul Hassan
Date: June 2021
Signature

أ.د. عليا كريم عبد الحسن
رئيس قسم علوم الحاسوب

Deans Assistant for Scientific Affairs: Nuha Jamil Ibrahim
Date: June 2021
Signature

TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

PROGRAMME SPECIFICATION

This Programme Specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the programme.

1. Teaching Institution	University of technology
2. University Department/Centre	Department of computer sciences
3. Programme Title	Information Systems
4. Title of Final Award	B.SC. in computer sciences
5. Modes of Attendance offered	courses
6. Accreditation	ABET
7. Other external influences	no
8. Date of production/revision of this specification	9-6-2021
9. Aims of the Programme	

1- The Information Systems Branch aims to build scientific knowledge for students in the field of designing and building systems and databases

2- Training students on how to manage projects

3 - Teaching students to build advanced databases to keep pace with the current development and to deal with the World Wide Web

4- Website design and update

5- Studying the concepts of building systems within the specifications of security and protection from hackers by teaching students the basic concepts of data security.

6- Teaching students on the modern programming languages that support the ORACAL information systems branch

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and understanding

A1- Learn the modern programming languages that support the systems branch

A2- Learn the methods and techniques of project management

A3- Learn how to build information systems

B. Subject-specific skills

B1 - Programming skills

B2 - Ability to analyze and design systems

B3 - Project management and activation on the Internet

Teaching and Learning Methods
1- Adoption of electronic illustrations DATA SHOW 2- Adopting quick daily tests without prior notification to students, and weekly tests with a prior mark for students 3- Opening the field of discussion within an open panel discussion on the topic and following up on its recent applications by giving assignments to students about urging modern applications of the scientific subject.
Assessment methods
1- Approving the evaluation of the student's participation in the hall 2- Daily and weekly tests 3- Semester test 4- Commitment to attend and adhere to modest dress
C. Thinking Skills C1- Questioning: Searching for new information by creating and raising questions. C2 - Conclusion: Thinking beyond the available information to fill the gaps in it. C 3- Comparing: Noting the similarities and differences between two or more things. C4- Classification: Putting things into groups according to common characteristics.
Teaching and Learning Methods
Practical laboratories that develop students' thinking skills Thought test questions overlap with other disciplines (software applications, artificial intelligence, computer security, networking)
Assessment methods Theoretical and practical tests

Reports on information systems, applications, and website languages

Small systems setup

D- General and transferable skills (or) other skills related to employability and personal development

D 1- The student has the ability to design and implement small projects

D 2- The student has the ability to work in a team

D 3- The student has the ability to establish and manage systems, analyze problems and address them

D4 - The student has the ability to deal with systems and design websites while maintaining the security of networks

Learning Methods

1. Theoretical lectures in class
2. Practical lectures in the laboratory
3. Adoption of electronic data show and Power point means
4. Adoption of modern books that are appropriate for the stage

Assessment methods

1. Semester exams
2. Sudden daily tests
3. Classroom posts and discussions
4. Homework

5. Doing small projects

13. Personal Development Planning

Graduate Studies

Research and projects

Participation in seminars and specialty conferences

14. Admission criteria.

Central Admission

15. Key sources of information about the programme

1. Labor market requirements
2. Keeping pace with scientific development

Software Curriculum

First Year Syllabus

منهج المرحلة الأولى

First Year – First Semester					
Subject Code	Subject in English	Number of Hours / Week			
		Theory	Lab	Tutorial	Units
CSCL1101	Structured Programming 1	3	2	1	4
CSCL1103	Mathematics 1	2	-	1	2
CSCL1105	Discrete Structure 1	2	-	-	2
CSCL1107	Computer Organization	2	-	1	2
CSCL1109	Introduction to Statistics	2	-	1	2
CSIS1101	Information System	2	-	-	2
CSCL1111	English Language 1	2	-	-	1
UT100	Work shop	-	2	-	2
		15	4	4	17

First Year – Second Semester					
Subject Code	Subject in English	Number of Hours / Week			
		Theory	Lab	Tutorial	Units
CSCL1202	Structured Programming 2	3	2	1	4
CSCL1204	Mathematics 2	2	-	1	2
CSCL1206	Discrete Structure 2	2	-	-	2
CSCL1208	Logic Design	2	2	1	3
CSCL1210	Probability Theory	2	-	1	2
CSIS1202	Information Technology	2	-	-	2
CSIS1203	E - Techniques	2	-	-	2
		15	4	4	17

Second Year – First Semester

	Subject in English	Number of Hours / Week			
		Theory	Lab	Tutorial	Units
CSCL2112	Object Oriented Programming 1	2	2	1	3
CSCL2114	Data Structures	2	2	1	3
CSCL2116	Mathematics 3	2	2	1	3
CSCL2118	Database Foundation	2	2	1	3
CSIS2104	Projects Management	2	-	1	2
CSIS1202	Information Technology	2	-	-	2
CSIS1203	E - Techniques	2	-	-	2
		14	8	5	18

Second Year – Second Semester

Subject Code	Subject in English	Number of Hours / Week			
		Theory	Lab	Tutorial	Units
CSCL2213	Object oriented programming2	2	2	1	3
CSCL2215	Sorting and Searching Algorithms	2	2	1	3
CSCL2217	Numerical Analysis	2	2	1	3
CSCL2219	DataBase Design	2	2	1	3
CSIS2205	System Analysis and Design	2	-	-	3
CSIS2206	IT Projects Management	2	2	-	3
CSCL2221	Democracy	2	-	-	1
CSCL2122	English Language 2	2	-	-	1
		16	10	4	20

Third Year – First Semester					
Subject Code	Subject in English	/ Week Number of Hours			
		Theory	Lab	Tutorial	Units
CSCL3123	Microprocessor	2	2	1	3
CSCL3125	Computation Theory	2	-	1	2
CSCL3127	Operations Research	2	-	-	2
CSCL3129	Knowledge Representation	2	2	-	3
CSIS2205	Distributed database	2	2	1	3
CSIS2206	Computer Graphic	2	2	1	3
CSIS2205	Web Information Systems	2	2	1	3
CSIS2206	English Language 3	2	-	-	1
		16	10	5	20

Third Year – Second Semester					
Subject Code	Subject in English	Number of Hours / Week			
		Theory	Lab	Tutorial	Units
CSCL3224	Computer Architecture	2	2	1	3
CSCL3226	Compiler Design	2	2	1	3
CSCL3228	Optimization	2	-	-	2
CSCL3230	Intelligent Searching Techniques	2	2	-	3
CSIS3208	DataWarehouse	2	-	1	2
CSIS3210	Gegraphic Information System	2	2	1	3
CSIS3212	Business Application Development	2	2	-	3
		14	10	4	19

Fourth Year – First Semester

Subject Code	Subject in English	/ Week Number of Hours			
		Theory	Lab	Tutorial	Units
CSCL4134	Static Web Programming	2	2	1	3
CSCL4136	Operating System 1	2	2	1	3
CSCL4138	Data Security 1	2	2	1	3
CSIS4113	Computer networking 1	2	2	1	3
CSIS4115	Soft Computing	2	2	1	3
CSIS4116	Information System Management	2	-	-	2
CSCL444	Project	2	2	-	3
		14	12	5	20

Fourth Year – Second Semester

Subject Code	Subject in English	Number of Hours / Week			
		Theory	Lab	Tutorial	Units
CSCL4235	Dynamic Web Programming	2	2	1	3
CSCL4237	Operating System 2	2	2	1	3
CSCL4239	Data Security 2	2	2	1	3
CSIS4214	Cloud computing foundations	2	-	1	2
CSIS4217	Data Analysis Methods	2	2	1	3
CSIS4218	Accounting information systems	2	-	-	2
CSCL444	Project	2	2	-	3
CSCL4142	English Language 4	2	-	-	1
		16	10	5	20

Curriculum Skills Map

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

				Programme Learning Outcomes															
Year / Level	Course Code	Course Title	Core (C) Option (O)	General and Transferable Skills (or) Other skills relevant to employability and personal development				Thinking Skills				Subject-specific skills				Knowledge and understanding			
				D4	D2	D2	D1		C3	C2	C1		B3	B2	B1		A3	A2	A1
First Year/ First Course	**CSCL1101**	**Structured Programming I**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL1103	**Mathematics I**	**C**						√	√	√		√	√	√		√	√	√
	CSCL1105	**Discrete Structures I**	**C**				√				√			√	√		√	√	√
	CSCL1107	**Computer Organization**	**C**								√			√	√		√	√	√
	CSCL1109	**Introduction to Statistics**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSIS1101	**Information System**					√			√	√		√	√	√		√	√	√
	CSCL1111	**English Language 1**	**C**	√	√	√	√			√	√		√	√	√			√	√
First Year/ Second Course	**CSCL1202**	**Structured Programming II**	**C**						√	√	√		√	√	√		√	√	√
	CSCL1204	**Mathematics II**	**C**				√				√			√	√		√	√	√
	CSCL1206	**Discrete Structures II**	**C**								√			√	√		√	√	√
	CSCL1208	**Logic Design**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL1210	**Probabilistic Theory**	**C**				√			√	√		√	√	√		√	√	√
	CSIS1202	**Information Technology**	**C**	√	√	√	√			√	√		√	√	√			√	√
	CSIS1203	**E - Techniques**	**C**								√			√	√		√	√	√
	UT101	**workshop**		√	√	√	√	√	√	√	√		√	√	√		√	√	√

Second Year/ First Course	**CSCL2112**	**Object Oriented Programming I**	**C**				√			√	√		√	√	√		√	√	√
	CSCL2114	**Data Structures**	**C**	√	√	√	√			√	√		√	√	√			√	√
	CSCL2116	**Mathematics III**	**C**				√				√			√	√		√	√	√
	CSCL2118	**Database Foundation**	**C**		√	√	√		√	√	√		√	√	√		√	√	√
	CSIS2104	**Projects Management**	**C**			√	√			√	√		√	√	√		√	√	√
	CSIS1202	**Information Technology**	**C**		√	√	√	√	√	√	√		√	√	√		√	√	√
	CSIS1203	**E - Techniques**			√	√	√			√	√			√	√		√	√	√
Second Year/ Second Course	**CSCL2213**	**Object oriented programming II**	**C**				√			√	√			√	√		√	√	√
	CSCL2215	**Sorting and Searching Algorithms**	**C**	√	√	√	√			√	√			√	√		√	√	√
	CSCL2217	**Numerical Analysis**	**C**				√				√				√				√
	CSCL2219	**Database Design**	**C**				√			√	√			√	√		√	√	√
	CSIS2205	**System Analysis and Design**	**C**	√	√	√	√			√	√			√	√		√	√	√
	CSIS2206	**IT Projects Management**	**C**				√				√				√				√
	CSCL2221	**Democracy**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL2122	**English Language II**			√	√	√			√	√			√	√		√	√	√

Third Year/ First Course	**CSCL3123**	**Microprocessor**	**C**		√	√	√		√	√	√		√	√	√		√	√	√
	CSCL3125	**Computation Theory**	**C**			√	√			√	√		√	√	√		√	√	√
	CSCL3127	**Operations Research**	**C**		√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL3129	**Knowledge Representation**	**C**		√	√	√			√	√			√	√		√	√	√
	CSIS2205	**Distributed database 1**	**C**				√			√	√			√	√		√	√	√
	CSIS2206	**Computer Graphic**	**C**	√	√	√	√			√	√			√	√		√	√	√
	CSIS2205	**Web Information Systems**	**C**				√				√				√				√
	CSIS2206	**English Language 3**	**C**				√			√	√			√	√		√	√	√
Third Year/ Second Course	**CSCL3224**	**Computer Architecture**	**C**	√	√	√	√			√	√			√	√		√	√	√
	CSCL3226	**Compiler Design**	**C**				√				√				√				√
	CSCL3228	**Optimization**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL3230	**Intelligent Searching Techniques**	**C**		√	√	√			√	√			√	√		√	√	√
	CSIS3208	**DataWarehouse**	**C**				√			√	√		√	√	√		√	√	√
	CSIS3210	**Gegraphic Information System**	**C**	√	√	√	√		√	√	√		√	√	√		√	√	√
	CSIS3212	**Business Application Development**	**C**	√	√	√	√			√	√			√	√		√	√	√
Fourth year/ First Course	**CSCL4134**	**Static Web Programming**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL4136	**Operating system 1**	**C**	√	√	√	√	√	√	√	√		√				√	√	√
	CSCL4138	**Data Security 1**	**C**	√	√	√	√	√	√	√	√			v			√	√	√

	CSIS4113	**Computer networking 1**	**C**	√	√	√	√	√	√	√	√		√	√			√	√	√
	CSIS4115	**Soft Computing**	**C**	√	√	√	√	√	√	√	√		√						√
	CSIS4116	**Information System Management**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL444	**Project**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
Fourth year/ Second Course	**CSCL4235**	**Dynamic Web Programming**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL4237	**Operating system 2**	**C**	√	√	√	√	√	√	√	√			√			√	√	√
	CSCL4239	**Data Security 2**	**C**	√	√	√	√	√	√	√	√			√			√	√	√
	CSIS4214	**Cloud computing foundations**	**C**	√	√	√	√	√	√	√	√			√			√	√	√
	CSIS4217	**Data Analysis Methods**	**C**	√	√	√	√	√	√	√	√			√			√	√	√
	CSIS4218	**Accounting information systems**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL4142	**Project**	**C**	√	√	√	√	√	√	√	√		√	√	√		√	√	√
	CSCL444	**English Language 4**	**C**					√	√	√	√								