Academic Program Specification Form for the Academic College

University: Al Hikma University College
Department: Computer Engineering Technique
Date of Form Completion:

Nidhal (signature)	(signature)	
Dean's Name	**Dean's Assistant for Scientific Affairs**	**Head of Department**
Prof. Dr. Nidhal Raoof	Prof. Dr. Habeeb R. Tilfah	أ. د. زكي سعيد توفيق
Date: 1:10:2023	Date: 1:10:2023	Date: 1.10.2023
Signature	Signature	Signature (signature)

Quality Assurance and University Performance Manager

Dr. Ahmed Hamid Abdulrazzaq
Date: 1:10:2023
Signature: Ahmed

TEMPLATE FOR PROGRAM SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAM REVIEW

PROGRAMME SPECIFICATION

This Program Specification provides a concise summary of the main features of the Program 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 Program.

1. Teaching Institution	*Middle Technical University*
2. University Department/Centre	*Electrical Engineering Technical College*
3. Program Title	*Computer Engineering Technique*
4. Title of Final Award	Bachelor of Engineering Technology
5. Modes of Attendance offered	Annual
6. Accreditation	ABET
7. Other external influences	Labor market: where many seminars and meetings held to discuss academic and applied content with employers Universities and colleges that have majors debate: through the joint mechanisms work allows communication between the teaching staff and students for the purpose of going out a shared vision for the development and the development of academic content plans
8. Date of production/revision of this specification	*2\8\2022*

9. Aims of the Program

Academic program aims to graduate students majoring in technical architecture of computers and prepare them for the following:

1. to be able to work in areas that require linking computer networks as companies and communication technology companies and educational institutions.
2. To work on the infrastructure for e-government development and assistance to overcome the technical problems that may occur.
3. To work of industrial enterprises, especially in the areas that require computerized control operations.
4. To work on the renovation greeting structure of the old plants productivity and modernize operations to control the output used previously to modern processes controlling them with computers and remote.

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding
  A1. knowledge and understanding of telecommunications networks and how to connect them
  A2. knowledge and understanding of the digital signal and analyzed
  A3. knowledge and understanding of parts of the calculator and how to install it and address its problems
  A4. knowledge and understanding of electronic circuits for different computerized devices and how to design
  A5. knowledge and understanding of different programming languages used and how to take advantage of them
  A6. know the types of digital dominants and how programming and design departments

B. Subject-specific skills
  B1. Implementation and writing software for communications and dominants and engineering algorithms.
  B2. Design and Implementation wired and wireless computer networks
  B3. Diagnosis and treatment of faults occurring in the computerized devices and accessories.

Teaching and Learning Methods

Academic lectures: providing a solid foundation upon which the development of the students knowledge

Laboratory and practical workshops: that provide everything he needs from the student's experiences to help develop practical skills side and consolidate the principles necessary to carry out practical projects correctly and follow the occupational safety steps to reduce the damage caused to persons and property

Systematic training: systematic training aims to provide the experience the student and the labor market to enable the student to understand the practical application of curricula he studied.

Assessment methods
Interactive Rating: Rating process where the ditch directly between the student and teaching and be one of the fundamentals of feedback upon which faculty members evaluate the teaching and learning process. Periodic tests editorial: The availability of these tests the knowledge of a faculty member for over a follow-up to the students to content academy and how to interact with information and observations given by teaching students. Quarterly exam: Episode moderation and be to assess the student's interest and its interaction with the scientific article received during the semester, both academic and skill The final exam: These are the final episode to assess the student's interest and its interaction with the scientific article received during the school year, both academic and skill.

C. Thinking Skills
  C1. Planting the spirit of creativity among students and to ensure that find them innovative solutions to various problems
  C2. Students develop the ability to work together effectively as teams graduated distinct results.
  C3. Sense of responsibility among students and psychological configuration to carry the burden on their shoulders development.
  C4.   Development to ensure the values and perseverance to get the job done to reach satisfactory results.

Teaching and Learning Methods
Ask a scientific problems and the demand of the students to find more than a solution to it different scientific methods to stimulate creative side of the students. Form working groups are evaluating the results of its work and change their structure periodically to develop a spirit of cooperation and stimulate students to instead of all the efforts the crisis of the work of the various conditions and with several people.

Assessment methods
Direct assessment: Where is this Rating by faculty members directly and through observation of the interaction of students and their application of section sentimental ad valorem targets and record their observations about it Operation projects and graduation projects: is assessing the student's ability to ACCT and to work in teams, consequences and solutions to various scientific problems facing students.

D. General and Transferable Skills (other skills relevant to employability and personal development)
D1. Linking internal and external networks wired and wireless
D2. Design and Implementation of printed circuit boards
D3. Installation and interfacing communications of computerized operations systems
D4. Skills of maintaining personal and industrial computerized systems

Teaching and Learning Methods
Laboratory and practical workshops: which provides everything a student needs from the expertise to help him develop the skills and practical side and the consolidation of the principles necessary to carry out practical projects correctly and follow the occupational safety steps to reduce the damage caused to persons and property
Systematic training: systematic training aims to provide the experience the student and the labor market to enable the student to understand the practical application of curricula he studied.

Assessment Methods
Interactive Rating: Rating process where the ditch directly between the student and teaching and be one of the fundamentals of feedback upon which faculty members evaluate the teaching and learning process.
Periodic tests editorial: The availability of these tests the knowledge of a faculty member for over a follow-up to the students to content academy and how to interact with information and observations given by teaching students.
Quarterly exam: Episode moderation and be to assess the student's interest and its interaction with the scientific article received during the semester, both academic and skill
The final exam: These are the final episode to assess the student's interest and its interaction with the scientific article received during the school year, both academic and skill.

12. Awards and Credits	11. Program Structure			
	Credit rating	Course or Module Title		Level/Year
Bachelor Degree Requires (x) credits	4	Democracy and Human Rights	1	First Year
	4	Mathematics (I)	2	
	3	Engineering Drawing	3	
	4	Workshops	4	
	7	Electrical Engineering Fundamentals	5	
	6	Computer Organization	6	
	7	Computer Programming (I)	7	
	6	Digital Electronics	8	
	2	English	9	
	4	Computer Applications	1	Second Year
	4	Mathematics (II)	2	
	7	Microprocessor Architecture	3	
	6	Instrumentation and Measurements	4	
	6	Computer Programming (II)	5	
	6	Communication Fundamentals	6	
	6	Electronics	7	
	-	Training	8	
	2	English	9	
	4	Electronic Systems Simulators	1	3rd year Computer Electronic
	6	Engineering Analysis	2	
	6	Control Engineering Fundamentals	3	
	6	Power Electronics	4	
	6	Real Time Systems Design	5	
	6	Digital Signal Processing	6	
	6	Digital Controllers	7	
	6	Elective Course	8	
	-	Training	9	
	2	English	10	
	6	Smart Systems Modeling	1	4th year Computer Electronic
	6	Advanced Computer Technology	2	
	6	Computer Interface Circuits Design	3	
	6	Advanced Digital Electronics	4	
	6	Project Management	5	
	6	Computer Networks	6	
	6	Elective Course	7	
	4	Project	8	
	2	English	9	

	Course			Year
	4	Computer Networks Simulators	1	**3rd Year** Computer Communication Network
	6	Engineering Analysis	2	
	6	Control Engineering Fundamentals	3	
	6	Computer Networks Fundamentals	4	
	6	Real Time Systems Design	5	
	6	Digital Signal Processing	6	
	6	Digital Communications	7	
	6	Elective Course	8	
	-	Training	9	
	2	English	10	
	6	Computer Networks Protocols	1	**4th Year** Computer Communication Network
	6	Information Theory and Coding	2	
	6	Mobile Communications	3	
	6	Security of Computer and Networks	4	
	6	Project Management	5	
	6	Multimedia Computing	6	
	6	Elective course	7	
	4	Project	8	
	2	English	9	

13. Personal Development Planning

Academic program accredited how my information essential to the student and skill provides can work on the same continuously develop and is also keen teaching staff on the estimated self-development of the student by urging students to look for problems within their field and then work to resolve this process and be under the supervision and follow up the teaching staff to provide advice and guidance sponsor planting right foundations for the process of personal development.

14. Admission criteria.

Admission criteria are determined annually by the specialized committees in the Ministry of Higher Education and Scientific Research, where inputs are accepting students as follows:

1- Graduates of the scientific branch(applied & biochemistry) and at a rate of at least 77%
2- Graduates of Preparatory School industrial and 10% of the country's top graduates and the following disciplines:
   A- specialty of Computer Maintenance
   B- allocate Communications
   C- specialty computer networks
   D specialty assembly and maintenance of computer
   E- Media Technology
3- Graduates of technical institutes

15. Key sources of information about the program

1. Specialized scientific books
2. Academic research
3. Internet informatics
4. Accumulated scientific expertise of the staff section
5. Nutrition feedback from the labor market

Curriculum Skills Map

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

Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	General and Transferable Skills (or) Other skills relevant to employability and personal development				Thinking Skills				Subject-specific skills				Knowledge and understanding			
				D4	D3	D2	D1	C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1
1st		Democracy and Human Rights		/			/	/	/	/			/	/			/		/
		Mathematics (I)			/	/	/	/	/	/			/	/	/		/	/	/
		Engineering Drawing		/	/		/	/			/	/		/		/	/		
		Workshops		/		/	/	/	/			/	/	/			/	/	
		Electrical Engineering			/	/	/	/	/	/		/	/	/		/		/	/
		Computer Organization		/		/	/	/	/	/		/	/	/			/	/	/
		Computer Programming (I)			/	/	/	/	/		/	/	/			/		/	
		Digital Electronics		/		/			/		/			/		/	/		/
		English			/			/	/	/			/	/	/		/	/	/
2nd		Computer Applications		/			/	/	/	/							/		/
		Mathematics (II)			/	/		/	/	/			/	/	/		/	/	/

Program	Course	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3rd Computer Electronic	**Microprocessor Architecture**	/	/		/	/			/	/		/		/	/			
	Instrumentation and Measurements	/			/	/	/	/		/	/		/	/		/	/	
	Computer Programming (II)		/	/	/	/	/	/	/	/	/					/	/	
	Communication Fundamentals	/		/	/	/	/	/		/	/		/			/	/	/
	Electronics		/	/	/	/		/	/	/		/			/			
	Training	/		/			/		/				/					/
	English		/	/		/	/	/			/	/	/			/	/	/
	Electronic Systems Simulators	/		/	/	/	/			/	/		/	/		/	/	
	Engineering Analysis		/	/	/	/	/	/	/	/	/		/	/			/	/
	Control Engineering Fundamentals	/			/	/	/	/		/						/	/	/
	Power Electronics		/	/	/	/			/	/			/			/	/	
	Real Time Systems Design	/		/		/		/	/	/	/	/				/		/
	Digital Signal Processing	/			/		/	/	/		/	/				/		/
	Digital Controllers		/	/		/	/	/		/	/				/		/	/
	Elective Course	/	/		/	/		/	/					/		/		
	Training	/		/	/	/	/		/	/	/			/		/		
	English		/	/		/	/	/			/	/	/			/	/	/

			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		English		/	/		/	/	/			/	/	/		/	/	/
4th Computer Electronic		**Smart Systems Modeling**	/		/			/		/			/			/		/
		Advanced Computer Technology	/		/	/	/	/			/	/	/	/			/	/	
		Computer Interface Circuits Design		/	/	/	/	/	/		/		/	/	/			/	/
		Advanced Digital Electronics	/		/	/	/	/			/		/	/	/		/	/	/
		Project Management		/	/	/	/				/	/			/		/		
		Computer Networks	/		/			/		/			/	/	/		/		/
		Elective Course	/		/			/		/							/	/	
		Project		/	/		/	/	/				/	/			/	/	/
3rd Computer Communication Network		**Computer Networks Simulators**	/	/		/	/				/	/				/	/		
		Engineering Analysis	/		/	/	/	/				/		/		/	/	/	
		Control Engineering Fundamentals	/		/		/	/				/				/		/	
		Computer Networks Fundamentals		/	/		/	/	/			/					/	/	/
		Real Time Systems Design	/	/		/	/				/	/		/		/	/		
		Digital Signal Processing	/		/	/	/				/			/			/	/	
		Digital Communications		/	/	/		/	/	/			/	/				/	/
		Elective Course	/		/	/		/									/	/	/
		Training		/	/	/	/				/	/	/			/		/	/
		English		/	/			/	/	/	/		/	/			/	/	/