

**Ministry of Higher Education and Scientific  
Research  
Scientific Supervision and Evaluation Authority  
Quality Assurance and Academic Accreditation  
Department**

**Description of Academic Program & Syllabus  
College of TECHNICALS ENGINEERING  
Department of Computer Engineering  
Technology**

2025-2026

**University Name: Madenat Alelem University**

**Faculty/Institute: College of TECNCHALS OF ENGINEERING**

**Scientific Department: Dept. of Computer Engineering Techniques**

**Academic or Professional Program Name: .: Computer Engineering Techniques Dept.**

**Final Certificate Name: Bachelor's degree in Computer Techniques**

**Academic System: annual**

**Date of preparation of the description:**

**File filling date:**

**Signature**

**Head of Department Name**

**Date**

**Signature**

**Scientific Associate Name**

**Date**

**The file was checked by the Division of Quality Assurance and University Performance**

**Name of the Head of the Quality Assurance and University Performance Division**

**Date**

**Signature**

**Approval of the Dean**

## 1. Vision

Our vision is for the Department of Computer Engineering Technology to be one of the most distinguished departments scientifically, and for the department to be creative, pioneering and active within the college departments in the field of computer engineering technology, to make it a scientific edifice that raises the quality of higher education and academic research using advanced technologies to contribute to the development and service of the local and regional community by supplying it with competent and highly qualified personnel in acquiring knowledge and using the latest modern scientific technologies in light of the existence of an open competitive market. It also aspires to develop scientific research in a way that contributes to raising the effectiveness of education.

## 2. Program Mission

The Department of Computer Technologies contributes to the academic mission of the college and prepares competent technical engineers capable of meeting the needs of the local labor market in the fields of network and communications engineering technologies and electronics engineering technologies. The technical engineer is able to link the theoretical basis with the scientific and applied aspect of the programs in order to be consistent with quality standards and be able to meet the needs of the governmental, mixed and private labor market. It also adopts modeling of computer and mathematical principles to reach knowledge integration and raise the student to the level of ambition that serves Iraqi society and aspires to reach global standards.

## 3. Program Objectives

**Academic program objective is 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**

## 4. Program Accreditation

The college accreditation from the ministry of higher education and scientific research

5. 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

6. Program Structure

Reviews*	Percentage	Credit Hours	Number of cycles	Program Structure
Essential		90	17	Requirements of the institution
Essential			yes	College Requirements
Essential			yes	Department Requirements
		yes	Second and third	Summer Training
				Other

Study Plan for the Department of Radiology							
Grades	Course or Course Code	Course Name	.Crites hr			Unites	
			Theoretical	teaching method	Practical		teaching method
fourth Stage	MCET1405	project management	2	Lectures	2	APP	6
	MCET1407	Advanced Computer Technology	2	Lectures	2	App	6
	MCET1408	Professional ethics	2	Lectures	0	App	2
	MCET1410	project	0	Lectures	2	App	6
	MCET1411	Smart systems modeling	2	Lectures	2	App	6
	MCET1412	Computer interface circuit design	2	Lectures		App	6
	MCET1413	Advanced Digital Electronics	2	Lectures	2	App	6
	MCET1414	Computer networks	2	Lectures	2	APP	6
	MCET1415	Digital image processing	2	Lectures	5	App	6
fourth Stage fourth Stage	MCET1405	project management	2	Lectures	2	APP	6
	MCET1407	Advanced Computer Technology	2	Lectures	2	App	6
	MCET1408	Professional ethics	2	Lectures	0	App	2
	MCET1410	project	0	Lectures	2	App	6
	MCET1411	Smart systems modeling	2	Lectures	2	App	6
	MCET1412	Computer interface circuit design	2	Lectures		App	6
	MCET1413	Advanced Digital Electronics	2	Lectures	2	App	6
	MCET1414	Computer networks	2	Lectures	2	APP	6
	MCET1415	Digital image processing	2	Lectures	5	App	6
							199

## Expected learning outcomes of the program

### Knowledge

Methods of assessing knowledge and understanding

**Learning Outcomes**

- 1- Knowledge of the different stages of the development of electronic sense.
- 2-knowledge of different types of electronic calculator and parts for major
- 3- knowledge of the structural core of the memory and the various classifications of memory from the main memory and secondary memory
- 4-knowledge of the structural core CPU
- 5- know how data is represented inside the electronic calculator
- 6- knowledge of the processor of the type 8085

### Skills

Methods of assessing thinking skills

**Learning Outcomes**

- 1-Ability to diagnose faults in the electronic calculator
- 2 - The ability to use meta own processor 8085
- 3 -The ability to know different types of electronic calculator
- 4- The ability to program processor 8085

أ- Thinking skills : -

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Statement of Learning Outcomes

Methods of assessing practical skills: -

Practical skills are assessed through individual differences between students and the methods specific to each practical subject.

ب- **Professional and practical skills: -**

- Qualifies students to work as medical technologists in the field of radiology techniques
- Diagnostic in radiology and medical imaging departments in hospitals and health centers. The student must master the theoretical scientific material

### Values

Statement of Learning Outcomes

**Learning Outcomes**

- 1- Student participation in community events outside the college campus
- 2- Visits community institutions and reviews the conditions of those in them
- 3- Good selection of titles of research projects, novelty and innovation in the method of presenting them
- 4- Research projects successfully exceed scientific plagiarism tests

- 1- The student should master the basics of civil society**
- 2- The student should be an active member of the community**
- 3- The student should understand the formulation of research projects**
- 4- The student should know the ethics of research writing and**

1. Teaching and Learning Strategies

**Academic lectures: providing a solid foundation upon which to develop cognitive**

**balance for students**

**Practical laboratory: which provides each student the expertise to help develop**

**practical skills side and consolidate the principles necessary to carry out the**

**projects correctly**

2. Evaluation methods

- The direct way to ask and answer it in the lecture
- Expected and unannounced daily exams
- Evaluating research and evaluating its writing in terms of style, expression and spelling
- Ask questions to measure listening and attention in English
- Participation of students in evaluating the performance of their fellow students
- Practical assessment exams for listening, speaking and reading
- Monthly and Quarterly Exams
- Theoretical final exams

## Professional Development

### Mentoring new faculty members

- Work on diversifying classroom management methods and giving lectures
- The new faculty is exposed to the visit of the head of the department and the old teachers during the lectures
- Conducting personal interviews to know the teaching competence and skill in teaching
- Publishing research in international journals with an impact factor, writing literature, and participating in workshops and conferences

### Professional development of faculty members

- The academic program is reviewed periodically in order to identify and fix its gaps.
- Annual evaluation of each unit from the head of the department or the rapporteur of the department.
- Periodic faculty reviews of the academic program.
- Establishing an external advisory body for the department that includes representatives of the student and the beneficiaries of this course.
- Periodic evaluation by the head of the department for faculty members.
- Students evaluate the faculty member by electronic referendum.
- Self-evaluation of the faculty member.
- Student evaluation of a stage of study by electronic poll method.
- Coordination with the Quality Division in the college and the university to follow up the application of the academic program in the department.

### 7. Personal Development Planning

1. Identify the social determinants of health to reduce disparities in access to quality care.
2. Self-awareness (self-awareness) 0 Examine and reflect on personal knowledge, skills, abilities, beliefs, prejudices, motivations, and emotions that can enhance or limit personal and professional growth.
3. Professionalism 0 Demonstrate behaviors and values consistent with the trust that patients, other healthcare providers, and the community place in the profession.
4. Learner(s) 0 Develop, integrate, and apply knowledge from foundational sciences (e.g. dentistry and social/behavioral/managerial and clinical sciences) to
5. Evaluate the scientific literature, explain pharmacological action, solve therapeutic problems, and advance the population. Healthcare and patient-centered.
6. **Design prevention, intervention and education strategies for individuals and communities to manage chronic diseases and improve health.**
7. Educate all audiences by identifying the most effective and sustainable methods of conveying information and assessing understanding.

#### 8. Acceptance Criteria

1. The general average of central admission, which is within the applicable limits and according to the directives of the Ministry of Higher Education and Scientific Research.
2. Personal interview with students applying for admission and recording speech, behavioral or personality defects.

#### 3. The most important sources of information about the program

The Quality Division in the college through the Quality Division at the university, which adheres to the quality conditions and upgrading the scientific, knowledge, skill and scientific research level according to the data of the Ministry of Higher Education and Scientific Research, which seeks with international quality conditions to raise the efficiency of the academy in line with the efficiency of the academy.

#### 4. Program Development Plan

- Work to motivate students to use medical books
  - Work on developing conversation, translation and reading skills by taking advantage of websites and means
- Other contemporary.
- Work to encourage students to know the most important books of medicine

**Curriculum Skills Outline**

مخرجات التعلم المطلوبة من البرنامج

General and qualifying skills transferred (other skills related to employability and personal development)				Emotional and value goals				Program Skills Objectives				Cognitive goals				Basic or optional	Course Name	Course Code	Year/ Level
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		project management	MCET1405	fourth Stage Semester 1
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Advanced Computer Technology	MCET1407	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Professional ethics	MCET1408	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		project	MCET1410	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Smart systems modeling	MCET1411	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Computer interface circuit design	MCET1412	Fourth Stage Semester 2
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Advanced Digital Electronics	MCET1413	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Computer networks	MCET1414	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Digital image processing	MCET1415	

