

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



Academic program and course description guide

2024

Academic program description form

University name: Al-Furat Al-Awsat Technical University

College/Institute: Technical Institute/Kufa

Scientific Department: Mechanical Technics Department

Name of the academic or professional program: Production

Name of final certificate: Technical diploma

Academic system: annual

Date of description prepared: 10-2-2024

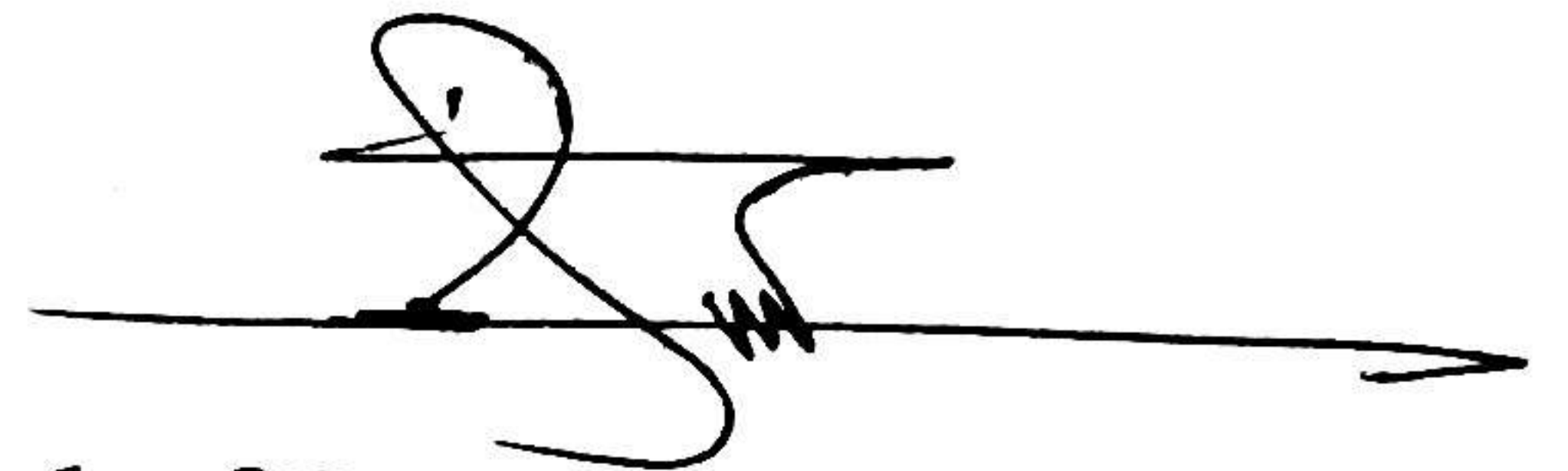
File written date: 10-2-2024



Scientific Assistant of Dean Signature:

Name: A. prof. Nadia Abd-AL-Hadi

Date:



Head of Department Signature

Name: Muneer Naji

Date:

File Check From:

The Division of Quality Assurance and University Performance.

Name of the Director of the Quality Assurance and University

Performance Division: Kholoud Muzaffar

Date:

Signature:



Authentication of the Dean

Prof. Fadel Sami Zgheer

Description of the academic program

This academic program description provides a necessary summary of the most important characteristics of the program and the learning outcomes that the student is expected to achieve, demonstrating whether he has made the most of the available opportunities. It is accompanied by a description of each course within the program

Al-Furat Al-Awsat University	1. Educational institution
Technical Institute/Kufa _Department of Mechanical Technologies/Production Branch	2. Scientific department /center
Department of Mechanical Technologies	3. Name of the academic or professional program
Technical Diploma	4. Name of the final certificate
Annual system	5. : Study system annual/courses/others
ABET Engineering majors	6. Accredited accreditation program
.Public sector and private sector	7. Other external influences
2024/2/10	8. Date the description was prepared
9. : Objectives of the academic program	
The Department of Mechanical Technology aims to graduate technical cadres who will be a link between the specialist and the skilled worker. The department prepares and prepares the graduate and provides him with theoretical, applied and practical .information to be able to carry out the work assigned to him	

10.: program outcomes and teaching, learning and evaluation methods

I- Cognitive goals

Machine parts -1 1	Mathematics -1
2/12Manufacturing processes	Mechanics -2
Minerals -3 1	Manufacturing processes/1 -3
Occupational management and safety -4 1	Engineering drawing -4
Computer applications/2 -5 1	Applications Computer/1 -5
Industrial drawing-16	Material properties-6
Factor /2 -17	Human rights -7
The project-18	Factor /1 -8
English language/2-19	English language/1 -9
	.Electricity technology – 10

B - The program 's skill objectives

1. .Learn about the basic principles of mechanical devices
2. Calculating skills related to the subject of devices, machines, and mechanical properties
3. Identify the mechanical properties of materials
4. How to protect and maintain mechanical devices

Teaching and learning methods

(Lectures, laboratories, workshops, summer training, projects)

Evaluation methods

(monthly exams, daily exams, oral exams, final exams)

.C- Emotional and value goals

1. The student's ability to calculate mechanical ability
2. The student learned ways to protect machines and equipment
3. The student learns mechanical calculations and knowledge of the properties of materials

Teaching and learning methods

(Lecture, laboratory, workshops, summer training, projects)

Evaluation methods

(Monthly exams, daily evaluation, oral exams, final exams)

D - General and qualifying transferable skills (other skills related to . (employability and personal development

1. .Using ready-made systems such as (AutoCAD...)
2. CNC . programmed machines
3. .Preparing computers (formatting them) and inserting software into them
4. .Knowledge of the workings of mechanical testing devices
5. English

Teaching and learning methods

,Lectures, laboratories, workshops, summer training, methodological training)
(projects

Evaluation methods

(Monthly exams, daily evaluation, oral exams, final exams)

Program structure -11

Credit hours per week		Name of the course or course	Course or course code		
My theory is	practical				
	20	13	Department of Mechanical Technologies	—	The first stage
	19	11	Department of Mechanical Technologies	—	The second phase
The technical diploma degree for the Department of Mechanical Technology requires: $33 * 30 + 30 * 30 = 1890$ credit hours			Certificates and credit hours -12		

Planning for personal development -13

**Admission standard (setting regulations related to admission to the college or -14
(institute**

Average : 55% and more: Branch graduated from: Scientific + Industrial

The most important sources of information about the program -15

Development plan for the Department of Mechanical Technology
(prescribed curricula, lectures and Internet resources)

Curriculum skills chart

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

Learning outcomes required from the programme

General and qualifying) transferable skills other skills related to employability and personal development (Emotional and value goals				Skills objectives of the programme				Cognitive objectives				Basic Or optional	Course Name	Course Code	Year/level		
																				D4	D3
/	/	/	/	/	/	/	/		/	/	/	/	/	/	/			Basic	Technologies Mechanica I		The first

/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	Basic	Technologies Mechanics I		the second

1. :Course Name					
Manufacturing processes / 2					
2. Course Code					
3. Semester/ year					
2024-2023					
4. Date this description was prepared					
2024-4-5					
5. A. Available attendance forms					
Actual presence					
6. Number of study hours (total)/number of units (total)					
hours - 2- Theoretical - 2- Practical 4					
Number of units: 8 units					
7. Name of the course administrator (if more than one name is mentioned)					
: Atu- Name: M. Muneer Naji Waheed AlMuneer.wheed@atu.edu.iq					
8. objectives Course					
<p>Objectives of the course: To graduate a cadre capable of working in the fields of manufacturing and production and prepared to contribute to the following work</p> <ul style="list-style-type: none"> • .The ability to analyze processes into operating components • .Preparing the technological path between production units • . Conduct preliminary calculations of operating costs • Preparing operating cards and orders for each unit and each machine, and calculating operating time elements and loading .programs for the units 					
9. Teaching and learning strategies					
Strategies and interactive methods that make the learner the focus of the educational process					The strate
10. Course structure					
Evaluation method	Learn ing method	Name of the unit or topic	Required learning outcomes	hours	the week
Group discussions tests + reports +	and practical method	Tolerance system	,Identify geometric tolerances couplings, coupling systems, ranks of tolerances, coupling units, and .basic deviations	12	- First third

Group discussions	and practical methods	Measurement parameters	Gauges, design of gauges, types of gauges (internal gauges, external gauges, adjustable gauges, solid gauges, special gauges)	4	the fourth
Group discussions	and practical methods	Classification of minerals	,Classification of metal fabrication metal working, introduction to the theory of blade formation and influencing factors, methods of fixing artifacts, including round and non-round objects, the cutting edges used, and the longitudinal and transverse feed shares.	4	Fifth
Group discussions tests + reports +	Interact and practical methods	Identifying turning pens and cutting edges	Identifying the types of angles of turning pens, the effect of angles of turning pens on the cutting process ,types of metals of turning pens cutting conditions, cutting elements, uses of cutting speeds and the use of tables and speed maps, classification of cutting tools according to operating methods and number of cutting edges	12	Sixth-eighth
Group discussions tests + reports +	and practical methods	Operating cards	How to conduct an operating card for a group of operations, calculate its components, and calculate the cutting time for each operation	8	Ninth-tenth
Group discussions tests + reports +	and practical methods	Lathe and turning machines	,Turret turning machines automatic, studying the processes that can be operated and analyzing the processes on the product, how to prepare operating cards	12	Eleventh-thirteenth
Group discussions tests + reports +	and practical methods	Milling and milling machines	Milling, learning about the operations that can be performed on milling machines, parts and components of horizontal and vertical milling machines, and the nature of the work of each part	28	Fourteenth-twentieth
Group discussions tests + reports +	and practical methods	Skimming and skimming machines	Skimming: Introduction to the ,types of planers (trolley, hopper vertical), operations performed on the planing machine, operating capabilities available with each machine, methods of attaching the work	12	Twenty-first twenty-third
Group discussions tests + reports +	and practical methods	Grinding and grinding machines	Grinding: Introduction to the theory of cutting and the shape of the blade in the grinding process the grinding stones used ,circumferal, face, side, cup) external, internal), their	8	Twenty-fourth twenty-fifth

			specifications and uses, attachment methods and balances		
Group discussions	and practical method	Making employment cards	Preparing a comprehensive operating card for all cutting operations	4	twenty-sixth
Group discussions tests +	and practical method	Metal Forming	,Metal forming: theory of forming foundations of cold and hot forming, types of forming	16	Twenty-seventh-thirty
11. Course evaluation					
Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc					
12. Learning and teaching resources					
Metal manufacturing processes - first edition - written by - Ali Ibrahim Al-Musawi			Required textbooks (methodology, if any)		
Introduction to production engineering			Main references (sources)		
Production engineering technology and dimensional design			Recommended supporting books and references (....scientific journals, reports)		
			Electronic references, Internet sites		

And the course class mathematics

1. Course Name	
mathematics	
2. Course Code	
DMP125	
3. Semester/ year	
2024-2023	
4. Date this description was prepared	
2024-4-7	
5. A. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
n(2), h(0), h(4)	
7. Name of the course administrator (if more than one name is mentioned)	
: Nazari -Name: Nawres Riyadh Nehme Alnawres.riyadh.iku@atu.edu	
8. objectives Course	
<p>Introducing the student to the use of mathematics in other scientific topics and increasing his ability to think logically when solving exercises, as well as increasing his ability to develop and how to link data with his information to obtain a solution to the .problem</p>	<p>Objectives of the study subject</p>
9. Teaching and learning strategies	
	The strategy

10. Course structure					
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
	My presence	Matrices	Operations on matrices and determinants	2	the first
11. Course evaluation					
<p>,Distribution of the grade out of 100 according to the tasks assigned to the student .such as daily preparation, daily, oral, monthly, written exams, reports, etc theoretical 20</p> <p>year's work (assignments + class participation + attendance and commitment) 10</p>					
12. Learning and teaching resources					
, Schumm's Abstracts Series Frank Ayers, 1977			Required textbooks (methodology, if any)		
Schaum Briefs Series			Main references (sources)		
books taught to fourth, fifth, and sixth grade students			Recommended supporting books and references (scientific journals, reports....)		
Online mathematics lecture series for institute students			Electronic references, Internet sites		

And the course class Computer applications 2

1. Course Name					
Computer applications 2					
2. Course Code					
3. Semester/ year					
2024-2023					
4. Date this description was prepared					
2023-4-7					
5. A. Available attendance forms					
My presence					
6. Number of study hours (total)/number of units (total)					
) N (1) - A (2) - H6 .(
7. Name of the course administrator (if more than one name is mentioned)					
: Nari -Name: Nawres Riyadh Nehmeh Al nawres.riyadh.iku@atu.edu.iq Haider Jundi + Bashaer Thamer Al -Amli					
8. objectives Course					
Introducing the student to using the 2D and 3D engineering drawing program(AutoCAD 2D & 3D) with applications in his field of specialization (Objectives of the study subject	
9. Teaching and learning strategies					
Using illustrative methods and practical application					The strategy
10. Course structure					
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
		Introduction to theAutoCAD program ,	Principles of the AutoCAD program , Screen settings (Snap, Limit, Grid, Pan, Zoom,...)	3	the first
11. Course evaluation					

Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc

theoretical 20

practical 20

year's work (attendance + duties + reports) 10

12. Learning and teaching resources	
nothing	Required textbooks (methodology, if any)
The Internet	Main references (sources)
nothing	Recommended supporting books and references (scientific journals, reports....)
Type the name of the topic in Google or YouTube	Electronic references, Internet sites

And the course class Computer Applications (1)

1. Course Name					
Computer Applications (1)					
2. Course Code					
DMP 126					
3. Semester/year					
2024-2023					
4. Date this description was prepared					
2024/4/7					
5. Available attendance forms					
My presence					
6. Number of study hours (total)/number of units (total)					
) N (1) - A (2) - H6 .(
7. Name of the course administrator (if more than one name is mentioned)					
: Nazari -Name: Nawres Riyadh Nehme nawres.riyadh.iku@atu.edu.iq Haider Jundi + Doaa Fadel Al-Amli					
8. objectives Course					
A- Introducing the student to the calculator with an idea about its prospects and use in various fields and the principles of programming and giving him skill in using the calculator to implement programs previously prepared for application in his .field of specialization			Objectives of the study subje		
B_ Introducing the student to using Windows and AutoCAD with applications in his field of .specialization					
9. Teaching and learning strategies					
Using illustrative methods and practical application					The strategy
10. Course structure					
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
	Power point	Hardware and software components	Introduction :to computers their	3	the first

			,generations :components hardware and software system) software and application .(software		
11. Course evaluation					
Distribution of the grade out of 100 according to the tasks assigned to ,the student, such as daily preparation, daily, oral, monthly, written exams .reports, etc theoretical 20 practical 20 year's work (attendance + duties + reports) 10					
12. Learning and teaching resources					
nothing			Required textbooks (methodology (any		
The Internet			Main references (sources)		
nothing			Recommended supporting books and references (scientific (...journals, reports		
Type the name of the topic Google or YouTube			Electronic references, Internet site		

And the course class **The crimes of the Baath regime in Iraq**

1. :Course Name					
The crimes of the Baath regime in Iraq					
2. Course Code					
3. :Semester/ Year					
AD 2024-2023					
4. :Date this description was prepared					
AD 2024-14-2					
5. A. Available attendance forms					
6. : Number of study hours (total)/number of units (total)					
.Number of hours (30) and number of units (2)					
7. Name of the course administrator (if more than one name is :mentioned)					
:Amiel - Name: Al A.M.D. Mudar Sabah Abdel moder.sabah@atu.edu.iq					
8. objectives Course					
<ul style="list-style-type: none"> - Introducing the crimes of the Baath reg .committed against the Iraqi people - Finding out some facts that are hid from the Iraqi people regarding t .crimes - Students' insight into the period of t preceding the Baathist regim .misleading media attacks 			Objectives of the study subject		
9. Teaching and learning strategies					
<ul style="list-style-type: none"> - Strategies and interactive methods that make learner the focus of the educational process 				The strategy	
10. Course structure					
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week

Oral diagnostic	Interactive methods	The concept of crimes and their types	Identify the terms mentioned in the study material	1	the first
Group discussion	Interactive methods	Crime departments	Review the crime sections and distinguish between them	1	the second
Group discussion	Interactive methods	Documenting Baathist crimes	View the work of the Iraqi Criminal Court	1	the third
Group discussion	Interactive methods	Types of international crimes	Learn about international crimes and their types	1	the fourth
Group discussion	Interactive methods	Decisions issued by the Iraqi Criminal Court	Review the decisions issued by the Iraqi Criminal Court	1	Fifth
Group discussion	Interactive methods	Psychological crimes	Learn about the concept of psychological crimes	1	VI
Group discussion	Interactive methods	Mechanisms of psychological crimes	Identify the mechanisms of psychological crimes	1	Seventh
Group discussion	Interactive methods	Psychological effects of crimes	Identify the negative effects of psychological crimes	1	VIII
Group discussion	Interactive methods	Social crimes	Identify social crimes	1	Ninth
Group discussion	Interactive methods	Militarization of society	Learn about the methods of militarization of society	1	The tenth
Group discussion	Interactive methods	The Baathist regime's position on religion	Identify his negative attitudes towards religion	1	eleventh
Group discussion	Interactive methods	Violations of Iraqi laws	View violations of Iraqi laws	1	twelveth
Group discussion	Interactive methods	Pictures of human rights violations	Learn about the crimes of power against the people	1	Thirteenth
Group discussion	Interactive methods	Some decisions regarding political and military violations of the Baathist regime	Learn about some political and military violations	1	fourteenth
Group discussion	Interactive methods	Prison and detention places	View a number of places of detention during the Baathist regime	1	Fifteenth
Group discussion	Interactive methods	Environmental crimes	Learn about environmental crimes	1	sixteen
Group discussion	Interactive methods	Military radiation pollution	Identify the types of pollution	1	seventeenth
Group discussion	Interactive methods	scorched earth policy	See the effects of destruction of cities	1	eighteen
Group discussion	Interactive methods	Drying the marshes	Learn about the policy of draining the marshes	1	nineteenth
Group discussion	Interactive methods	Razing orchards and trees	View agricultural damage	1	The twentieth
Group discussion	Interactive methods	Mass grave crimes	Viewing the mass graves of the people	1	21st
Group discussion	Interactive methods	Chronology of mass graves	View the history of the regime's mass graves	1	twenty two
Group discussion	Interactive methods	Peace Cemetery	See some sources related to the academic subject	1	twenty third
Group discussion	Interactive methods	'Khan Al-Rub' Cemetery	See some sources related to the study material: Khan Al-Rub' Cemetery	1	twenty fourth

Group discussion	Interactive methods	Al-Zarka Cemetery	See some sources related to the academic subject	1	25th
Editorial - written reports		Daily - quarterly	Tests	4	twenty-sixth
11. Course evaluation					
,Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, monthly, written exams, reports, etc					
12. Learning and teaching resources					
Crimes of the Baath regime in Iraq against public and private universities			Required textbooks (methodology, if any)		
			Main references (sources)		
			Recommended supporting books and references (scientific (...journals, reports		
			Electronic references, Internet sites		