

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



Guide to Course Descriptions and Academic Programs for 2025

Academic Program Specification Form for The Academic Year 2024

University: Northern Technical University

Faculty/Institute: Al-dour Technical Institute

Department: Mechanical techniques

Name of the academic or professional program: Technical diploma in

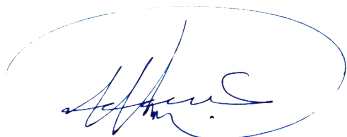
Name of the final certificate: Technical diploma in

Academic system: Curriculum system

File preparation date:

File filling date:

Signature



The name of the head of the department

Lec. Najm Abdullah Mullan

Date: 4 / 2 /2025

Signature



Dean's Assistant For Scientific Affairs

Assist. Prof. Dr. Hanan Shahb Ahmad

Date: 5/ 2 /2025

Check the file by

Quality Assurance and University Performance Division

Name of the director of the Quality Assurance and University Performance Division:

Signature



Lec. Hayder Ali Mohssn

Dean's endorsement



Assist. Prof. Dr. Maha Elttayef Jasim

Vision of program
The Department of Mechanical Engineering is one of the main technological departments. The department is working towards expanding the base of technical education and its modern applications, becoming a leader in providing certified technical services, in a spirit of competition and cooperation with the community
Program message
The Department of Mechanical Technology has adopted a general mission based in its general form on the framework of technical education in Iraq, which it seeks to achieve every year to highlight the department's distinguished aspect. The general objectives focus on graduating national technical cadres at a level of education and training that are capable of absorbing technology systems and supporting the process of technical development to keep pace with rapid global technical developments. The department's mission includes
Program Goals
The Production Branch aims to prepare technical staff to serve as a link between specialists and skilled workers. The department prepares and equips graduates with theoretical, practical and applied information to enable them to carry out the tasks assigned to them
Program accreditation
nothing
External influences
The labor market, through its follow-up, aims to qualify our students in a manner that suits them, in addition to the summer training program.

Program structure				
Program structure	Number of courses	Study unit	Percentage	Notes*
Foundation requirements	38	93		
Institute requirements	Yes	36		
Department requirements	Yes	57		
Summer training	Satisfied			essential
Others	nothing			

Program description				
Year / Level	Code of the course	Name of the course	Approved hours	
			Theoretical	Practical
First Level	METP125	سبائك معدنية	2	-
	METP121	ميكانيك علم الحركة	2	2
	NTU102	الحاسوب	1	1
	METP120	ميكانيك علم السكون اجباري	2	2
	TIMO110	رياضيات 1/	2	-
	TIMO111	رياضيات 2/	2	-
	NTU 101	اللغة الإنكليزية	2	-
	NTU 100	الديمقراطية وحقوق الانسان	2	-
	NTU 105	الرياضة	2	-
	METP122	القياسات واللحام	2	2
	METP123	السباكة	2	2
	METP126	رسم هندسي ثنائي الابعاد	3	-
	METP127	الرسم الهندسي ثلاثي الابعاد	3	-
	TIOM112	معامل ميكانيكية	6	-
	METP129	تكنولوجيا الكهرباء	2	1
	NTU 104	اللغة العربية	2	-
	METP131	التدريب الصيفي		-
	METP128	معامل متقدمة	6	-

Program description				
Year / Level	Code of the course	Name of the course	Code of the course	
			Theoretical	Practical
Second Level		تقنية أجزاء المكنائن	2	-
	MTP207	اسس عمليات تصنيع	2	2
	MTP211	علم المعادن والبلورات	2	2
	MTP209	المعامل/3		6
	NTU 204	اخلاقيات المهنة	2	-
	NTU 201	الحاسوب	1	1
	MTP213	رسم وسائل الربط الميكانيكية *	3	-
	NTU 203	جرائم نظام البعث في العراق	2	-
	TUDO203	مبادئ السلامة المهنية	2	-
	MTP218	انظمة الاتممة وادوات الانتاج	2	2
	MTP206	تصميم مكنائن *	2	-
	MTP208	عمليات تصنيع المعادن	2	2
	MTP212	خواص المعادن الفيزيائية	2	2
	MTP210	المعامل/4	6	6
	MTP216	المشروع		-
	MTP214	رسم المسننات *		3
	TUDO204	الادارة الصناعية	2	-
	NTU202	اخلاقيات المهنة	2	-
	MTP219	اللحام و تشكيل المعادن	2	2

Expected learning outcomes of the program
Knowledge
<ol style="list-style-type: none"> 1. To prepare the student to apply knowledge in various fields of knowledge in general and in the field of general mechanics. 2. To familiarize the student with professional principles and responsibilities, as well as industrial management. 3. To enable the student to provide general maintenance for mechanical equipment in the event of a malfunction. 4. To teach the student leadership skills, values of commitment, ethical behavior, and respect for others
Skills
<ol style="list-style-type: none"> 1- Preparing students to work and integrate into multidisciplinary teams. 2- Preparing students to perform periodic maintenance on equipment and devices available in the workplace. 3- Preparing students to use modern technologies, skills, and specialized courses in the field of mechanics. 4- Preparing students to identify equipment malfunctions, if any
Values
<ol style="list-style-type: none"> -1. The ability to manage engineering work. -2. The ability to use mechanical equipment and machinery to meet the requirements within the field of specialization. -3. The ability to work with the latest hardware and software to diagnose mechanical faults. -4. Teaching the student the ability to adapt to engineering disciplines.

Teaching and learning strategies						
The instructor explains the theoretical material on the blackboard using a slide projector, paper lectures, educational packages, and systematic and summer training in hospitals.						
Evaluation methods						
Submit weekly reports, daily, semester and final tests						
Education Institution						
Faculty members						
Academic Degree	Specialization		Special requirements/skills		Faculty members	
	Major	Specialization			Staff	Lecturer
Teacher	Mechanics	تطبيقي	engineering		angel	
Teacher	Mechanics	احتراق داخلي	engineering		angel	
Assistant teacher	Mechanics	انتاج	engineering		angel	
Assistant teacher	Mechanics	انتاج	engineering		angel	
Assistant teacher	Mechanics	تطبيقي	engineering		angel	

Assistant teacher	Mechanics	تطبيقي	engine ering		angel	
Assistant teacher	كهرياء		engine ering			محاضر
Assistant teacher	Mechanics	انتاج	engine ering		angel	

Professional development
Orienting new faculty members
Professional development for faculty members
The admission criteria is through central admission within the Ministry's plan, according to the student's branch in middle school and his GPA
Acceptance standard
The textbook, auxiliary materials, external Internet sources, scientific research and its latest developments

The most important sources of information about the program
<ol style="list-style-type: none"> 1. Developing the mechanics department's laboratories and developing the curriculum through deletion, addition, and substitution. 2. Learning about recent scientific developments. 3. Participating in international and local conferences.

4. Participating in scientific workshops inside and outside Iraq.
5. Hosting scientific experts in the field of specialization

Program development plan

1. Developing the mechanics department's laboratories and developing the curriculum through deletion, addition, and substitution.
2. Learning about recent scientific developments.
3. Participating in international and local conferences.
4. Participating in scientific workshops inside and outside Iraq.
5. Hosting scientific experts in the field of specialization

Program skills chart															
				Learning outcomes required from the program											
Year / Level	Code of course	Name of course	Basic or Optional	Knowledge				Skills				Values			
				1A	2A	3A	4A	1B	2B	3B	4B	1C	2C	3C	4C
First Level	METP125	سبائك معدنية		x				x					x		
	METP121	ميكانيك علم الحركة		x				x					x		
	NTU102	الحاسوب		x				x					x		
	METP120	ميكانيك علم السكون (اجباري)		x				x					x		
	TIMO110	رياضيات 1/		x				x					x		
	TIMO111	رياضيات 2/		x				x					x		
	NTU 101	اللغة الإنكليزية		x				x					x		
	NTU 100	الديمقراطية وحقوق الانسان		x				x					x		
	NTU 105	الرياضة		x				x					x		
	METP122	القياسات واللحام		x				x					x		

	METP123	السباكة		x				x					x			
	METP126	رسم هندسي ثنائي الابعاد		x				x					x			
	METP127	الرسم الهندسي ثلاثي الابعاد		x				x					x			
	TIOM112	معامل ميكانيكية		x				x					x			
	METP129	تكنولوجيا الكهرباء		x				x					x			
	NTU 104	اللغة العربية		x				x					x			
	METP131	التدريب الصيفي		x				x					x			
	METP128	معامل متقدمة		x				x					x			
			x													

Program skills chart															
				Learning outcomes required from the program											
Year / Level	Code of course	Name of course	Basic or Optional	Knowledge				Skills				Values			
				1A	2A	3A	4A	1B	2B	3B	4B	1C	2C	3C	4C
Second Level	تقنية أجزاء المكانن	MTP205	اساسي	x				x				x			
	اسس عمليات تصنيع	MTP207	اساسي	x				x				x			
	علم المعادن والبلورات	MTP211	اساسي	x				x				x			
	المعامل/3	MTP209	اساسي	x				x				x			
	اخلاقيات المهنة	NTU 204	اساسي	x				x				x			
	الحاسوب	NTU 201	اساسي	x				x				x			
	رسم وسائل الربط الميكانيكية *	MTP213	اساسي	x				x				x			

	جرائم نظام البعث في العراق	NTU 203	اساسي	x				x				x			
	مبادئ السلامة المهنية	TUDO203	اساسي	x				x				x			
	انظمة الاتمئة وادوات الانتاج	MTP218	اساسي	x				x				x			
	تصميم مكائن *	MTP206	اساسي	x				x				x			
	عمليات تصنيع المعادن	MTP208	اختياري	x				x				x			
	خواص المعادن الفيزيائية	MTP212	اختياري	x				x				x			
	المعامل/4	MTP210	اجباري	x				x				x			
	المشروع	MTP216	اجباري	x				x				x			
	رسم المسندات *	MTP214	اجباري	x				x				x			
	الادارة الصناعية	TUDO204	اجباري	x				x				x			

اجباري	NTU202	اخلاقيات المهنة	
اجباري	MTP219	اللحام و تشكيل المعادن	