Program Curriculum Form

University Name: .Northern Technical University.....

Faculty/Institute: .Technical Engineering College Mosul.....

Scientific Department: Chemical and Petroleum Industries Technologies Engineering

Academic or Professional Program Name: Bachelor of Chemical and Petroleum Industries Technologies Engineering

Final Certificate Name: Bachelor of Chemical and Petroleum Industries Technologies Engineering

Academic System: Bologna Process.....

Description Preparation Date: 2/9/2025

File Completion Date: 2/9/2025

Signature:

Head of Department Name:

Haider Ismael Ibrahim

Date: 2/9/2025

Signature:

Scientific Associate Name:

Prof. Dr. Mohammed Sabah Jarjees

Date: 25/9/2025

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance

Department: Assist. Lect. Warqaa Hashim Mahmood

Date:

Signature:

Approval of the Dean

Republic of Iraq - Ministry of Higher Education and Scientific Research

Northern Technical University

Bachelor's degree in Engineering Technological for Chemical andPetroleum Industries

Four years (Eight semesters) - 240 ECTS credits - 1 ECTS = 25 hr

Program Curriculum (2025 - 2026)

Level	Semester	No.	M code	Module Name in English	Language	SSWL (hr/w)					Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisites Module(s) Code
						CL (hr/w)	lect (hr/w)	Lab (hr/w)	Tut (hr/w)	Semn (hr/w)		hr/sem	hr/sem	hr/sem			
One	One	1	NTU100	Human Rights and Democracy	Arabic	2				1	3	33	17	50	2.00	B	
		2	NTU101	English Language	English	2				1	3	33	17	50	2.00	B	
		3	ETCP106	Mathematics	English	2			2		3	63	137	200	8.00	s	
		4	ETCP105	Engineering Drawing	English			4		1	3	63	137	200	8.00	S	
		5	ETCP100	Principles of Chemical Engineering	English	4			2	1	3	93	157	250	10.00	C	
					Total	10	0	4	4	4	15	285	465	750	30.00		

Level	Semester	No.	M code	Module Name in English	Language	SSWL (hr/w)					Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisites Module(s) Code
						CL (hr/w)	lect (hr/w)	Lab (hr/w)	Tut (hr/w)	Semn (hr/w)		hr/sem	hr/sem	hr/sem			
One		1	NTU103	Arabic Language	Arabic	2					3	33	17	50	2	B	
	Two	2	NTU102	Computer	English	2		2		1	3	63	12	75	3	B	
		3	ETCP107	Electrical Principles	English	2		3			3	78	72	150	6	S	
		4	ETCP103	Workshop	English			4			3	63	62	125	5	S	
		5	ETCP102	General Chemistry	English	2		3		1	3	78	122	200	8	C	
		6	ETCP104	Engineering Mechanics &Strength of Materials	English	2			2		3	63	87	150	6	S	
					Total	10	0	12	2	2	15	345	355	750	30.00		

Level	Semester	No.	M code	Module Name in English	Language	SSWL (hr/w)					Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisites Module(s) Code
						CL (hr/w)	lect (hr/w)	Lab (hr/w)	Tut (hr/w)	Semn (hr/w)		hr/sem	hr/sem	hr/sem			
Two		1	NTU200	Crimes of the Ba'ath Regime in Iraq	Arabic	2					3	33	17	50	2.00	S	
		2	ETCP200	Petroleum Chemistry	English	2		3		1	3	78	122	200	8.00	C	
		3	ETCP201	Engineering Mathematics	English	2			2		3	63	87	150	6.00	C	
		4	ETCP202	Physical Chemistry	English	2		3		1	3	78	122	200	8.00	C	
		5	ETCP203	Engineering Materials	English	2		3		1	3	78	87	165	6.60	C	
					Total	10	0	9	2	2	15	330	435	765	30.60		

Level	Semester	No.	M code	Module Name in English	Language	SSWL (hr/w)					Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisites Module(s) Code
						CL (hr/w)	lect (hr/w)	Lab (hr/w)	Tut (hr/w)	Semn (hr/w)		hr/sem	hr/sem	hr/sem			
Two		1	NTU201	English language	English	2					3	33	17	50	2.00	B	
	Four	2	NTU203	Arabic language	Arabic	2					3	33	17	50	2.00	B	
		3	NTU202	computer	English	2		2		1	3	63	12	75	3.00	B	
		4	ETCP204	Fluid Flow	English	2		2	1		3	78	122	200	8.00	C	
		5	ETCP206	Kinetics	English	2		2	2		3	93	32	125	5.00	C	
		6	ETCP207	Energy balance	English	2			1	1	3	48	102	150	6.00	C	
		7	ETCP208	Fluid Petroleum Properties	English	2		3		1	3	78	22	100	4.00	C	
					Total	14	0	9	4	3	21	426	324	750	30.00		

Level	Semester	No.	M code	Module Name in English	Language	SSWL (hr/w)					Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisites Module(s) Code
						CL (hr/w)	lect (hr/w)	Lab (hr/w)	Tut (hr/w)	Semn (hr/w)		hr/sem	hr/sem	hr/sem			
		1	ETCP300	Mass Transfer 1	English	3		2			3	78	47	125	5	C	
		2	ETCP301	Heat Transfer 1	English	2		2			3	63	62	125	5	C	
		3	ETCP302	Chemical Engineering Thermodynamics 1	English	2		2			3	63	62	125	5	C	
	Five	4	ETCP303	Reactor Design I	English	2		2		1	3	63	62	125	5	C	
		5	ETCP304	Instrumental of Chemical Analysis	English	2		2		1	3	63	37	100	4	C	
		6	ETCP305	Automation in Chemical Industries	English	2		2		1	3	63	37	100	4	C	
		7	ETCP306	Engineering Analysis	English	2			1		3	48	2	50	2	C	
					Total	15	0	12	1	3	21	441	309	750	30.00		
Three	Semester	No.	M code	Module Name in English	Language	SSWL (hr/w)					Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisites Module(s) Code
						CL (hr/w)	lect (hr/w)	Lab (hr/w)	Tut (hr/w)	Semn (hr/w)		hr/sem	hr/sem	hr/sem			
		1	ETCP307	Industrial Safety	English	2				1	3	33	42	75	3	C	
		2	ETCP308	Mass Transfer 2	English	3		2			3	78	47	125	5	C	
		3	ETCP309	Heat Transfer 2	English	2		2			3	63	62	125	5	C	
		4	ETCP310	Chemical Engineering Thermodynamics 2	English	2		2			3	63	62	125	5	C	
	Six	5	ETCP311	Reactor Design 2	English	2		2		1	3	63	62	125	5	C	
		6	ETCP312	Chemical Process Simulation	English	2		2		1	3	63	37	100	4	C	
		7	ETCP313	Renewable energies	English	2		2			3	63	12	75	3	C	
					Total	15	0	12	2	3	18	426	324	750	30.00		
Level	Semester	No.	M code	Module Name in English	Language	SSWL (hr/w)					Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisites Module(s) Code
						CL (hr/w)	lect (hr/w)	Lab (hr/w)	Tut (hr/w)	Semn(hr/w)		hr/sem	hr/sem	hr/sem			
		1	TEMO400	Project 1	English			4			3	63	37	100	4.00	C	
		2	ETCP400	Petroleum Refinery	English	2		2			3	63	87	150	6.00	C	
		3	ETCP401	Equipment Design 1	English	2			2		3	63	87	150	6.00	C	
	Seven	4	ETCP402	Chemical Industries	English	3		3			3	93	7	100	4.00	C	
		5	ETCP403	Unit Operation 1	English	2		2		1	3	63	87	150	6.00	C	
		6	ETCP404	Environmental Pollution in Chmeical Industries	English	2		2		1	3	63	37	100	4.00	C	
					Total	11	0	13	2	2	18	345	342	750	30.00		
Four	Semester	No.	M code	Module Name in English	Language	SSWL (hr/w)					Exam hr/sem	SSWL	USSWL	SWL	ECTS	Module Type	Prerequisites Module(s) Code
						CL (hr/w)	lect (hr/w)	Lab (hr/w)	Tut (hr/w)	Semn(hr/w)		hr/sem	hr/sem	hr/sem			
			TEMO401	Project 2	English			4			3	63	37	100	4.00	C	
			ETCP405	Petrochemical Industries	English	2		3			3	78	22	100	4.00	C	
			ETCP406	Equipment Design 2	English	2			2	1	3	63	87	150	6.00	C	
	Eight		ETCP407	Gas Technology	English	3				1	3	48	52	100	4.00	C	
			ETCP408	Unit Operation 2	English	2		2		1	3	63	87	150	6.00	C	
			ETCP409	Process Control	English	2		2			3	63	37	100	4.00	C	
			ETCP410	Numerical Analysis	English	2			1		3	48	2	50	2.00	C	
					Total	13	0	11	3	3	21	426	324	750	30.00		
					Total	98	0	82	20	22	144	3024	2878	6015	240		Must be 240 ECTS
er Internships to fullfil t																	
Structured SWL		CL	Class Lecture			B	Basic learning activities				SWL:	Student Workload					
		Lab	Laboratory			C	Core learning activity				SSWL:	Structured SWL					

(hr/w) type																		
		Pr	Practical Training		S	Suport or related learning activity				USSWL:	Unstructured SWL							
		Tut	Tutorial		E	Elective learning activity												
		Lect	Online lecture															
		Semr	Seminar															