

COURSE STRUCTURE

2025-10107 Chemical Engineering (EN) Bachelor

1						2					
No	Course code	Title	Th	Pr	Ects	No	Course code	Title	Th	Pr	Ects
1	MATH 174	Linear algebra and analytic geometry	2	1+0	6	1	TRX 111	History of Azerbaijan	2	2+0	5
2	CHE 125	General Chemistry- 1	2	1+1	6	2	PHYS 200	Fundamentals of Physics	2	1+1	6
3	AZD 140	Official and Academic Communication in the Azerbaijani language	0	2+0	4	3	CHE 126	General Chemistry- 2	2	1+1	6
4	CHE 120	Introduction to Chemical Engineering	1	1+0	4	4	MATH 225	Mathematical analysis- 1	2	2+0	5
5	XXX XXX	[NAE] Foreign language I	0	6+0	5	5	XXX XXX	[NAE] Non Area Elective Course I	2	1+0	3
6	XXX XXX	[NAE] Foreign language II	0	6+0	5	6	XXX XXX	[NAE] Foreign language III	0	6+0	5
Subtotal: 30						Subtotal: 30					

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Nº	Course code	Title	Th	Pr	Ects
1	CHE 124	Mathematical Modeling in Chemical Engineering	2	1+0	4
2	MATH 152	Calculus- 2	2	2+0	6
3	MM 120	Civil Defence	3	0+0	3
4	CHE 122	Materials Science	1	1+0	4
5	CHE 200	Analytical Chemistry and Instrumental Analysis	2	1+1	7
6	CHE 207	Organic Chemistry	2	1+1	6

Subtotal: 30

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Nº	Course code	Title	Th	Pr	Ects
1	CHE 251	Design of Chemical Processes	2	2+0	4
2	CHE 223	Chemical Thermodynamics-1	2	2+0	5
3	ME 240	Fluid Mechanics	2	1+0	3
4	MATH 255	Applied mathematics	2	1+0	4
5	CHE XXX	[AE] Area Elective Course II	2	1+0	5
6	CHE XXX	[AE] Area Elective Course III	2	1+0	4
7	XXX XXX	[AE] Area Elective Course I	2	2+0	5

Subtotal: 30

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Nº	Course code	Title	Th	Pr	Ects
1	CHE 224	Chemical Thermodynamics-2	2	2+0	4
2	CHE 335	Chemical Reaction Engineering- 1	2	1+0	3
3	CHE 221	Mass and Heat Transfer	2	2+0	5
4	CHE XXX	[AE] Area Elective Course VI	2	1+0	5
5	XXX XXX	[AE] Area Elective Course IV	2	1+0	5
6	XXX XXX	[NAE] Non Area Elective Course II	2	0+0	3
7	XXX XXX	[AE] Area Elective Course V	1	1+0	5

Subtotal: 30

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Nº	Course code	Title	Th	Pr	Ects
1	CHE 336	Chemical Reaction Engineering- 2	2	1+0	3
2	CHE 401	Chemical Engineering Design- 1	2	2+0	5
3	CHE 310	Separation Processes	2	2+0	4
4	CHE 352	Chemical Engineering Laboratory- 1	0	0+5	5
5	CHE XXX	[AE] Area Elective Course IX	1	1+0	4
6	CHE XXX	[AE] Area Elective Course VIII	2	1+0	5
7	CHE XXX	[AE] Area Elective Course VII	2	1+0	4

Subtotal: 30

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№	Course code	Title	Th	Pr	Ects
1	CHE 412	Chemical Engineering Design- 2	2	2+0	4
2	CHE 414	Technological Operations of Units in Chemical Engineering	2	2+0	5
3	CHE 353	Chemical Engineering Laboratory- 2	0	0+5	5
4	CHE XXX	[AE] Area Elective Course X	2	1+0	5
5	CHE XXX	[AE] Area Elective Course XI	2	1+0	5
6	XXX XXX	[AE] Area Elective Course XII	2	1+0	6

Subtotal: 30

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№	Course code	Title	Th	Pr	Ects
1	CHE 490	Internship	0	0+0	21
2	CHE 49X	[AE] Graduation Work	0	0+0	9

Subtotal: 30

Total ECTS credits: **240**

AE - Area Elective Courses

№	Course code	Title	Th	Pr	Ects
1	CHE 499	Graduation Work: Thesis	0	0+0	9
2	MINF 282	Statistics for Chemical Engineers	2	2+0	5
3	CHE 226	Introduction to Reservoir Engineering	2	1+0	4
4	CHE 334	Electrochemistry	2	1+0	5
5	CHE 417	Work Safety	1	1+0	5
6	CHE 328	Fuel Cells and Batteries	2	1+0	5
7	CHE 253	Biomass Conversion Technology	1	1+0	4
8	CHE 416	Introduction to Computational Chemistry	2	1+0	6
9	CHE 231	Mineral Processing	2	1+0	5

