

**CURRICULUM \*\***  
**Year of study I**

Code	Disciplines*	Type	Sem. I [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	<b>OBLIGATORII IMPUSE</b>										
STII-0217	General chemistry	FD	2	-	2	-	56	Ex	5	69	
STII-0752	Basics of inorganic chemistry	FD	2	-	2	-	56	Ex	5	69	
STII-0203	Basic Organic Chemistry	FD	3	-	2	-	70	Ex	7	105	
STII-0051	Mathematics I (Algebra and geometry)	CD	1	1	-	-	28	Ex	3	47	
STII-0137	Physics I (Molecular Physics and Heat)	CD	2	-	1	-	42	Ex	4	58	
STII-0266	Computer science	CD	1	-	2	-	42	Cv	4	58	
STII-0465	English I	CD	-	1	-	-	14	Vp	2	36	
	<b>TOTAL</b>		<b>11</b>	<b>2</b>	<b>9</b>	<b>-</b>	<b>308</b>		<b>30</b>	<b>442</b>	
STII-0651	Sport I	CD	-	1	-	-	14	A/R	3	61	
	<b>FACULTATIVE</b>										
STII-0511	Second Foreign Language I	CD	-	-	1	-	14	Vp	2	36	

Code	Disciplines*	Type	Sem. II [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
	<b>OBLIGATORII IMPUSE</b>										
STII-0763	Chemistry of non-metals	FD	2	-	2	-	56	Ex	4	44	
STII-0220	Organic Chemistry simple functions	FD	2	-	2	-	56	Ex	5	69	
STII-0206	Qualitative Analytical Chemistry	FD	2	-	2	-	56	Ex	5	69	
STII-0138	Physics II (Electricity and magnetism, optics)	CD	2	-	1	-	42	Ex	4	58	
STII-0052	Mathematics II (Mathematical Analysis)	CD	1	1	-	-	28	Ex	3	47	
STII-0233	Mechanisms of Reactions in Organic Chemistry	SD	2	2	-	-	56	Ex	4	44	
STII-0466	English II	CD	-	1	-	-	14	Vp	2	36	
STII-0786	Traineeship I	SD	-	-	-	-	60	Cv	3	15	
	<b>TOTAL</b>		<b>11</b>	<b>4</b>	<b>7</b>	<b>-</b>	<b>368</b>		<b>30</b>	<b>382</b>	
STII-0652	Sport II	CD	-	1	-	-	14	A/R	3	61	
	<b>FACULTATIVE</b>										
STII-0512	Second Foreign Language II	CD	-	-	1	-	14	Vp	2	36	

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**Head of department ,**  
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**CURRICULUM \*\***  
**Year of study II**

Code	Disciplines*	Type	Sem. III [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
<b>OBLIGATORII IMPUSE</b>											
STII-0753	Metal chemistry	FD	2	-	2	-	56	Ex	6	94	
STII-0219	Organic Chemistry mix functions and heterocyclic compounds	FD	2	-	2	-	56	Ex	5	69	
STII-0207	Quantitative Analytical Chemistry	FD	2	-	2	-	56	Ex	5	69	
STII-0754	The structure and properties of molecules	FD	2	-	2	-	56	Ex	5	69	
STII-0467	English III	CD	-	1	-	-	14	Vp	2	36	
<b>TOTAL</b>			<b>8</b>	<b>1</b>	<b>8</b>	<b>-</b>	<b>238</b>		<b>23</b>	<b>337</b>	
<b>OBLIGATORII OPȚIONALE</b>											
STII-0671	Trace analysis techniques	SD	2	-	3	-	70	Ex	7	105	
STII-0672	Catalysis	SD	2	-	3	-	70	Ex	7	105	
<b>TOTAL</b>			<b>2</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>70</b>		<b>7</b>	<b>105</b>	
STII-0653	Sport III	CD	-	1	-	-	14	A/R	3	61	
<b>FACULTATIVE</b>											
STII-0513	Second Foreign Language III	CD	-	1	-	-	14	Vp	2	36	
STII-0470	History of sciences	CD	1	1	-	-	28	Cv	3	47	

Code	Disciplines*	Type	Sem. IV [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
<b>OBLIGATORII IMPUSE</b>											
STII-0755	Instrumental analysis	FD	2	-	2	-	56	Ex	4	44	
STII-0756	Chemical thermodynamics	FD	2	-	2	-	56	Ex	5	69	
STII-0757	Physico-chemical bases of Chemical Technology	FD	2	-	2	-	56	Ex	4	44	
STII-0391	Biochemistry I	CD	2	-	2	-	56	Ex	5	69	
STII-0468	English IV	CD	-	1	-	-	14	Vp	2	36	
STII-0787	Traineeship II	SD	-	-	-	-	90	Cv	3	0	
<b>TOTAL</b>			<b>8</b>	<b>1</b>	<b>8</b>	<b>-</b>	<b>328</b>		<b>23</b>	<b>262</b>	
<b>OBLIGATORII OPȚIONALE</b>											
PACHET 1											
STII-0231	Electrochemistry	SD	2	-	3	-	70	Ex	6	80	
STII-0673	Advanced techniques in instrumental analysis	SD	2	-	3	-	70	Ex	6	80	
PACHET 2											
STII-0765	Academic Ethics and Integrity	CD	1	-	-	-	14	Cv	1	11	
STII-0794	Antreprenorship in Natural Sciences Domain	CD	1	-	-	-	14	Cv	1	11	
<b>TOTAL</b>			<b>3</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>84</b>		<b>7</b>	<b>91</b>	
STII-0654	Sport IV	CD	-	1	-	-	14	A/R	3	61	
<b>FACULTATIVE</b>											
STII-0514	Second Foreign Language IV	CD	-	1	-	-	14	Vp	2	36	
STII-0295	Human Anatomy and physiology	CD	2	-	1	-	42	Cv	4	58	

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**CURRICULUM \*\***  
**Year of study III**

Code	Disciplines*	Type	Sem. V [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
<b>OBLIGATORII IMPUSE</b>											
STII-0758	Chemical kinetics	FD	2	-	2	-	56	Ex	6	94	
STII-0759	Methods of separation	FD	2	-	2	-	56	Ex	6	94	
STII-0248	Biochemistry II	CD	2	-	2	-	56	Cv	6	94	
<b>TOTAL</b>			<b>6</b>	<b>-</b>	<b>6</b>	<b>-</b>	<b>168</b>		<b>18</b>	<b>282</b>	
<b>OBLIGATORII OPȚIONALE</b>											
PACHET 1											
STII-0226	Natural Compounds	SD	2	-	3	-	70	Ex	6	80	
STII-0224	Biological Active Compounds	SD	2	-	3	-	70	Ex	6	80	
PACHET 2											
STII-0227	Organometallic compounds	SD	2	-	3	-	70	Ex	6	80	
STII-0213	Compounds Coordinative Chemistry	SD	2	-	3	-	70	Ex	6	80	
<b>TOTAL</b>			<b>4</b>	<b>-</b>	<b>6</b>	<b>-</b>	<b>140</b>		<b>12</b>	<b>160</b>	
<b>FACULTATIVE</b>											
STII-0764	Drug chemistry	SD	2	-	2	-	56	Ex	5	69	
STII-0792	Life skills	CD	1	-	-	-	14	Vp	1	11	
STII-0793	Career Coaching	CD	1	-	-	-	14	Vp	1	11	

Code	Disciplines*	Type	Sem. VI [hours / week]				Total of hours / sem.	Type of Exami- nation	Cre- dits	IS [hours / sem.]	Condi- tioning
			C	S	L	P					
<b>OBLIGATORII IMPUSE</b>											
STII-0204	Chemistry of materials	SD	2	-	2	-	48	Ex	5	77	
STII-0413	Elaboration of degree theses	SD	-	-	2	-	24	A/R	4	76	
<b>TOTAL</b>			<b>2</b>	<b>-</b>	<b>4</b>	<b>-</b>	<b>72</b>		<b>9</b>	<b>153</b>	
<b>OBLIGATORII OPȚIONALE</b>											
PACHET 1											
STII-0405	Environmental chemistry	SD	2	-	2	-	48	Ex	5	77	
STII-0760	Quality assurance and standardization	SD	2	-	2	-	48	Ex	5	77	
PACHET 2											
STII-0761	Chemical technology	SD	2	-	2	-	48	Ex	5	77	
STII-0234	Chromatographic methods of analysis	SD	2	-	2	-	48	Ex	5	77	
PACHET 3											
STII-0675	Nuclear Chemistry	SD	2	2	-	-	48	Ex	5	77	
STII-0676	The structure of inorganic compounds	SD	2	2	-	-	48	Ex	5	77	
PACHET 4											
STII-0225	Macromolecular Compounds	SD	2	-	3	-	60	Cv	6	90	
STII-0223	Colloids	SD	2	-	3	-	60	Cv	6	90	
<b>TOTAL</b>			<b>8</b>	<b>2</b>	<b>7</b>	<b>-</b>	<b>204</b>		<b>21</b>	<b>321</b>	
<b>FACULTATIVE</b>											
STII-0751	Clinical Biochemistry	CD	1	-	2	-	36	Cv	3	39	

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**VIII. DISTRIBUTION OF CREDITS ACCORDING TO COMPETENCES (TABLES NRQHE /ARACIS - Grid 1 \*)**

No.	Discipline**	Sem.	Number of credits	Professional Competences						Transversal Competences			
				C1	C2	C3	C4	C5	C6	CT1	CT2	CT3	
1.	Chimie generală	I	5	1	1	1	1					1	
2.	Bazele chimiei anorganice	I	5	1	1	1					1	1	
3.	Bazele chimiei organice	I	7	1	1	1	1		1		1	1	
4.	Matematică I (algebră și geometrie)	I	3			1	1					1	
5.	Fizică I (fizică moleculară și căldură)	I	4		1	1	1					1	
6.	Informatică	I	4				1		1			1	1
7.	Limba engleză I	I	2										2
8.	Educație fizică I	I	3							2	1		0
9.	A doua limba străină I	I	2										2
10.	Chimia nemetalelor	II	4	1	1	1			1				
11.	Chimie organică funcțiuni simple	II	5	1	1			1	1	1			
12.	Chimie analitică calitativă	II	5			1	1	1	1	1			
13.	Fizică II (electricitate, magnetism, optică)	II	4	1		1	1					1	
14.	Matematica II (analiză matematică)	II	3			1	1					1	
15.	Mecanisme de reacție în chimia organică	II	4	2						1			1
16.	Limba engleză II	II	2										2
17.	Practică de specialitate I	II	3					1	1	1			
18.	Educație fizică II	II	3							2	1		
19.	A doua limba străină II	II	2										2
20.	Chimia metalelor	III	6	1	1	1	1		1	1			
21.	Chimie organică funcțiuni mixte și compuși heterociclici	III	5	1		1	1		1	1			
22.	Chimie analitică cantitativă	III	5	1		1		1	1	1			
23.	Structura și proprietățile moleculelor	III	5	1	1	1		1				1	
24.	Limba engleză III	III	2										2
25.	Educație fizică III	III	3							2	1		
26.	Tehnici de analiză în urme	III	7	1	1	1	1	1	1	1			
27.	Cataliza	III	7	1		1	1	2	1	1			
28.	A doua limba străină III	III	2										2
29.	Istoria științei	III	3									2	1
30.	Analiza instrumentală	IV	4			1		1	1	1			
31.	Termodinamica chimică	IV	5	1		1	1	1		1			
32.	Bazele fizico-chimice ale tehnologiei chimice	IV	4				1	1		1		1	
33.	Biochimie I	IV	5		1	1	1	1		1			
34.	Limba engleză IV	IV	2										2
35.	Practică de specialitate II	IV	3					1	1	1			
36.	Educație fizică IV	IV	3							2	1		
37.	Electrochimie	IV	6			1	1	1		1	1		1
38.	Tehnici avansate în analiza instrumentală	IV	6			1		1	1	1	1		1
39.	etică și integritate academică	IV	1									1	
40.	Antreprenariat în domeniul Științe ale naturii	IV	1									1	
41.	A doua limba străină IV	IV	2										2
42.	Anatomia și fiziologia omului	IV	4							2	2		
43.	Cinetică chimică	V	6	1		2	1	1	1				
44.	Metode de separare	V	6	1		1	1	1	1	1			
45.	Biochimie II	V	6		1	1	1	1	1	1			
46.	Compuși naturali	V	6		1	1	1	1	1	1		1	
47.	Compuși biologic activi	V	6	1	1	1	1			1		1	
48.	Compuși organometalici	V	6	1	1	1	1			1		1	
49.	Chimie coordinativă	V	6	1	1	1	1		1	1			
50.	Chimia medicamentelor	V	5			1	1	1	1	1			
51.	Abilități de viață	V	1										1
52.	Coaching pentru carieră	V	1										1
53.	Chimia materialelor	VI	5	1	1				1	1	1		
54.	Elaborarea lucrării de licență	VI	4					1	1	1			1
55.	Chimie mediului	VI	5				1	1	1	1		1	
56.	Asigurarea calității și standardizare	VI	5			1	1	1	1	1			
57.	Tehnologie chimică	VI	5			1	1	1		1		1	
58.	Metode cromatografice de analiză	VI	5			1	1		1	1		1	
59.	Chimie nucleară	VI	5	1	1	1		1				1	
60.	Structura compușilor anorganici	VI	5	1		1	1			1		1	
61.	Compuși macromoleculari	VI	6	1	1	1	1	1		1			
62.	Coloizi	VI	6	1	1	1	1	1		1			
63.	Biochimie clinică	VI	3			1	1			1			

Legendă: C1 ÷ C5 sau C6 - Competențe profesionale; CT1 ÷ CT3 - Competențe transversale

\* Se va utiliza Grila 1 (G1) care prezintă variantele: G1L și G1M corepunzătoare ciclurilor de studii de licență și masterat, în conformitate cu Ordinul MECS nr. 5703 / 18.10.2011.

\*\* Se vor trece toate disciplinele din Planul de Învățământ