

TABLE 2: COURSE DISTRIBUTION PER SEMESTER

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
A' Semester								
1.	Theoretical	Professional Skills for Chemical Engineers	CEN 100	2	3 hrs	6	12	1
2.	Theoretical	Mathematics I	CEN 101	2	1,5 hrs	13	26	4
3.	Theoretical	Physics I	CEN 102	2	1,5 hrs	13	26	4
4.	Theoretical	Biology for Chemical Engineers	CEN 103	2	1,5 hrs	13	26	4
5.	Theoretical	Inorganic Chemistry	CEN 104	2	1,5 hrs	13	26	4
6.	Experimental	Chemical Engineering Laboratory I	CEN 105	16 labs/ semester	2 hrs	16 labs/ semester	16 labs/ semester	7
7.	Theoretical	English for Chemical Engineering I	LCE 131	2	1,5 hrs	13	26	4
B' Semester								
1.	Theoretical	Mathematics II	CEN 107	2	1,5 hrs	13	26	4
2.	Theoretical	Physics II	CEN 108	2	1,5 hrs	13	26	4
3.	Theoretical	Organic Chemistry I	CEN 109	2	1,5 hrs	13	26	4
4.	Theoretical	Analytical Chemistry	CEN 110	2	1,5 hrs	13	26	4

5.	Theoretical	Introduction to Chemical Engineering	CEN 111	2	1,5 hrs	13	26	4
6.	Experimental	Chemical Engineering Laboratory II	CEN 112	16 labs/ semester	2 hrs	16 labs/ semester	16 labs/ semester	5
7.	Theoretical	English for Chemical Engineering II	LCE 132	2	1,5 hrs	13	26	4

C' Semester								
1.	Theoretical	Mathematics III	CEN 203	2	1,5 hrs	13	26	5
2.	Theoretical	Applied Thermodynamics I	CEN 204	2	2 hrs	13	26	5
3.	Theoretical	Organic Chemistry II	CEN 205	2	1,5 hrs	13	26	5
4.	Theoretical	Mass and Energy Balances	CEN 206	2	1,5 hrs	13	26	5
5.	Theoretical	Physical Chemistry I	CEN 208	2	1,5 hrs	13	26	5
6.	Theoretical	Engineering Mechanics	CEN 213	2	1,5 hrs	13	26	5
7.	Experimental	Organic Chemistry Laboratory	CEN 214	5 labs/ semester	2 hrs	5 labs/ semester	5 labs/ semester	2
D' Semester								
	Theoretical and Experimental	Mechanical Design with the Help of Computer	CEN 201	1	3 hrs	13	13	5

1.	Theoretical and Experimental	Data analysis and Introduction to Applied Statistics	CEN 202	2	1.5 hrs	13	26	5
2.	Theoretical	Transport Phenomena I: Fluid Mechanics	CEN 207	2	1,5 hrs	13	26	5
3.	Theoretical	Materials Science and Technology	CEN 212	2	1,5 hrs	13	26	5
4.	Experimental	Physical Chemistry Laboratory	CEN 215	10 labs/ semester	2 hrs	10 labs/ semester	10 labs/ semester	2
5.	Theoretical	Physical Chemistry II	CEN 304	2	1,5 hrs	13	26	5
6.	Theoretical	Applied Thermodynamics II	CEN 305	2	1,5 hrs	13	26	5

E' Semester								
1.	Theoretical	Chemical Reaction Engineering	CEN 210	2	1.5 hrs	13	26	5
2.	Theoretical and Laboratory	Dynamic Simulation with the Use of Computers	CEN 301	2	1.5 hrs	13	26	5
		Computational Laboratory	CEN 301E	1	2 hrs	6	6	
3.	Experimental	Chemical Technology Lab	CEN 302	10 labs/ semester	2 hrs	10 labs/ semester	10 labs/ semester	5
4.	Theoretical	Engineering Economics and Production Management	CEN 303	2	1,5 hrs	13	26	5

5.	Theoretical	Transport Phenomena II: Heat and Mass Transfer	CEN 312	2	2 hrs	13	26	5
6.	Theoretical	SPECIALIZATION COURSE 1	CEN 321-326, 328-333	2	1,5 hrs	13	26	4
F' Semester								
1.	Theoretical	Unit Operations I	CEN 209	2	1,5 hrs	13	26	5
2.	Theoretical	Biochemical Processes	CEN 211	2	1,5 hrs	13	26	5
	Theoretical	Electrical Circuits	CEN 306	2	1,5 hrs	13	26	5
3.	Theoretical	Chemical Reactor Design and Installation	CEN 307	2	1,5 hrs	13	26	5
4.	Experimental	Processes Lab I	CEN 310	1	2 hrs	6	6	2
5.	Theoretical	Air Pollution and Design of Pollution Control Systems	CEN 402	2	1,5 hrs	13	26	5
6.	Theoretical	SPECIALIZATION COURSE 2	CEN 321-326, 328-333	2	1,5 hrs	13	26	4
7.	Theoretical and/or Experimental	Practical Training	CEN 309	NR	NR	NR	NR	5

G' Semester

1.	Theoretical	Unit Operations II: Separation Technologies	CEN 327	2	1,5 hrs	13	26	5
2.	Theoretical	Biochemical Engineering – Production of Biotechnological Products	CEN 401	2	1,5 hrs	13	26	5
3.	Experimental	Processes Lab II	CEN 403	1	2 hrs	6	6	2
4.	Theoretical	Processes Design and Control	CEN 406	2	1,5 hrs	13	26	5
5.	Theoretical	Seminars for linking curriculum learning to careers I	CEN 407	1	1.5 hrs	13	13	1
6.	Theoretical	SPECIALIZATION COURSE 3	CEN 321-326, 328-333	2	1,5 hrs	13	26	4
7.	Theoretical	SPECIALIZATION COURSE 4	CEN 321-326, 328-333	2	1,5 hrs	13	26	4
8.	Theoretical or/and Experimental	Bachelor's Thesis I	CEN 404	NR	NR	NR	NR	10
H' Semester								
1.	Theoretical and Experimental	Industrial Process Design using Aspen Hysys	CEN 311	2	1,5 hrs	13	26	5
2.	Theoretical	SPECIALIZATION COURSE OPTION	CEN 421 – 430	2	1,5 hrs	13	26	4

3.	Theoretical	SPECIALIZATION COURSE 5	CEN 321-326, 328-333	2	1,5 hrs	13	26	4
4.	Theoretical	SPECIALIZATION COURSE 6	CEN 321-326, 328-333	2	1,5 hrs	13	26	4
5.	Theoretical	Seminars for linking curriculum learning to careers II	CEN 408	1	1.5 hrs	13	13	1
6.	Theoretical or/and Experimental	Bachelor's Thesis II	CEN 405	NR	NR	NR	NR	10