SENAT,

„*GHEORGHE ASACHI*" TECHNICAL UNIVERSITY OF IAŞI
"*CRISTOFOR SIMIONESCU*" FACULTY OF CHEMICAL ENGINEERING AND ENVIRONMENTAL PROTECTION

Domain: **Environmental Engineering**
Specialization: **Environmental Engineering and Protection in Industry**
Title of the graduated: ***Engineer***
Period of studies: ***4 years***
Learning program: **daily**

CURRICULUM

Ist YEAR

	No.	Discipline	Code	Prerequisites	1st Semester						2nd Semester					
					No.h/week/ discipline				Final evaluation	K	No.h/week/ discipline				Final evaluation	K
					C	S	L	P			C	S	L	P		
DI	101	Mathematical Analysis and Linear Algebra	DF DI		2	2	-	-	**E**	**5**						
	102	Physics	DF DI		3	-	2	-	**E**	**5**						
	103	Inorganic Chemistry	DF DI		2	-	2	-	**E**	**5**						
	104	Ecology	DF DI		2	-	-	-	**C**	**4**						
	105	Applied Informatics 1	DF DI		2	-	2	-	**E**	**5**						
	106	Climatology	DID DI								2	-	1	-	**C**	**3**
	107	Numerical Methods and Statistics	DF DI								2	2	-	-	**E**	**4**
	108	Soil sciences	DID DI								2	-	2	-	**E**	**4**
	109	Organic chemistry	DF DI								2	-	2	-	**E**	**5**
	110	Applied Informatics 2	DF DI								2	-	2	-	**E**	**5**
	111	Computer Assisted Graphics	DF DI								1	-	2	-	**C**	**3**
	112	Physical Training	DC DI		-	-	1	-	-	-	-	-	1	-	**A/R**	**2**
DO	113	English/French/German Language	DC DO		-	2	-	-	**VP**	**2**	-	2	-	-	**VP**	**2**
	114	Environment and sustainable development / Environmental Psychology and Social Inquiry Techniques	DC DO		2	1	-	-	**C**	**4**						
	115	Inter-human Communication / Culture, Civilization and European Institutions	DC DO								1	1	-	-	**C**	**2**
DL	116	Fundamental Concepts in Chemistry	DF DL		2				**VP**	**2**						
	117	Fundamental Concepts in Mathematics	DF DL		2				**VP**	**2**						
	118	Elaboration techniques of scientific reports and presentations	DID DL								1		1		**VP**	**2**
		Total hours on week, total tests and credits on semester, at DI (mandatory disciplines) and DO (optional disciplines)			13	5	7		**4E 2C 1VP**	**30**	12	5	10		**4E 3C 1VP**	**30**
					25						27					

RECTOR,
Prof. dr.Eng.Dan Caşcaval

DEAN,
Prof.dr.Eng. Nicolae Hurduc

SENAT,

„*GHEORGHE ASACHI*" TECHNICAL UNIVERSITY OF IAŞI
"*CRISTOFOR SIMIONESCU*" FACULTY OF CHEMICAL ENGINEERING AND ENVIRONMENTAL PROTECTION
Domain: **Environmental Engineering**
Specialization: **Environmental Engineering and Protection in Industry**
Title of the graduated: ***Engineer***
Period of studies: ***4 years***
Learning program: **daily**

CURRICULUM

IInd YEAR

	No.	Discipline	Code	Prerequisites	1st Semester						2nd Semester					
					No.h/week/ discipline				Final evaluation	K	No.h/week/ discipline				Final evaluation	K
					C	S	L	P			C	S	L	P		
DI	201	Analytical Chemistry and Instrumental Analysis	DID DI		2	-	3	-	**C**	**6**						
	202	Materials Science	DID DI		2	-	2	-	**E**	**5**						
	203	Hydraulics	DID DI		2	-	1	-	**E**	**4**						
	204	Environmental Chemistry	DF DI		2	-	1	-	**E**	**4**						
	205	Biology and Microbiology	DF DI		2	-	2	-	**C**	**4**						
	206	Eco-Toxicology	DID DI								2	-	2	-	**E**	**4**
	207	Topography	DID DI								1	-	1	-	**C**	**2**
	208	Mechanical and Electrotechnical Engineering Elements	DID DI								2	-	2	-	**E**	**4**
	209	Hydrology and Hydrogeology	DID DI								2	-	2	-	**E**	**4**
	210	Physical Training	DC DI		-	-	1	-	**-**	**-**	-	-	1	-	**A/R**	**2**
	211	Practical training (for specialization)– 3 weeks	DID DI								3x30				**C**	**3**
DO	212	English/French/German Language	DC DO		-	2	-	-	**VP**	**2**	-	2	-	-	**VP**	**2**
	213	Transfer Phenomena, Unit Operation and Equipments 1 Hydraulics 2	DID DO								3	-	2	-	**E**	**5**
	214	Biochemistry Geo-techniques	DF DO		2	-	2	-	**E**	**5**						
	215	Radiation Sources and Protection Technologies Natural and technological disasters	DID DO								2	-	2	-	**C**	**4**
DL	216	Radio-chemistry	DIS DL		2				**VP**	**2**						
	217	Polymers for environment	DIS DL		1		1		**VP**	**2**						
	218	Marketing of eco-products	DIS DL								2				**VP**	**2**
	219	Unconventional sources of energy	DIS DL								2				**VP**	**2**
	220	Creativity stimulation	DC DL								2				**VP**	**2**
		Total hours on week, total tests and credits on semester, at DI (mandatory disciplines) and DO (optional disciplines)			12	2	12	-	**4E 2C 1VP**	**30**	12	2	12	-	**4E 3C 1VP**	**30**
					26						26					

RECTOR,
Prof. dr.Eng.Dan Caşcaval

DEAN,
Prof.dr.Eng. Nicolae Hurduc

SENAT,

„„*GHEORGHE ASACHI*" TECHNICAL UNIVERSITY OF IAŞI
"*CRISTOFOR SIMIONESCU*" FACULTY OF CHEMICAL ENGINEERING AND ENVIRONMENTAL PROTECTION

Domain: **Environmental Engineering**
Specialization: **Environmental Engineering and Protection in Industry**
Title of the graduated: ***Engineer***
Period of studies: ***4 years***
Learning program: **daily**

CURRICULUM

IIIrd YEAR

	No.	Discipline	Code	Prerequisites	1st Semester						2nd Semester					
					No.h/week/ discipline				Final evaluation	K	No.h/week/ discipline				Final evaluation	K
					C	S	L	P			C	S	L	P		
DI	301	Transfer Phenomena, Unit Operation and Equipments 2	DID DI		2	-	1	-	**E**	**4**						
	302	Transfer Phenomena, Unit Operation and Equipments, project design	DID DI		-	-	-	2	**VP**	**3**						
	303	Physical Chemistry 1: Thermodynamics	DIS DI		2	-	2	-	**E**	**5**						
	304	Analysis and Synthesis of Technological Processes	DID DI		3	-	2	-	**E**	**6**						
	305	Technologies for Acquisition, Monitoring and Diagnosis of Environmental Protection Quality	DID DI		2	-	2	-	**C**	**4**						
	306	Engineering of Chemical and Biological Processes	DIS DI		3	-	3	-	**E**	**6**						
	307	Environmental Legislation	DID DI		2	-	-	-	**C**	**2**						
	308	Automatization of Technological Processes	DID DI								2	-	2	-	**E**	**4**
	309	Technologies for Atmosphere Protection	DID DI								2	-	2	-	**E**	**4**
	310	Technologies for Atmosphere Protection, project design	DID DI								-	-	-	2	**VP**	**3**
	311	Optimization of Technological Processes	DID DI								2	1	-	-	**C**	**3**
	312	Physical Chemistry 2: Kinetics	DID DI								2	-	2	-	**E**	**4**
	313	Technologies for drinking and industrial water	DIS DI								2	-	2	-	**E**	**4**
	314	Practical training (for specialization)– 3 weeks	DIS DI								3x30				**C**	**3**
DO	315	Marketing / Industrial economy	DID DO								2	-	-	-	**VP**	**2**
	316	Electrochemistry and Corrosion / GIS (Geographical Information Systems)	DID DO								2	-	1	-	**C**	**3**
DL	317	Chemical and bio-chemical sensors	DIS DL		1		1		**VP**	2						
	318	Viability of industrial systems	DID DL		2				**VP**	2						
	319	Entrepreneurship	DIS DL		2				**VP**	3						
	320	Biomass valorization for energy	DID DL								2				**VP**	**2**
	321	Eco-design	DIS DL								2				**VP**	**2**
		Total hours on week, total tests and credits on semester, at DI (mandatory disciplines) and DO (optional disciplines)			14	-	10	2	**4E 2C 1VP**	**30**	14	1	9	2	**4E 3C 2VP**	**30**
					26						26					

RECTOR,
Prof. dr. eng.Dan Caşcaval

DEAN,
Prof.dr.eng. Nicolae Hurduc

SENAT,

„*GHEORGHE ASACHI*" TECHNICAL UNIVERSITY OF IAŞI
"*CRISTOFOR SIMIONESCU*" FACULTY OF CHEMICAL ENGINEERING AND ENVIRONMENTAL PROTECTION
Domain: **Environmental Engineering**
Specialization: **Environmental Engineering and Protection in Industry**
Title of the graduated: ***Engineer***
Period of studies: ***4 years***
Learning program: **daily**

CURRICULUM

IVth YEAR

	No.	Discipline	Code	Prerequisites	1st Semester						2nd Semester					
					No.h/week/ discipline				Final evaluation	K	No.h/week/ discipline				Final evaluation	K
					C	S	L	P			C	S	L	P		
DI	401	Technologies and Biotechnologies for Waste Waters Treatment	DIS DI		3	-	3	-	**E**	**6**						
	402	Technologies and Biotechnologies for Waste Waters Treatment, project design	DIS DI		-	-	-	2	**VP**	**3**						
	403	Biotechnologies and Bioremediation	DIS DI		3	-	3	-	**E**	**6**						
	404	Environmental Impact Assessment	DID DI		2	3	-	-	**C**	**6**						
	405	Wastes Treatment Technologies and Valorization	DIS DI		3	-	2	-	**E**	**6**						
	406	Wastes Treatment Technologies and Valorization, project design	DIS DI		-	-	-	2	**VP**	**3**						
	407	Ecological Management	DID DI								2	1	-	-	**E**	**4**
	408	Catalysis in Environmental Protection	DIS DI								2	-	2	-	**E**	**4**
	409	Elaboration and Management of Environmental Projects	DIS DI								1	-	-	1	**VP**	**3**
	410	Technologies for Soil Decontamination	DIS DI								2	-	-	2	**E**	**5**
	411	Integrated Pollution Prevention and Control	DID DI								2	-	-	2	**E**	**5**
	412	Research, Design and Elaboration of Graduation Project	DIS DI								-	-	6	-	**VP**	**4**
	413	Practical training for elaboration of diploma project	DIS DI								2 * 30				**C**	**2**
DO	414	Energy and environment Quality monitoring of environmental components	DIS DO								2	-	1	-	**C**	**3**
DL	415	Advanced numerical computed applications for environmental protection	DID DL		1		1		**VP**	**2**						
	416	Techniques for Protection of Cultural Heritage	DID DL		2				**VP**	**2**						
	417	Innovation elements	DID DL								2	-	-	-	**VP**	**2**
PL	418	Graduation Project exam and defend (DP)														**10**
		Total hours on week, total tests and credits on semester, at DI (mandatory disciplines) and DO (optional disciplines)			11	3	8	4	**3E 1C 2VP**	**30**	11	1	9	5	**4E 1C 2VP PL**	**30 10**
					26						26					

RECTOR,
Prof. dr.Eng.Dan Caşcaval

DEAN,
Prof.dr.Eng. Nicolae Hurduc