

Process Engineering Degree

Semester 1

Teaching unit	Course title	Credits	Coefficient	Hourly volume per week			Hourly Volume of each semester (15 weeks)	Additional Work (15 weeks)	Assessment method	
				Course	TD	PW			Continuous Assessment	Exam
Fundamental Unit Code: UEF 1.1 Credits : 18 Coefficients: 9	Mathematics 1	6	3	3:00 a.m.	1h30		67h30	82h30	40%	60%
	Physics 1	6	3	3:00 a.m.	1h30		67h30	82h30	40%	60%
	Structure of matter	6	3	3:00 a.m.	1h30		67h30	82h30	40%	60%
Methodological Unit Code: UEM 1.1 Credits: 9 Coefficients: 5	Physics 1 Practical Work	2	1			1h30	10:30 p.m.	27:30	100%	
	Chemistry 1 practical work	2	1			1h30	10:30 p.m.	27:30	100%	
	Computer Science 1	4	2	1h30		1h30	45h00	55h00	40%	60%
	Writing methodology	1	1	1 hour			3:00 p.m.	10:00 a.m.		100%
Discovery Unit Code: UED 1.1 Credits: 1 Coefficients: 1	Professions in Science and Technologies 1	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal Unit Code: UET 1.1 Credits: 2 Coefficients: 2	Ethical and deontological foundations	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
	Foreign language 1 (French or English)	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Total semester 1		30	17	4:00 p.m.	4:30 a.m.	4:30 a.m.	375 hours	375 hours		

Semester 2

Teaching unit	Course title	Credits	Coefficient	Hourly volume per week			Hourly Volume of each semester (15 weeks)	Additional Work (15 weeks)	Assessment method	
				Course	TD	PW			Continuous Assessment	Exam
Fundamental Unit Code: UEF 1.2 Credits: 18 Coefficients: 9	Mathematics 2	6	3	3:00 a.m.	1h30		67h30	82h30	40%	60%
	Physics 2	6	3	3:00 a.m.	1h30		67h30	82h30	40%	60%
	Thermodynamics	6	3	3:00 a.m.	1h30		67h30	82h30	40%	60%
Methodological Unit Code: UEM 1.2 Credits: 9 Coefficients: 5	Physics 2 Practical Work	2	1			1h30	10:30 p.m.	27:30	100%	
	Chemistry 2 practical work	2	1			1h30	10:30 p.m.	27:30	100%	
	Computer Science 2	4	2	1h30		1h30	45h00	55h00	40%	60%
	Presentation methodology	1	1	1 hour			3:00 p.m.	10:00 a.m.		100%
Discovery Unit Code: UED 1.2 Credits: 1 Coefficients: 1	Professions in science and technologies 2	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal Unit Code: UET 1.2 Credits: 2 Coefficients: 2	Foreign language 2 (French and/or English)	2	2	3:00 a.m.			45h00	5:00 a.m.		100%
Total semester 2		30	17	4:00 p.m.	4:30 a.m.	4:30 a.m.	375 hours	375 hours		

Semester 3

Teaching unit	Course title	Credits	Coefficient	Hourly volume per week			Hourly Volume of each semester (15 weeks)	Additional Work (15 weeks)	Assessment method	
				Course	TD	PW			Continuous Assessment	Exam
Fundamental unit Code: UEF 2.1.1 Credits: 10 Coefficients: 5	Mathematics 3	6	3	3:00 a.m.	1h30		67h30	82h30	40%	60%
	Waves and vibrations	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental unit Code: UEF 2.1.2 Credits: 8 Coefficients: 4	Fluid mechanics	4	2	1h30	1h30		45h00	55h00	40%	60%
	Mineral chemistry	4	2	1h30	1h30		45h00	55h00	40%	60%
Methodological unit Code: UEM 2.1 Credits: 9 Coefficients: 5	Probability and statistics	4	2	1h30	1h30		45h00	55h00	40%	60%
	Computer Science 3	2	1			1h30	10:30 p.m.	27:30	100%	
	Technical drawing	2	1			1h30	10:30 p.m.	27:30	100%	
	TP Waves and vibrations	1	1			1 h	3:00 p.m.	10:00 a.m.	100%	
EU Discovery Code: UED 2.1 Credits: 2 Coefficients: 2	HSE Industrial Installations	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
	Regulations and standards	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 2.1 Credits: 1 Coefficients: 1	Technical English	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Total semester 3		30	17	1:30 p.m.	7:30 a.m.	4:00 a.m.	375 hours	375 hours		

Semester 4

Teaching unit	Course title	Credits	Coefficient	Hourly volume per week			Hourly Volume of each semester (15 weeks)	Additional Work (15 weeks)	Assessment method	
	Titled			Course	TD	PW			Continuous Assessment	Exam
Fundamental Unit Code: UEF 2.2.1 Credits: 8 Coefficients: 4	Chemistry of Solutions	4	2	1h30	1h30		45h00	55h00	40%	60%
	Organic chemistry	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental Unit Code: UEF 2.2.2 Credits: 8 Coefficients: 4	Chemical thermodynamics	4	2	1h30	1h30		45h00	55h00	40%	60%
	Numerical methods	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental Unit Code: UEF 2.2.3 Credits: 2 Coefficients: 1	Chemical kinetics	2	1	1h30			10:30 p.m.	27:30		100%
Methodological Unit Code: UEM 2.2 Credits: 9 Coefficients: 5	Practical work on Chemistry of Solutions	2	1			1h30	10:30 p.m.	27:30	100%	
	Organic Chemistry Practical Work	1	1			1 h	3:00 p.m.	10:00 a.m.	100%	
	Practical work on fluid mechanics	2	1			1h30	10:30 p.m.	27:30	100%	
	Numerical Methods Practical Work	2	1			1h30	10:30 p.m.	27:30	100%	
	Chemical Kinetics Practical Work	2	1			1h30	10:30 p.m.	27:30	100%	
Discovery Unit Code: UED 2.2 Credits: 2 Coefficients: 2	Introduction to Refining and Petrochemistry	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
	Concepts of transfer phenomena	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal Unit Code: UET 2.2 Credits: 1 Coefficients: 1	Techniques of expression, information and communication	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Total semester 4		30	17	12:00 p.m.	6:00 a.m.	7:00 a.m.	375 hours	375 hours		

Semester 5

Teaching unit	Materials	Credits	Coefficient	Weekly hourly volume			Half-yearly Hourly Volume (15 weeks)	Additional Work in Consultation (15 weeks)	Assessment method	
	Titled			Course	TD	PW			Continuous Assessment	Exam
Fundamental EU Code: UEF 3.1.1 Credits: 10 Coefficients: 5	Heat Transfer	4	2	1h30	1h30		45h00	55h00	40%	60%
	Transfer of Matter	4	2	1h30	1h30		45h00	55h00	40%	60%
	Transfer of Momentum	2	1	1h30			10:30 p.m.	27:30		100%
Fundamental EU Code: UEF 3.1.2 Credits: 8 Coefficients: 4	Electrochemistry	4	2	1h30	1h30		45h00	55h00	40%	60%
	Instrumentation - sensors	2	1	1h30			10:30 p.m.	27:30		100%
	Kinetics and homogeneous catalysis	2	1	1h30			10:30 p.m.	27:30		100%
Methodological EU Code: UEM 3.1 Credits: 9 Coefficients: 5	Analysis techniques	4	2	1h30		1h30	45h00	55h00	40%	60%
	Practical work: Physical Chemistry 1 and Chemical Engineering 1	2	1			1h30	10:30 p.m.	27:30	100%	
	Macroscopic assessments	3	2	1h30	1 hour		37h30	37h30	40%	60%
EU Discovery Code: UED 3.1 Credits: 2 Coefficients: 2	pharmaceutical processes	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
	Agri-food processes	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 3.1 Credits: 1 Coefficients: 1	Pollution: Air, water, soil	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Total semester 5		30	17	4:30 p.m.	5:30 a.m.	3:00 a.m.	375 hours	375 hours		

Semester 6

Teaching unit	Materials	Credits	Coefficient	Weekly hourly volume			Half-yearly Hourly Volume (15 weeks)	Additional Work in Consultation (15 weeks)	Assessment method	
	Titled			Course	TD	TP			Continuous Assessment	Exam
Fundamental EU Code: UEF 3.2.1 Credits: 10 Coefficients: 5	Unit operations	6	3	3:00 a.m.	1h30		67h30	82h30	40%	60%
	Thermodynamics of equilibria	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental EU Code: UEF 3.2.2 Credits: 8 Coefficients: 4	Homogeneous reactors	4	2	1h30	1h30		45h00	55h00	40%	60%
	Surface phenomena and heterogeneous catalysis	4	2	1h30	1h30		45h00	55h00	40%	60%
Methodological EU Code: UEM 3.2 Credits: 9 Coefficients: 5	End of Cycle Project	4	2			3:00 a.m.	45h00	55h00	100%	
	Process simulators	3	2	1h30		1 hour	37h30	37h30	40%	60%
	Practical work in physical chemistry 2 and chemical engineering 2	2	1			1h30	10:30 p.m.	27:30	100%	
EU Discovery Code: UED 3.2 Credits: 2 Coefficients: 2	Cryogenic processes	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
	Corrosion	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 3.2 Credits: 1 Coefficients: 1	Entrepreneurship and business management	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Total semester 6		30	17	1:30 p.m.	6:00 a.m.	5:30 a.m.	375 hours	375 hours		