



الجمهورية الجزائرية الديمقراطية الشعبية
République Algérienne Démocratique et
Populaire
وزارة التعليم العالي والبحث العلمي
Ministère de l'Enseignement Supérieur
et de la Recherche Scientifique

Université

LOGO

TRAINING OFFER L.M.D. ACADEMIC BACHELOR'S DEGREE

NATIONAL PROGRAM 2018 - 2019

Establishment	Faculty / Institute	Department

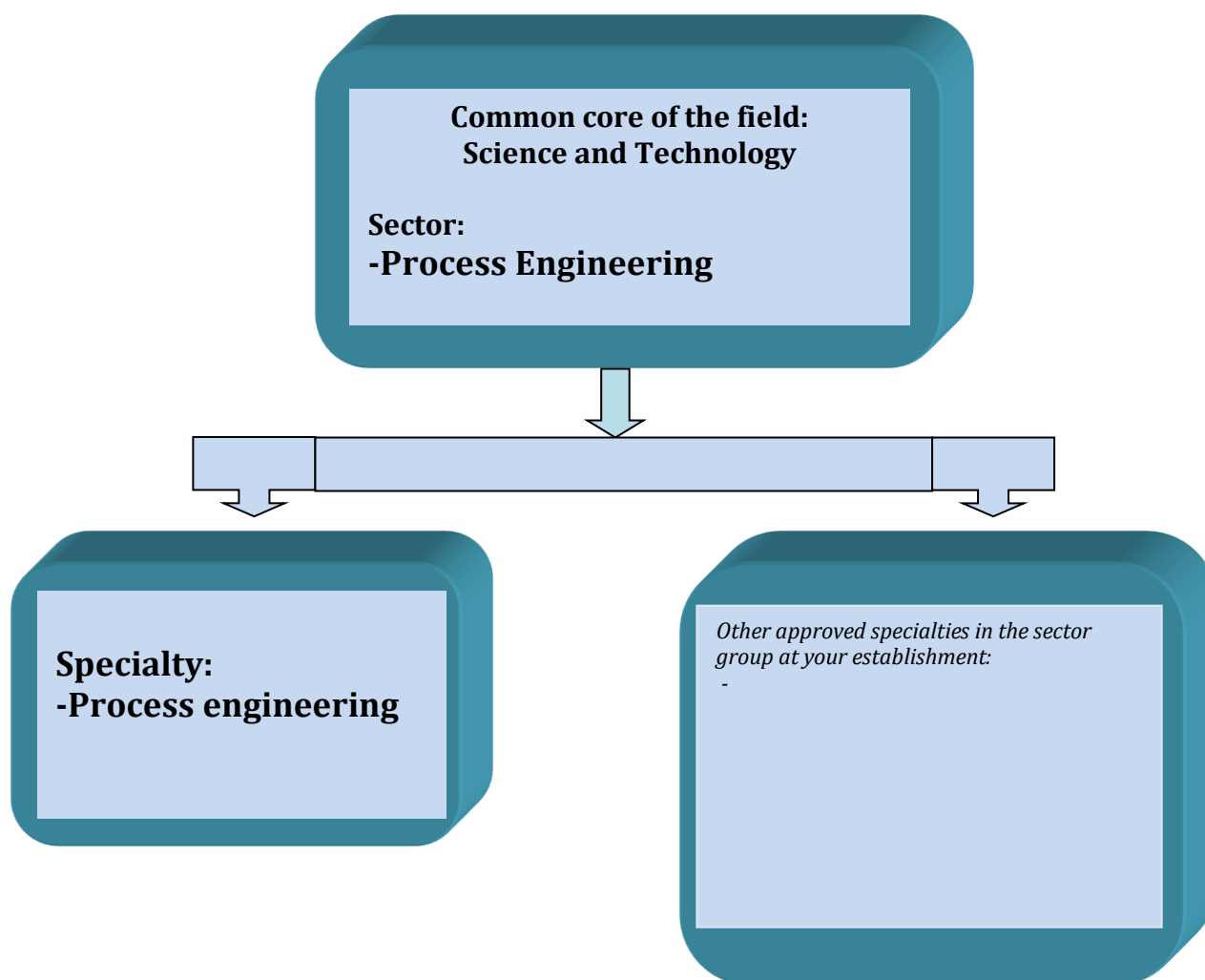
Domain	Sector	Specialty
<i>Science and Technology</i>	<i>Process engineering</i>	<i>Process engineering</i>

License Identity Card

Context and objectives of the training

A – General organization of the training: position of the project

Enter in the following diagram the License that is the subject of this framework as well as all the approved licenses (functional or not) at the establishment level and belonging to the same Group of sectors. Specify with an asterisk any other license whose supervision is also provided by a large part of the teachers involved in this current license. Indicate with a double asterisk the frozen licenses. Also mark with (P) any professional type license.



B - Training objectives:

Process Engineering is an important field in the field of science and technology (S&T). This field, which initially developed around fundamental Chemical Engineering, encompasses a very wide range of specialties (Chemical Engineering, Environmental Engineering, Materials Engineering, Pharmaceutical Engineering, Electrochemical Engineering, Cryogenics, Energy, Agrofood, etc.).

Process Engineering plays a vital role in all industrial processes for transforming matter and energy. To this end, it is essential to train people capable of mastering transformation processes on an industrial scale. This degree, whose curriculum covers the fundamental subjects of the sector (physical chemistry, unit operations, transfer phenomena, reactors, etc.), constitutes basic training for all specialties in Process Engineering.

At the end of this multidisciplinary training, graduates will have acquired basic knowledge, not only in fundamental sciences (Maths, Physics, Chemistry), but also in technology and industrial processes (Reactors, Processes, Transfer Phenomena, Instrumentation, Industrial Installations, etc.) which are necessary for understanding process engineering and its various applications.

This training allows the graduate not only to continue their studies and prepare for various specialized masters, but also to quickly integrate into the socio-economic sector.

Semester 3

Teaching unit	Titled	Credits	Coefficient	Weekly hourly volume			Half-Yearly Hourly Volume (15 weeks)	Additional Work in Consultation (15 weeks)	Assessment method	
				Course	TD	TP			Continuous Assessment	Exam
Fundamental Course Code: UEF 2.1.1 Credits: 10 Coefficients: 5	Mathematics 3	6	3	3h00	1h30		67h30	82h30	40%	60%
	Waves and vibrations	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental Course 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%
Methodology Course 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	22h30	27h30	100%	
	Technical drawing	2	1			1h30	22h30	27h30	100%	
	TP Waves and vibrations	1	1			1h00	15h00	10h00	100%	
Discovery Course Code: UED 2.1 Credits: 2 Coefficients: 2	HSE Industrial Installations	1	1	1h30			22h30	02h30		100%
	Regulations and standards	1	1	1h30			22h30	02h30		100%
Transversal Course Code: UET 2.1	Technical English	1	1	1h30			22h30	02h30		100%

Credits: 1 Coefficients : 1										
Total semester 3		30	17	13h30	7h30	4h00	375h00	375h00		

Semestre 4

Teaching unit	Subjects	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 Course Code: UEF 2.2.1 Credits: 8 Coefficients: 5	Solution chemistry	4	2	1h30	1h30		45h00	55h00	40%	60%
	Organic chemistry	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental Course 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 Course Code: UEF 2.2.3 Credits: 2 Coefficients: 1	Chemical kinetics	2	1	1h30			22h30	27h30		100%
Methodology Course Code: UEM 2.2 Credits: 9 Coefficients: 5	TP Solution chemistry	2	1			1h30	22h30	27h30	100%	
	TP Organic chemistry	1	1			1h00	15h00	10h00	100%	
	TP Fluid mechanics	2	1			1h30	22h30	27h30	100%	
	TP Numerical methods	2	1			1h30	22h30	27h30	100%	
	TP Chemical kinetics	2	1			1h30	22h30	27h30	100%	

Discovery Course Code: UED 2.2 Credits: 2 Coefficients: 2	Introduction to Refining and Petrochemistry	1	1	1h30			22h30	02h30		100%
	Concepts of transfer phenomena	1	1	1h30			22h30	02h30		100%
Transversal course Code: UET 2.2 Credits: 1 Coefficients: 1	Expression and communication techniques	1	1	1h30			22h30	02h30		100%
Total semester 4		30	17	12h00	6h00	7h00	375h00	375h00		

Semester 5

Teaching unit	Subjects	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 Course 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			22h30	27h30	40%	60%
Fundamental Course Code: UEF 3.1.2 Credits: 8 Coefficients: 4	Electrochemistry	4	2	1h30	1h30		45h00	55h00	40%	60%
	Instrumentation – sensors	2	1	1h30			22h30	27h30		100%
	Kinetics and homogeneous catalysis	2	1	1h30			22h30	27h30		100%
Methodology Course 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	22h30	27h30	100%	
	Macroscopic assessments	3	2	1h30	1h00		37h30	37h30	40%	60%
Discovery Course Code: UED 3.1 Credits: 2 Coefficients: 2	pharmaceutical processes	1	1	1h30			22h30	02h30		100%
	Agrofood processes	1	1	1h30			22h30	02h30		100%
Transversal Course (UET) Code: UET 3.1 Credits: 1	Pollution: Air, water, soil	1	1	1h30			22h30	02h30		100%

Coefficients: 1										
Total semester 5		30	17	16h30	5h30	3h00	375h00	375h00		

Semester 6

Teaching unit	Subjects	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 Course Code: UEF 3.2.1 Credits: 10 Coefficients: 5	Unit operations	6	3	3h00	1h30		67h30	82h30	40%	60%
	Thermodynamics of equilibria	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental Course 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%
Methodology Course Code: UEM 3.2 Credits: 9 Coefficients: 5	End of Cycle Project	4	2			3h00	45h00	55h00	100%	
	Process simulators	3	2	1h30		1h00	37h30	37h30	40%	60%
	Practical work in physical chemistry 2 and chemical engineering 2	2	1			1h30	22h30	27h30	100%	
Discovery Course Code: UED 3.2 Credits: 2 Coefficients: 2	Cryogenic processes	1	1	1h30			22h30	02h30		100%
	Corrosion	1	1	1h30			22h30	02h30		100%
Transversal Course (UET) Code: UET 3.2	Professional project and business management	1	1	1h30			22h30	02h30		100%

Credits: 1										
Coefficients: 1										
Total semester 6		30	17	13h30	6h00	5h30	375h00	375h00		

The assessment methods presented in these tables are given for information purposes only; the establishment's training team may suggest other weightings.