

Democratic and Popular Republic of Algeria

MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

UNIVERSITY MOHAMED KHIDER OF BISKRA

TRAINING OFFER FOR NATIONAL RECRUITMENT

L.M.D.

Professional License (PL)

Establishment	Faculty / Institute	Department
Université Mohamed Khider of Biskra	Faculty of Exact Sciences and Sciences of Nature and Life	Materials Sciences

Domain	branch	Specialty
MS	Physics	Materials and Physical Chemistry Controls (MPCC)

Organization of the License

Semestriel teaching organization sheets

Abbreviations:

TU: Teaching Unit

FTU: Fundamental Teaching Unit

MTU: Methodology Teaching Unit

DTU: Discovery Teaching Unit

TTU: Transversal Teaching Unit

Lc: Lecture

SHV: Semestriel Hourly Volume

WHV: Weekly Hourly Volume

PW(TP): Practical Work

TS(TD): Tutorial series

Semester 1:

Teaching units(TU)	Course	SHV	SHV14-15 Weeks			SHV	Coefficient	Credits	Evaluation mode	
	Entitled	15 Week	Lc	TS	PW	Others			Continuous	Exam
Fundamental TU Code : FTU1 Credits: 10 Coeff:5	Mechanics 1	60h00	20h	20h	20h	90h	3	6	40 %	60 %
	Mathematics 1	45h00	22h	23h		55h	2	4	40 %	60 %
Fundamental TU Code : FTU2 Credits: 8Coeff : 4	Chemistry	50h00	10h	20h	20h	50h	2	4	40 %	60 %
	Materials sciences	50h00	10h	20h	20h	50h	2	4	40 %	60 %
Methodology TU Code : MTU1 Credits: 7Coeff: 4	Metrology 1	45h00	10h	15h	20h	55h	2	4	50 %	50 %
	Computer science 1	40h00	10h	10h	20h	35h	2	3	50 %	50 %
Methodology TU Code : MTU2 Credits : 2Coeff : 1	PPP Project 1	30h00				20h	1	2	50 %	50 %
Transversal TU Code : TTU1 Credits: 3Coeff : 3	Languages, Culture and Communication 1	35h00	15h		20h	15h	2	2		100 %
	Knowledge and socio-professional practices	20h00	10h		10h	5h	1	1		100 %
Total Semester 1(Outside the Project)		345h00	107h	108h	130h	375h				
Total Semester 1		375h00					17	30		

Semester 2:

Teaching units(TU)	Course	SHV	SHV 13-14 Week			SHV	Coefficient	Credits	Evaluation mode	
	Entitled	15 Weeks	Lc	TS	PW	Others			Continuous	Exam
Fundamental TU Code : FTU1 Credits:10 Coeff: 5	Electricity	60h00	20h	20h	20h	90h	3	6	40 %	60 %
	Mathematics 1	45h00	22h	23h		55h	2	4	40 %	60 %
Fundamental TU Code : FTU2 Credits: 8 Coeff: 4	Thermodynamics	50h00	10h	20h	20h	50h	2	4	40 %	60 %
	Mechanics 2	45h00	10h	15h	20h	55h	2	4	40 %	60 %
Methodology TU Code : MTU1 Credits: 6Coeff: 4	Computer science 2	40h00	10h	10h	20h	35h	2	3	50 %	50 %
	Thermal Transfers	40h00	10h	10h	20h	35h	2	3	50 %	50 %
Methodology TU Code : MTU2 Credits: 4Coeff: 2	PPP Project 2	30h00				20h	1	2	50 %	50 %
	Internship (observation)	30h00				20h	1	2	50 %	50 %
Transversal TU Code : TTU1 Credits: 2Coeff: 2	Languages, Culture and Communication 2	35h00	15h		20h	15h	2	2		100 %
Total Semester 2 (outside the Project + Internship)		315h00	97h	98h	120h	375h				
Total Semester 2		375h00					17	30		

Semester 3:

Teaching units(TU)	Course	SHV	SHV 14-15 Week			SHV	Coefficient	Credits	Evaluation mode	
	Entitled	15 Week	Lc	TS	PW	Others			Continuous	Exam
Fundamental TU Code : FTU1 Credits:12 Coeff: 6	Electronic systems	60h00	20h	20h	20h	90h	3	6	40 %	60 %
	Optical systems	60h00	20h	20h	20h	90h	3	6	40 %	60 %
Fundamental TU Code : FTU2 Credits: 6 Coeff: 3	Instrumentation electronics	50h00	10h	20h	20h	50h	2	4	40 %	60 %
	Sensors-Conditioners	35h00	10h	10h	15h	15h	1	2	40 %	60 %
Methodology TU Code : MTU1 Credits: 7 Coeff: 4	Instrumentation computing	45h00	10h	15h	20h	55h	2	4	50 %	50 %
	Fluid mechanics	40h00	10h	10h	20h	35h	2	3	50 %	50 %
Methodology TU Code : MTU2 Credits: 2 Coeff: 1	Project PPP 3	30h00				20h	1	2	50 %	50 %
Transversal TU Code : TTU1 Credits: 3 Coeff: 3	Languages, Culture and Communication 3	35h00	15h		20h	15h	2	2		100 %
	Industrial Security	20h00	10h	10h		5h	1	1		100 %
Total Semester 3 (outside the Project)		345h00	105h	105h	135h	375h				
Total Semester 3		375h00					17	30		

Semester 4:

Teaching units(TU)	Course	SHV	SHV 14-15 Week			SHV	Coefficient	Credits	Evaluation mode	
	Entitled	15 Week	Lc	TS	PW	Others			Continuous	Exam
Fundamental TU Code : FTU1 Credits:8Coeff: 4	Electrochemical analyzes and chromatographic methods	45h00	10h	15h	20h	55h	2	4	40 %	60 %
	Spectroscopic and nuclear techniques	45h00	10h	15h	20h	55h	2	4	40 %	60 %
Fundamental TU Code : FTU2 Credits: 7Coeff: 4	Structure and properties of materials	45h00	10h	15h	20h	55h	2	4	40 %	60 %
	Waves and Vibrations	40h00	10h	10h	20h	35h	2	3	40 %	60 %
Methodology TU Code : MTU1 Credits: 5 Coeff: 3	Metrology 2, Quality, statistics	40h00	10h	10h	20h	35h	2	3	50 %	50 %
	Nanomaterials science and technology	30h00	10h		20h	20h	1	2	50 %	50 %
Methodology TU Code : MTU2 Credits: 8 Coeff: 4	Internship in company	65h00				85h	3	6	50 %	50 %
	Project PPP 4	30h00				20h	1	2	50 %	50 %
Transversal TU Code : TTU1 Credits: 2 Coeff: 2	Languages, Culture and Communication 4	35h00	15h		20h	15h	2	2		100 %
Total Semester 4 (outside the Project+ + Internship)		280h00	75h	65h	140h	375h				
Total Semester 4		375h00					17	30		

Semester 5:

Teaching units(TU)	Course	SHV	SHV 14-15 Week			SHV	Coefficien ↑	Credits	Evaluation mode	
	Entitled	15 Week	Lc	TS	PW	Others			Continuous	Exam
Fundamental TU Code : FTU1 Credits:12Coeff: 6	Material characterization techniques	60h00	20h	20h	20h	90h	3	6	40 %	60 %
	Instrumental Chemical Analysis Techniques	60h00	20h	20h	20h	90h	3	6	40 %	60 %
Fundamental TU Code : FTU2 Credits : 6 Coefficients : 3	Non-destructive testing (NDT)	50h00	10h	20h	20h	50h	2	4	40 %	60 %
	Thin layers	35h00	10h	10h	15h	15h	1	2	40 %	60 %
Methodology TU Code : MTU1 Credits : 7 Coefficients : 4	Expertise and control of industrial products	45h00	10h	15h	20h	55h	2	4	50 %	50 %
	Changing material properties	40h00	10h	10h	20h	35h	2	3	50 %	50 %
Methodology TU Code : MTU2 Credits : 2 Coefficients : 1	Project PPP 5	30h00				20h	1	2	50 %	50 %
Transversal TU Code : TTU1 Credits : 3 Coefficients : 3	Languages, Culture and Communication 5	35h00	15h		20h	15h	2	2		100 %
	Mathematics for engineering sciences	20h00	10h		10h	5h	1	1		100 %
Total Semester 5 (outside the Project)		345h00	105h	95h	145h	375h				
Total Semester 5		375h00					17	30		

Semester 6:

Teaching units(TU)	Course	SHV	SHV 14-15 Week			SHV	Coefficient	Credits	Evaluation mode	
	Entitled	15 Week	Lc	TS	PW	Others			Continuous	Exam
Fundamental TU Code : FTU1 Credits : 30 Coefficients : 17	Internship in company	375H00				375h	17	30	100 %	
Total Semester 6		375h00				375h	17	30		

