

PEOPLE’S DEMOCRATIC REPUBLIC OF ALGERIA

MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

**TRAINING OFFER
L.M.D.**

Academic Bachelor’s Degree

2024 - 2025

Institution	Faculty	Department
University of Jijel	Exact Sciences and Computer Science	Mathematics

Domain	Track	Specialization
Mathematics and Computer Science	Applied Mathematics	Applied Mathematics

Semester 1 :

Teaching Unit	THS	Hours per Week				Coeff	Credits	Assessment Method	
	14weeks	C	DW	PW	Others			Continuous	Exam
Fundamental TU									
FTU11		4h30	4h30		6h	7	11		
FTU111 : Analysis 1	84h	3h00	3h00		3h	4	6	40%	60%
FTU112 : Algebra 1	42h	1h30	1h30		3h	3	5	40%	60%
FTU12		4h30	3h	3h	6h	7	11		
FTU121 : Algorithms and Data Structures 1	105h	3h00	1h30	3h	3h	4	6	40%	60%
FTU122 : Machine Structure 1	42h	1h30	1h30		3h	3	5	40%	60%
Methodology TU									
MTU11			3h		4h	2	4		
MTU111 : Scientific Terminology and Writing Skills	21h		1h30		2h	1	2		100%
MTU112 : Foreign Language	21h		1h30		2h	1	2		100%
Discovery TU									
DTU11 Choose one subject from :		1h30	1h30		2h	2	4		
- Physics1 - Electronics and System Components	42h	1h30	1h30		2h	2	4	40%	60%
Total Semester 1	357h	10h30	12h	3h	18h	18	30		

Semester 2 :

Teaching Unit	THS	Hours per Week				Coeff	Credits	Assessment Method	
	14weeks	C	DW	PW	Others			Continuous	Exam
Fundamental TU									
FTU21		4h30	3h		6h	6	10		
FTU211 : Analysis 2	63h	3h00	1h30		3h	4	6	40%	60%
FTU212 : Algebra 2	42h	1h30	1h30		3h	2	4	40%	60%
FTU22		3h	3h	1h30	6h	6	10		
FTU221 : Algorithms and Data Structures 2	63h	1h30	1h30	1h30	3h	4	6	40%	60%
FTU222 : Machine Strucure 2	42h	1h30	1h30		3h	2	4	40%	60%
Methodology TU									
MTU21		4h30	1h30	1h30	6h	4	7		
MTU211 : Introduction to Probability and Descriptive Statistics	42h	1h30	1h30		2h	2	3	40%	60%
MTU212 : Information and Communication Technology	21h	1h30			2h	1	2		100%
MTU213 : Programming Tools for Mathematics	42h	1h30		1h30	2h	1	2	40%	60%
Transversal TU									
TTU21		1h30	1h30		2h	2	3		
TTU211 : Physics 2 (general electricity)	42h	1h30	1h30		2h	2	3	40%	60%
Total Semester 2	357h	13h30	9h	3h	20h	18	30		

Semester 3 :

Teaching Unit	THS	Hours per Week				Coeff	Credits	Assessment Method	
	14weeks	C	DW	PW	Others			Continuous	Exam
Fundamental TU									
FTU31		7h30	4h30		9h	10	18		
FTU311 : Algebra 3	42h	1h30	1h30		3h	3	5	40%	60%
FTU312 : Analysis 3	63h	3h00	1h30		3h	4	7	40%	60%
FTU313 : Introduction to Topology	63h	3h00	1h30		3h	3	6	40%	60%
Methodology TU									
MTU31		4h30	3h	3h	6h	6	10		
MTU311 : Numerical Analysis 1	63h	1h30	1h30	1h30	2h	3	4	40%	60%
MTU312 : Mathematical Logic	42h	1h30	1h30		2h	2	3	40%	60%
MTU313 : Programming Tools 2	42h	1h30		1h30	2h	1	3	40%	60%
Discovery TU									
DTU31		1h30			2h	1	2		
DTU311 : History of Mathematics	21h	1h30			2h	1	2		100%
Total Semester 3	336h	13h30	7h30	3h	17h	17	30		

Semester 4 :

Teaching Unit	THS	Hours per Week				Coeff	Credits	Assessment Method	
	14weeks	C	DW	PW	Others			Continuous	Exam
Fundamental TU									
FTU41		7h30	6h		9h	10	18		
FTU411 : Analysis 4	84h	3h	3h		3h	4	7	40%	60%
FTU412 : Algebra 4	42h	1h30	1h30		3h	3	5	40%	60%
FTU413 : Complex Analysis	63h	3h	1h30		3h	3	6	40%	60%
Methodology TU									
MTU41		4h30	4h30	1h30	6h	6	10		
MTU411 : Numerical Analysis 2	63h	1h30	1h30	1H30	2h	2	4	40%	60%
MTU412 : Probability	42hh	1h30	1h30		2h	2	3	40%	60%
MTU413 : Geometry	42h	1h30	1h30		2h	2	3	40%	60%
Discovery TU									
DTU41		1h30			2h	1	2		
DTU411 : Application of Mathematics to Other Sciences	21h	1h30			2h	1	2		100%
Total Semester 4	315h	13h30	10h30	1h30	17h	17	30		

Semester 5 :

Teaching Unit	THS	Hours per Week				Coeff	Credits	Assessment Method	
	14weeks	C	DW	PW	Others			Continuous	Exam
Fundamental TU									
UEF 51 (O/P)		7h30	4h30	1h30	9h	12	18		
UEF511: Advanced probability	63h	3h	1h30		3h	4	6	40%	60%
UEF512: Parametric statistics	63h	3h	1h30		3h	4	6	40%	60%
UEF513 : Matrix numerical analysis	63h	1h30	1h30	1h30	3h	4	6	40%	60%
Methodology TU									
UEM51(O/P)		6h	3h		4h	5	10		
UEM511 : Information systems and Databases	63h	3h	1h30		2h	2	5	40%	60%
UEM512 : Exploratory data analysis	63h	3h	1h30		2h	3	5	40%	60%
Discovery TU									
UEDT1(O/P)	21h	1h30			2h	1	2		
UET511 : Scientific English		1h30			2h	1	2		100%
Total Semestre 5	336h	15h	7h30	1h30	15h	18	30		

Semester 6 :

Teaching Unit	THS	Hours per Week				Coeff	Credits	Assessment Method	
	14weeks	C	DW	PW	Others			Continuous	Exam
Fundamental TU									
UEF61(O/P)		6h	3h		6h	8	12		
UEF611 : Choose a subject: - Graph theory - Time series	63h	3h	1h30		3h	4	6	40%	60%
UEF612 : Stochastic processes	63h	3h	1h30		3h	4	6	40%	60%
UEF62(O/P)		3h	3h	1h30	6h	4	8		
UEF621 : Choose a subject: - Linear programming - Algebra and advanced arithmetic - Linear and nonlinear regression	42h	1h30	1h30		3h	2	4	40%	60%
UEF612 : Software simulation and practice	63h	1h30	1h30	1h30	3h	2	4	40%	60%
Methodology TU									
UEM61(O/P)		1h30	1h30		12H	5	8		
UEM611: Choose a subject: - Mathematical programming - Cryptography and cryptanalysis - Non-parametric statistics	42h	1h30	1h30		2h	2	3	40%	60%
UEM612: Mini project					10h	3	5	100%	
Transversal TU									
UET61 (O/P)		1h30			2h	1	2		
Introduction to Latex	21h	1h30			2h	1	2	100%	
Total Semestre 6	294h	12h	7h30	1h30	26h	18	30		

In the core units UEF6.1.1, UEF6.2.1 and UEM6.1.1, the student must choose only one subject. However, this choice may not be unique for the institution. Consequently, if the pedagogical framework allows, all subjects can be taught if they are chosen.