

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	Mathematics	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	42h	1h30	1h30		2h	2	4	40%	60%
- Electronics and System Components									
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									
FTU 51		4h30	3h		6h	7	11		
FTU511 : Measure and Integration	63h	3h	1h30		3h	4	6	40%	60%
FTU512 : Normed Vector Spaces	42h	1h30	1h30		3h	3	5	40%	60%
FTU52		4h30	3h		6h	6	11		
FTU521 : Differential Equations	63h	3h	1h30		3h	4	6	40%	60%
FTU521 : Equations of Mathematical Physics	42h	1h30	1h30		3h	2	5	40%	60%
Methodology TU									
MTU51		1h30	1h30	1h30	2h	2	5		
MTU511 : Unconstrained Optimization	63h	1h30	1h30	1h30	2h	2	5	40%	60%
Discovery TU									
DTU51		1h30			2h	1	3		
DTU511 : Introduction to Didactics of Mathematics	21h	1h30			2h	1	3		100%
Total Semester 5	294h	12h	7h30	1h30	16h	16	30		

Semester 6 :

Teaching Unit	THS	Hours per Week				Coeff	Credits	Assessment Method	
	14weeks	C	DW	PW	Others			Continuous	Exam
Fundamental TU									
FTU61		6h	6h		6h	10	18		
FTU611 : Subject X(*)	84h	3h	3h		3h	5	9	40%	60%
FTU612 : Subject Y(*)	84h	3h	3h		3h	5	9	40%	60%
Methodology TU									
MTU61		6h	3h		4h	4	10		
MTU611 : Integral Transforms in L^p Spaces	63h	3h	1h30		2h	2	5	40%	60%
MTU612 : Differential Geometry	63h	3h	1h30		2h	2	5	40%	60%
Transversal TU									
TTU 61		1h30			2h	2	2		
DTU511 : Ethics of Teaching and Research	21h	1h30			2h	2	2		100%
Total Semester 6	315h	13h30	9h		12h	16	30		

(*) Subjects X and Y are to be chosen in pairs by the teaching team from the following List

Introduction to group theory	Introduction to the theory of linear operators
Field theory	Partial differential equations
Inferential statistics	Mathematical modeling of biological rhythms
Advanced probability	Constrained optimization
Introduction to Random processes	Linear programming
Numerical methods for EDO and EDP	