



University of Oum El Bouaghi

Master's degree in Earth & Marine Sciences

Specialty sedimentary basins

2. Program Description:

This training requires a good knowledge of fundamental geology. It is reserved for students holding a bachelor's degree in fundamental geology, geoscience, geology and environment, and other licenses in the field of Earth and universe sciences. It will be completed by the study of the dynamics of sedimentary basins, the relationship between diagenesis and deposit environments, petrophysics and logs, other geophysical methods, in particular refraction and reflection seismic, etc. Knowledge of geology on the one hand and geophysical methods on the other makes it possible to predict and quantify energy and mining resources in the earth's crust.

Semester 1 :

Teaching Unit	SHV	WHV				Coeff.	Credits	Evaluation Mode	
	14-16 sem	Course	TUT.	LAB	Others			Continuous	Exam
Fundamental TU									
FTU1 (O/P) Sedimentary Basins	90h	3h		3h		5	9		
Module 1: Deposition Environments and Diagenesis	45h	1h30		1h30		3	5	x	x
Module2: Dynamics of Sedimentary Basins	45h	1h30		1h30		2	4	x	x
FTU2 (O/P) Sedimentary rocks and Tectonics	112h30	3h	1h30	3h		4	9	x	x
Module 1: Sedimentary rocks	45h	1h30		1h30		2	5	x	x
Module 2: Tectonics	67h30	1h30	1h30	1h30		2	4	x	x
Methodological TU									

MTU1 (O/P) Applied Geophysics	60h	1h30	2h30			3	5		
Module 1: Applied Geophysics	60h	1h30	2h30			3	5	x	x
MTU2 (O/P) Techniques of Drilling	45h	1h30	1h30			2	4		
Module 1: Techniques of Drilling	45h	1h30	1h30			2	4	x	x
Discover TU									
DTU1 (O/P): Water et Soil	45h	1h30	1h30			2	2		
Module 1: Water et Soil	45h	1h30	1h30			2	2	x	x
Transversal TU									
TTU1(O/P) English scientific	22h30	1h30				1	1		
Module 1: English I	22h30	1h30				1	1	x	x
1Total Semester	375h	12h	7h	6h		17	30		

Semester 2

Teaching Unit	VHS	WHV				Coeff	Credits	Evaluation Mode	
	14-16 sem	Course	TUT.	LAB	Others			Continuous	Exam
Fundamental TU									
FTU1(O/P) Sedimentary Basins	112h30	4h30	3h			5	9		

Module 1: Georesources	45h	1h30	1h30			2	4		
Module 2: Reservoirs & Exploration	22h30	1h30				2	2		
Module 3: Petrophysics et Well logging	45h	1h30	1h30			1	3		
FTU2(O/P): Geology of Algeria	90h	3h		3h		4	9		
Module 1: Geology of Northern Algeria	45h	1h30		1h30		2	5		
Module 2: Sedimentary Basins of Northern Algeria	45h	1h30		1h30		2	4		
Methodological TU									
MTU1(O/P) Geomatics et Remote sensing	60h	3h	1h		10	3	6		
Module 1: Geomatics	22h30	1h30			5	2	3		
Module 2: Remote sensing & GIS	37h30	1h30	1h		5	1	3		
MTU2 (O/P) Field techniques and data interpretation	45h	1h30	1h30		5	2	3		
Module 1 Field techniques and data interpretation	45h	1h30	1h30		5	2	3		
Discover TU									
DTU1(O/P) Technical improvement of rocks	45h	1h30	1h30		5	2	2		
Module 1: Technical improvement of rocks	45h	1h30	1h30		5	2	2		
Transversal TU									
TTU1(O/P) English	22h30	1h30			5	1	1		
Module 1: English II	22h30	1h30			5	1	1		
Total Semester 2	375h	15h	7h	3h		17	30		

Semester 3

Teaching Unit	VHS	WHV				Coeff.	Credits	Evaluation Mode	
	14-16 sem	Course	TUT.	LAB	Others			Continuous	Exam
Fundamental TU									
FTU1(O/P) Geology of Algeria	90h	3h		3h		4	9		
Module 1: Geology of Southern Algeria	45h	1h30		1h30		2	5		
Module2: Sedimentary Basins of Southern Algeria	45h	1h30		1h30		2	4		
FTU2(O/P) Internship in laboratory or field and Hydrogeology	112h30	1h30		6h		5	9		
Module 1: Internship in the laboratory or in the field	67h30			4h30		3	5		
Module2: Hydrogeology	45h	1h30		1h30		2	4		
Methodological TU									
MTU1(O/P): Geomorphology	22h30	1h30				2	3		
Module 1: Geomorphology	22h30	1h30				2	3		
MTU2(O/P) Applied IT	45h	1h30		1h30		1	3		
Module 1: Geosciences Softwares	45h	1h30		1h30		1	3		
MTU3(O/P): Project	37h30	1h30	1h			2	3		
Module 1: Project	37h30	1h30	1h			2	3		
Discover TU									

DTU1(O/P): Geological hazards	45h	1h30	1h30			2	2		
Module 1: Geological hazards	45h	1h30	1h30			2	2		
Transversal TU									
TTU1(O/P) Organizations and professions of geology	22h30	1h30				1	1		
Module 1: Organizations and professions of geology	22h30	1h30				1	1		
Total Semester 3	375h	12h	2h30	10h30		17	30		

Semester 4 :

	VS	Coeff.	Credits
Personal work	200h00	9	18
Field and laboratory	150h00	5	9
Internship and Seminars	25h00	3	3
Total Semester 4	375h00	17	30