الجمهورية الجزائرية الديمقراطية الشعبية
People's Democratic Republic of Algeria
وزارة التعليم العالي والبحث العلمي
Ministry of Higher Education and Scientific Research

UniversityofJijel

HARMONIZED ACADEMIC MASTER

National program

Update 2022

Field	Training program	Specialty
Sciences and Technologies	***Public Works***	***Roads and Civil Engineering Structures***

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مواءمة
ماسترأكاديمي

تحيين 2022

الميدان	الفرع	التخصص
علوم و تكنولوجيا	أشغالعمومية	طرقات ومنشآت فنية

I –Master's degree profile

Access conditions

Training program	Harmonized Master	Licenses giving access to Master	Classification according to license compatibility	Coefficient allocated to the license
Public works	Roads and Civil Engineering Structures	PublicsWorks	**1**	**1.00**
		Civil Engineering	**1**	**1.00**
		Hydraulic	**2**	**0.70**
		Mechanical Construction	**2**	**0.70**
		Other licensesin the ST domain	**5**	**0.60**

II – Semester Organization Sheets for the Specialty Courses

Semester 1 Master: Roads and Civil Engineering Structures

Teaching Unit	Courses	Credits	Coefficient	Weekly Hourly Load			Semester Hourly Load (15 weeks)	Complementary Work in Consultation (15 weeks)	Assessment Method	
	Title			**Courses**	**DW**	**PW**			**Continuous assessment**	**Exam**
Fundamental TU Code : FTU 1.1.1 Credits : 8 Coefficients : 4	Theory of Elasticity	4	2	1h30	1h30		45h00	55h00	40%	60%
	Structural Dynamics	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental TU Code : FTU 1.1.2 Credits : 10 Coefficients : 5	Bridge design 1	6	3	3h00	1h30		67h30	82h30	40%	60%
	Road design	4	2	1h30	1h30		45h00	55h00	40%	60%
Methodology TU Code : MTU 1.1 Credits : 9 Coefficients : 5	Reinforced Concrete Structures Project	5	3	1h30	1h30	1h00	60h00	65h00	40%	60%
	Practical Works in Programming	2	1			1h30	22h30	27h30	100%	
	Practical WorksSoftware Applied to Roads	2	1			1h30	22h30	27h30	100%	
Discovery TU Code : DTU 1.1 Credits : 2 Coefficients : 2	Course of choice	1	1	1h30			22h30	02h30		100%
	Course of choice	1	1	1h30			22h30	02h30		100%
Transversal TU Code : TTU 1.1 Credits : 1 Coefficients : 1	Technical English and terminology	1	1	1h30			22h30	02h30		100%
Total semester 1		**30**	**17**	**13h30**	**7h30**	**4h00**	**375h00**	**375h00**		

Semester 2 Master: Roads and Civil Engineering Structures

Teaching Unit	Courses	Credits	Coefficient	Weekly Hourly Load			Semester Hourly Load (15 weeks)	Complementary Work in Consultation (15 weeks)	Assessment Method	
	Title			**Courses**	**DW**	**PW**			**Continuous assessment**	**Exam**
Fundamental TU Code : FTU1.2.1 Credits : 8 Coefficients : 4	Theory of Plasticity	4	2	1h30	1h30		45h00	55h00	40%	60%
	Bridge design 2	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental TU Code : UEF1.2.2 Credits :10 Coefficients : 5	Prestressed concrete	6	3	3h00	1h30		67h30	82h30	40%	60%
	Steel Constructions	4	2	1h30	1h30		45h00	55h00	40%	60%
Methodology TU Code : MTU 1.2 Credits : 9 Coefficients : 5	Finite Element Method	4	2	1h30	1h30		45h00	55h00	40%	60%
	Roads Project	3	2	1h30		1h00	37h30	37h30	40%	60%
	Practical WorksGeographic Information Systems (GIS)	2	1			1h30	22h30	27h30	100%	
Discovery TU Code : DTU 1.2 Credits : 2 Coefficients : 2	Course of choice	1	1	1h30			22h30	02h30		100%
	Course of choice	1	1	1h30			22h30	02h30		100%
Transversal TU Code : TTU 1.2 Credits : 1 Coefficients : 1	Respect of ethical and integrity standards and rules	1	1	1h30			22h30	02h30		100%
Total semester 2		**30**	**17**	15h00	7h30	2h30	**375h00**	**375h00**		

Semester 3 Master: Roads and Civil Engineering Structures

Teaching Unit	Courses	Credits	Coefficient	Weekly Hourly Load			Semester Hourly Load (15 weeks)	Complementary Work in Consultation (15 weeks)	Assessment Method	
	Title			**Courses**	**DW**	**PW**			**Continuous assessment**	**Exam**
Fundamental TU Code : FTU 2.1.1 Credits : 8 Coefficients : 4	Advanced Bridge Design	4	2	1h30	1h30		45h00	55h00	40%	60%
	Underground Structures	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental TU Code : FTU2.1.2 Credits : 10 Coefficients : 5	Railways	4	2	1h30	1h30		45h00	55h00	40%	60%
	Aerodromes	4	2	1h30	1h30		45h00	55h00	40%	60%
	Pathology and Rehabilitation of Civil Engineering Structures	2	1	1h30			22h30	27h30		100%
Methodology TU Code : MTU 2.1 Credits : 9 Coefficients : 5	Advanced Geotechnics	4	2	1h30		1h30	45h00	55h00	40%	60%
	Numerical Modeling of Bridges	3	2			2h30	37h30	37h30	100%	
	Organization and site visits	2	1			1h30	22h30	27h30	100%	
Discovery TU Code : DTU 2.1 Credits :2 Coefficients : 2	Course of choice	1	1	1h30			22h30	02h30		100%
	Course of choice	1	1	1h30			22h30	02h30		100%
Transversal TU Code : TTU2.1 Credits : 1 Coefficients : 1	Documentary research and Thesis Design	1	1	1h30			22h30	02h30		100%
Total semester 3		**30**	**17**	13h30	6h00	5h30	**375h00**	**375h00**		

Semester 4

Internship in a company or in a research laboratory leading to a dissertation and a defense.

	SWH	Coefficients	Credits
Personal work	550	09	18
Internship in a company or laboratory	100	04	06
Seminars	50	02	03
Other (Supervision)	50	02	03
Total Semester 4	750	17	30