

Semestre 5 Licence: Génie Civil

Unité d'enseignement	Matières	المقاييس بالعربية	المقاييس بالانجليزية	C r é d i t s	Coefficient	Volume horaire hebdomadaire		
	Intitulé					Cours	TD	TP
	Résistance des Matériaux 2	مقاومة المواد 2	Strength of Materials 2	6	3	3h00	1h30	
	Béton Armé 1	الخرسانة المسلحة 1	Reinforced concrete 1	4	2	3h00		
	Charpente Métallique	منشآت حديدية	Steel Structures	4	2	3h00		
	Mécanique des Sols 2	ميكانيكا التربة 2	Soil Mechanics 2	4	2	1h30	1h30	
	Matériaux de Construction 2	مواد البناء 2	Construction Materials 2	2	1			1h30
	TP Topographie	أعمال تطبيقية في الطبوغرافيا	Practical work in Topography	3	2			2h30
	TP Mécanique des sols 2	أعمال تطبيقية في ميكانيكا التربة 2	Practical work in Soil Mechanics 2	4	2	1h30		1h30
	TP Matériaux de Construction 2	أعمال تطبيقية في مواد البناء 2	Practical work in Construction Materials 2	1	1	1h30		
	Dessin du BTP	رسم المباني	Drawing of buildings	1	1	1h30		
	Topographie 2	الطوبوغرافيا 2	Topography 2					
	Hydraulique générale	الهيدروليكا العامة	General hydraulics					
	Techniques et règles de construction	تقنيات وقواعد البناء	Construction techniques and rules	1	1	1h30		
Total semestre 2				30	17	13h30	4h30	5h30

Semestre 6 Licence: Génie Civil

	Matières	المقاييس بالعربية	المقاييس بالانجليزية	Crédit	Coefficient	Volume horaire hebdomadaire		
	Intitulé					Cours	T D	T P
	Calcul des Structures	حساب الهياكل	Calculation of structures	4	2	1h30	1h30	
	Constructions Métalliques	الإتشاءات الفولاذية	Steel constructions	4	2	1h30	1h30	
	Béton Armé 2	الخرسانة المسلحة 2	Reinforced concrete 2	4	2	1h30	1h30	
	Fondations et ouvrages Géotechniques	الأساسات والهياكل الجيوتقنية	Geotechnical and foundation engineering	4	2	3h00		
	Projet de Fin de Cycle	مشروع نهاية الطور	End of cycle project	2	1	1h30		
	Calcul assiste par ordinateur	الحساب بمساعدة الكمبيوتر	Computer aided calculation	4	2	1h30		1h30
	Métre et Estimation des Prix	حساب الكميات وتقدير السعر	Quantity Surveying and valuation	3	2			2h30
	Voiries et Réseaux Divers	الطرق والشبكات المختلفة	Roads and various networks	2	1		1h30	
	Organisation des chantiers	تنظيم ورشات البناء	Organization of construction sites	1	1	1h30		
	Projet professionnel et Gestion de l'entreprise	إدارة المشاريع والأعمال المهنية	Professional project and business management	1	1	1h30		
				30	17	16h30	4h30	4h00



Specialty: Public Works License

Specialty Goals:

The Public Works bachelor's degree course aims to give the student a versatile formation in the Public Works sector (road and highway infrastructures, railroad network, port and airport infrastructures). It also aims to ensure graduates a certain socio-professional integration for the conduct of construction projects both in engineering offices and laboratories of technical studies as well as in public or private companies and administrations associated with the Public Works sector. This formation also offers the possibility for students who have successfully completed their studies to continue their graduation studies to access the Master's degree, or even at the post-graduate level to obtain a doctorate in specific specialties.

Formation content:

After the baccalaureate, the student can enroll in a training program that leads to the license. The License (L1, L2, L3) is held over six semesters.

Continuation of studies

This formation offers the possibility for students to continue their graduation studies to access the Master's degree in the following specializations:

- Civil Engineering Materials
- Public Works
- Roads and Engineering Structures
- Geotechnics

Number of students: 76

Number of teachers: 11



Specialty: Hydraulic License

Specialty Goals:

The opening of this option aims to train licenses mastering the problems of design, construction and operation of hydraulic systems. The program is characterized by an effective presence of the essential subjects for a theoretical and practical training and allows the acquisition of the scientific bases of the fundamental scientific bases necessary for an adequate specialization. This training aims to train high-level specialists in the field of hydraulics, more specifically, in the field of “urban hydraulics”. The department aims to train graduates mastering the problems of design, construction and operation of hydraulic structures.

Formation content:

After the baccalaureate, the student can enroll in a training program that leads to the license. The License (L1, L2, L3) is held over six semesters.

Continuation of studies

This formation offers the possibility for students to continue their graduation studies to access the Master's degree in the following specializations:

- Urban hydraulic
- hydraulic structures
- Water treatment

Number of students: 60

Number of teachers: 13



People`s Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
University of Echahid Hamma Lakhdar - El Oued
Faculty of Technology
Department of Hydraulic and Civil Engineering



Specialty: Civil Engineering License

Specialty Goals:

The Civil Engineering bachelor's degree course aims to give the student a scientific and technological basis ensuring the mastery of academic and practical knowledge in the various construction fields. Besides, a professional aptitude leading to a good insertion in functions of framing, management within construction companies, follow-up, and control of projects, this degree ensures to the student a scientific and specific basic training which he confers a capacity of assimilation allowing him to access higher degrees: the master and the possibility of preparing a doctorate in the various specialties of Civil Engineering.

Formation content:

After the baccalaureate, the student can enroll in a training program that leads to the license. The License (L1, L2, L3) is held over six semesters.

Continuation of studies

This formation offers the possibility for students to continue their graduation studies to access the Master's degree in the following specializations:

- Materials in civil engineering
- Structures
- Roads and works of art

Number of students: 60

Number of teachers: 11



People`s Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
University of Echahid Hamma Lakhdar - El Oued
Faculty of Technology
Department of Hydraulic and Civil Engineering



Specialty: Academic Master
Materials in civil engineering

Specialty Goals:

The Civil Engineering License course aims to give the student a scientific and technological basis ensuring mastery of academic and practical knowledge in the various construction fields. Besides, a professional aptitude leading to a good insertion in functions of framing, management within construction companies, follow-up and control of projects, this License ensures to the student a scientific and specific basic training which him confers a capacity of assimilation allowing him to access higher degrees: The Master and the possibility of preparing a Doctorate in the various specialties of Civil Engineering. This training aims to train executives for the Civil Engineering, Building and Public Works sector in general, and more particularly, companies, design offices, and consulting firms.



People`s Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
University of Echahid Hamma Lakhdar - El Oued
Faculty of Technology
Department of Hydraulic and Civil Engineering



Specialty: Academic Master

Hydraulic structures

Specialty Goals:

This training project meets the needs of the labor market in the field of protection and management of water resources, water quality, production and distribution of drinking water, collection, the treatment and fate of wastewater. Students graduating from the CDSAA master's degree (Design and Diagnosis of DWS and Sanitation Systems) will be able to apply to organizations responsible for managing urban water networks (ADE & ONA), design offices, the hydraulics of the Wilayat (DHW), the watershed agencies (ABH), the hydraulic works companies and finally the works control bodies (CTH & CTC).



People`s Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
University of Echahid Hamma Lakhdar - El Oued
Faculty of Technology
Department of Hydraulic and Civil Engineering



Specialty: Professionalizing Master

Design and Diagnosis of DWS and Sanitation Systems

Specialty Goals:

This training project meets the needs of the labor market in the field of protection and management of water resources, water quality, production and distribution of drinking water, collection, the treatment and fate of wastewater. Students graduating from the CDSAA master's degree (Design and Diagnosis of DWS and Sanitation Systems) will be able to apply to organizations responsible for managing urban water networks (ADE & ONA), design offices, the hydraulics of the Wilayat (DHW), the watershed agencies (ABH), the hydraulic works companies and finally the works control bodies (CTH & CTC).



Specialty: License in electro mechanics

Specialty Goals:

The Electromechanical training program is at the border of Electrical Engineering and of Mechanical Engineering. At the end of this training, students will assimilate, on the one hand, the essential concepts of mechanics (resistance of materials, mechanical construction, Technical drawing, Turbomachinery, Engine (internal combustion, ...)); and on the other hand, they will acquire a solid foundation in Electronics, Automation and Electrotechnics. Moreover, they will follow several courses that will allow them to solve problems related to the field of the conversion of energy from its electrical form to the mechanical form and Conversely.

Several objectives are expected from this training which aims to instill in students a practical and diversified know-how, in this case:

- Organize the maintenance of electromechanical systems, choose the adequate equipment and ensure compliance with standards and guidelines
- Master the control functions of electric drive systems, master the electronic control circuits of the electrical installations of power, know the functions of electronics, master the operation of electric machine.
- Choose control laws, choose the sensors and actuators necessary for the regulation, implement the optimal solution, master the diagnostic tools of functioning.

Profiles and targeted skills:

At the end of the course, graduates will have the opportunity to:

- Continue their training in a Master,
- Integrate the industrial world to carry out one of the many activities in which the electromechanic is in high demand.

Indeed, electromechanics is omnipresent in our daily lives as shown by the large use of electrical equipment and machines as well as means of transport daily

Graduates from this training and wishing to join the professional world will be able to:

- Carry out specialized tests and controls, check the conformity of equipment compared to the specifications of the compliance specifications with the regulations in force.
- Analyze the causes of breakdowns and failures and propose improvements.



People`s Democratic Republic of Algeria
 Ministry of Higher Education and Scientific Research
 University of Echahid Hamma Lakhdar - El Oued
 Faculty of Technology
 Department of Mechanical Engineering



- Ensure the maintenance of electrical machinery and equipment.
- Participate in the establishment of specifications and technical files.
- Assist in the study of pre-projects and projects.
- Constantly update their knowledge on technological developments

Formation content:

After the baccalaureate, the student can enroll in a training program that leads to the license. The License (L1, L2, L3) is held over six semesters.

Continuation of studies

This formation offers the possibility for students to continue their graduation studies to access the Master's degree in the following specializations abstracted in this identity card of the Master and conditions of access

Program	Harmonized Master's	Access Licenses at the master's level	Ranking according to compatibility of the license	Coefficient assigned to the Licence
Electro-mechanics	Electro-mechanics	Electromechanics	1	1.0
		Industrial maintenance	2	0.8
		Electrotechnics	3	0.7
		Electronics	3	0.7
		Mechanical construction	3	0.7
		Energetics	3	0.7
		Other ST domain licenses	5	0.6

Number of students: 152

Number of teachers: 13



People`s Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
University of EchahidHammaLakhdar - El Oued
Faculty of Technology
Department of Mechanical Engineering



Specialty: Master in electromechanics

Specialty Goals:

The master aims to prepare:

- Through scientific training and the acquisition of operational skills in electro-mechanics capable of defining, developing and deploying with a multidisciplinary vision of innovative systems and products for the company.
- With the help of research teams, this master aims to train of researchers capable of apprehending the system dimension in their discipline in the industrial applications.

Formation content:

After achieving the Master program, the student can enroll in a training program that leads to the Doctorat. The Master (M1, M2) is held over four semesters.

Continuation of studies

This formation offers the possibility for students to continue their post graduation studies.

Number of students: 247

Number of teachers: 15