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Democratic and Popular Republic of  
Algeria

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Ministry of Higher Education  
and Scientific Research

University

LOGO

# TRAINING OFFER

## LMD

## ACADEMIC LICENSE

NATIONAL PROGRAM  
**2021–2022**  
(2nd update)

Establishment	Faculty / Institute	Department
Domain	Sector	Speciality
<b>Sciences</b> <i>And</i> <b>Technologies</b>	<b>Electronic</b>	<b>Electronic</b>



Democratic and Popular Republic of  
Algeria  
Ministry of Higher Education  
and Scientific Research

Educational Committee  
National Domain  
Science and Technology



The Lord  
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The Lord and the Lord  
2021–2022

Al-Qaeda	Al-Qaeda/Al-Qaeda	Al-Qaeda
The	Allah	Allah
Al-Qaeda	Al-Qaeda	ÿÿÿÿ ÿ ÿÿÿÿÿÿÿÿÿ

## **II – Half-yearly organization sheets for the specialty** **courses**

### Semester 1

Unit teaching	Materials	Credits	Coefficient	Hourly volume weekly			Volume Hourly Biannual (15 weeks)	Work Complementary in consultation (15 weeks)	Assessment method	
	Titled			Course	TD	TP			Control Continuous	Exam
Fundamental EU Code: UEF 1.1 Credits: 18 Coefficients: 9	Mathematics 1	6	3	3h00	1h30		67h30	82h30	40%	60%
	Physics 1	6	3	3h00	1h30		67h30	82h30	40%	60%
	Structure of matter	6	3	3h00	1h30		67h30	82h30	40%	60%
Methodological EU Code: UEM 1.1 Credits: 9 Coefficients: 5	Physics 1 Practical Work	2	1			1h30	10:30 p.m.	27:30	100%	
	Chemistry 1 practical work	2	1			1h30	10:30 p.m.	27:30	100%	
	Computer Science 1	4	2	1h30		1h30	45h00	55h00	40%	60%
	Writing methodology	1	1	1h00			3:00 p.m.	10:00 a.m.		100%
EU Discovery Code: UED 1.1 Credits: 1 Coefficients: 1	Careers in Science and Technologies 1	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
E Transversal Code: UET 1.1 Credits: 2 Coefficients: 2	Ethical and deontological dimension (the foundations)	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
	Foreign language 1 (French or English)	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
<b>Total semester 1</b>		<b>30</b>	<b>17</b>	<b>4:00 p.m.</b>	<b>4:30 a.m.</b>	<b>4:30 a.m.</b>	<b>375 hours</b>	<b>375 hours</b>		

**Semester 2**

Teaching unit	Materials	Credits	Coefficient	Weekly hourly volume			Hourly Volume Biannual (15 weeks)	Work Complementary in Consultation (15 weeks)	Assessment method	
	Titled			Course	TD	TP			Control Continuous	Exam
Fundamental EU Code: UEF 1.2 Credits: 18 Coefficients: 9	Mathematics 2	6	3	3h00	1h30		67h30	82h30	40%	60%
	Physics 2	6	3	3h00	1h30		67h30	82h30	40%	60%
	Thermodynamics	6	3	3h00	1h30		67h30	82h30	40%	60%
Methodological EU Code: UEM 1.2 Credits: 9 Coefficients: 5	Physics 2 Practical Work	2	1			1h30	10:30 p.m.	27:30	100%	
	Chemistry 2 practical work	2	1			1h30	10:30 p.m.	27:30	100%	
	Computer Science 2	4	2	1h30		1h30	45h00	55h00	40%	60%
	Presentation methodology	1	1	1h00			3:00 p.m.	10:00 a.m.		100%
EU Discovery Code: UED 1.2 Credits: 1 Coefficients: 1	Careers in Science and Technology 2	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 1.2 Credits: 2 Coefficients: 2	Foreign language 2 (French and/or English)	2	2	3h00			45h00	5:00 a.m.		100%
<b>Total semester 2</b>		<b>30</b>	<b>17</b>	<b>4:00 p.m.</b>	<b>4:30 a.m.</b>	<b>4:30 a.m.</b>	<b>375 hours</b>	<b>375 hours</b>		

**Semester 3**

Teaching unit	Materials	Credits	Coefficient	Weekly hourly volume			Hourly Volume Biannual (15 weeks)	Work Complementary in Consultation (15 weeks)	Assessment method	
	Titled			Course	TD	TP			Control Continuous	Exam
Fundamental EU Code: UEF 2.1.1 Credits: 10 Coefficients: 5	Mathematics 3	6	3	3h	00	1h30	67h30	82h30	40%	60%
	Waves and vibrations	4	2	1h	30	1h30	45h00	55h00	40%	60%
Fundamental EU Code: UEF 2.1.2 Credits: 8 Coefficients: 4	Fundamental Electronics 1	4	2	1h	30	1h30	45h00	55h00	40%	60%
	Fundamental Electrical Engineering 1	4	2	1h	30	1h30	45h00	55h00	40%	60%
Methodological EU Code: UEM 2.1 Credits: 9 Coefficients: 5	Probability and statistics	4	2	1h	30	1h30	45h00	55h00	40%	60%
	Computer Science 3	2	1			1h30	10:30 p.m.	27:30	100%	
	Practical work Electronics 1 and electrotechnics 1	2	1			1h30	10:30 p.m.	27:30	100%	
	TP Waves and vibrations	1	1			1 hour	3:00 p.m.	10:00 a.m.	100%	
EU Discovery Code: UED 2.1 Credits: 2 Coefficients: 2	State of the art of electrical engineering	1	1	1h	30		10:30 p.m.	2:30 a.m.		100%
	Energy and environment	1	1	1h	30		10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 2.1 Credits: 1 Coefficients: 1	Technical English	1	1	1h	30		10:30 p.m.	2:30 a.m.		100%
<b>Total semester 3</b>		<b>30</b>	<b>17</b>	<b>1</b>	<b>30</b>	<b>p.m. 7:30 a.m. 4:00 a.m.</b>	<b>375 hours</b>	<b>375 hours</b>		

### Semester 4

Teaching unit	Titled	Credits		Weekly hourly volume			Hourly Volume Biannual (15 weeks)	Work Complementary in Consultation (15 weeks)	Assessment method	
				Course	TD	TP			Control Continuous	Exam
Fundamental EU Code: UEF 2.2.1 Credits: 10 Coefficients: 5	Fundamental Electronics 2	6	3 3h	00 1h30			67h30	82h30	40%	60%
	Combinatorial logic and sequential	4	2 1h	30 1h30			45h00	55h00	40%	60%
Fundamental EU Code: UEF 2.2.2 Credits: 8 Coefficients: 4	Numerical methods	4	2 1h	30 1h30			45h00	55h00	40%	60%
	Signal theory	4	2 1h	30 1h30			45h00	55h00	40%	60%
Methodological EU Code: UEM 2.2 Credits: 9 Coefficients: 5	Electrical measurements and electronics	3	2 1h	30		1 hour	37h30	37h30	40%	60%
	Fundamental Electronics 2 Practical Work	2	1			1h30	10:30 p.m.	27:30	100%	
	Practical work on combinatorial logic and sequential	2	1			1h30	10:30 p.m.	27:30	100%	
	Numerical Methods Practical Work	2	1			1h30	10:30 p.m.	27:30	100%	
EU Discovery Code: UED 2.2 Credits: 2 Coefficients: 2	Electronic Components Technology 1	1	1 1h	30			10:30 p.m.	2:30 a.m.		100%
	Elements of physics of electronic components	1	1 1h	30			10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 2.2 Credits: 1 Coefficients: 1	Techniques of expression, information and communication	1	1 1h	30			10:30 p.m.	2:30 a.m.		100%
<b>Total semester 4</b>		<b>30</b>	<b>17 1h</b>	<b>30 p.m. 6:00 a.m. 5:30 a.m.</b>			<b>375 hours</b>	<b>375 hours</b>		

**Semester 5**

Teaching units	Materials	Credits		Weekly hourly volume			Volume Hourly Biannual (15 weeks)	Work Complementary in Consultation (15 weeks)	Assessment method	
	Titled			Course	TD	TP			Control Continuous	Exam
Fundamental EU Code: UEF 3.1.1 Credits: 10 Coefficients: 5	Systems to Microprocessors	6	3	3h	00	1h30		67h30	82h30	40% 60%
	Functions of Electronics	4	2	1h	30	1h30		45h00	55h00	40% 60%
Fundamental EU Code: UEF 3.1.2 Credits: 8 Coefficients: 4	Signal processing	4	2	1h	30	1h30		45h00	55h00	40% 60%
	Local computer networks	4	2	1h	30	1h30		45h00	55h00	40% 60%
Methodological EU Code: UEM 3.1 Credits: 9 Coefficients: 5	TP Systems at Microprocessors	2	1			1h30	10:30 p.m.	27:30	100%	
	TP Functions of Electronics	2	1			1h30	10:30 p.m.	27:30	100%	
	TP Signal and Local Networks	2	1			1h30	10:30 p.m.	27:30	100%	
	Preliminary Project Works	3	2	1h	30	1 hour	37h30	37h30	40%	60%
EU Discovery Code: UED 3.1 Credits: 2 Coefficients: 2	Electronic Components Technology 2	1	1	1h	30		10:30 p.m.	2:30 a.m.		100%
	Integrated Circuit Technology and Manufacturing	1	1	1h	30		10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 3.1 Credits: 1 Coefficients: 1	Wave propagation and Antennas	1	1	1h	30		10:30 p.m.	2:30 a.m.		100%
<b>Total semester 5</b>		<b>30</b>	<b>17</b>	<b>1:30 p.m.</b>	<b>6:00 a.m.</b>	<b>5:30 a.m.</b>	<b>375 hours</b>	<b>375 hours</b>		



**Semester 6**

Teaching units	Materials	Credits		Weekly hourly volume			Volume Hourly Biannual (15 weeks)	Work Complementary in Consultation (15 weeks)	Assessment method	
	Titled			Course	TD	TP			Control Continuous	Exam
Fundamental EU Code: UEF 3.2.1 Credits: 10 Coefficients: 5	Continuous servos and regulation	6	3	3h00	1h30		67h30	82h30	40%	60%
	Sensors and Instrumentation	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental EU Code: UEF 3.2.2 Credits: 8 Coefficients: 4	Power electronics	4	2	1h30	1h30		45h00	55h00	40%	60%
	Pulse electronics	4	2	1h30	1h30		45h00	55h00	40%	60%
Methodological EU Code: UEM 3.2 Credits: 9 Coefficients: 5	End of Cycle Project	4	2			3:00 a.m.	45h00	55h00	100%	
	TP Servos and Regulation	2	1			1h30	10:30 p.m.	27:30	100%	
	TP Sensors and Instrumentation	2	1			1h30	10:30 p.m.	27:30	100%	
	Power Electronics and Impulses TP	1	1			1 hour	3:00 p.m.	10:00 a.m.	100%	
EU Discovery Code: UED 3.2 Credits: 2 Coefficients: 2	Devices Optoelectronics	2	2	3h00			45h00	5:00 a.m.		100%
Transversal EU Code: UET 3.2 Credits: 1 Coefficients: 1	Entrepreneurship and business management	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
<b>Total semester 6</b>		<b>30</b>	<b>17</b>	<b>12:00</b>	<b>6:00</b>	<b>7:00</b>	<b>375 hours</b>	<b>375 hours</b>		