



People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Sétif 1 University – Ferhat Abbas

Faculty of Technology
Department of Automatic and artificial intelligence

Training Canvas

Licence Degree in Automation

- Semester 1

Teaching unit	Subjects	Credits	Coefficient	Weekly hourly volume			Volume Hourly Half-yearly (15 weeks)	Complementary Work in Consultation (15 weeks)	Mode of evaluation	
	Entitled			Course	TD	TP			Continuous Monitoring	Review
TU Fondamental Code: TUF 1.1 Appropriations: 18 Coefficients : 9	Mathematics 1	6	3	3h00	1h30		67h30	82h30	40%	60%
	Physical 1	6	3	3h00	1h30		67h30	82h30	40%	60%
	Structure of the material	6	3	3h00	1h30		67h30	82h30	40%	60%
TU Methodological Code: TUM 1.1 Appropriations: 9 Coefficients : 5	TP Physics 1	2	1			1h30	22h30	27h30	100%	
	TP Chemistry 1	2	1			1h30	22h30	27h30	100%	
	Informatics 1	4	2	1h30		1h30	45h00	55h00	40%	60%
	Methodology of writing	1	1	1h00			15h00	10h00		100%
TU Discovery Code : TUD 1.1 Credits: 1 Coefficients : 1	The science trades and technologies 1	1	1	1h30			22h30	2h00		100%
TU Transversal Code: TUT 1.1 Credits: 2 Coefficients : 2	Foreign language 1 (French and/or English)	2	2	3h00			45h00	05h00		100 %
Total semester 1		30	17	4H	4h30	4h30	375h00	375h00		

- Semester 2

Teaching unit	Subjects	Credits	Coefficient	Weekly hourly volume			Volume Hourly Half-yearly (15 weeks)	Complementary Work in Consultation (15 weeks)	Mode of evaluation	
	Entitled			Course	TD	TP			Continuous Monitoring	Review
TU Fondamental Code: TUF 1.1 Appropriations: 18 Coefficients : 9	Math 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%
TU Methodological Code: TUM 1.2 Appropriations: 9 Coefficients : 5	TP Physics 2	2	1			1h30	22h30	27h30	100%	
	TP Chemistry 2	2	1			1h30	22h30	27h30	100%	
	Informatics 2	4	2	1h30		1h30	45h00	55h00	40%	60%
	Methodology of presentation	1	1	1h00			3:00 pm	10am		100%
TU Discovery Code : TUD 1.2 Credits: 1 Coefficients : 1	The science trades and technologies 2	1	1	1h30			22h30	2:30 am		100%
TU Transversal Code: TUT 1.2 Credits: 2 Coefficients : 2	Foreign language 2 (French and/or English)	2	2	3h00			45h00	05h00		100 %
Total semester 2		30	17	4h00	4h30	4h30	375h00	375h00		

- Semester 3

Teaching unit	Subjects	Credits	Coefficient	Weekly hourly volume			Volume Hourly Half-yearly (15 weeks)	Complementary Work in Consultation (15 weeks)	Mode of evaluation	
	Entitled			Course	TD	TP			Continuous Monitoring	Review
TU Fondamental Code: TUF 2.1.1 Credits: 10 Coefficients : 5	Math 3	6	3	3h00	1h30		67h30	82h30	40%	60%
	Waves and vibrations	4	2	1h30	1h30		45h00	55h00	40%	60%
TU Fondamental Code: TUF 2.1.2 Credits: 8 Coefficients : 4	Basic electronics 1	4	2	1h30	1h30		45h00	55h00	40%	60%
	Basic electrical engineering 1	4	2	1h30	1h30		45h00	55h00	40%	60%
TU Methodological Code: TUM 2.1 Appropriations: 9 Coefficients : 5	Probabilities and statistics	4	2	1h30	1h30		45h00	55h00	40%	60%
	Informatics 3	2	1			1h30	22h30	27h30	100%	
	TP Electronics 1 and electrical engineering 1	2	1			1h30	22h30	27h30	100%	
	TP Waves and vibrations	1	1			1h00	15h00	10h00	100%	
TU Discovery Code : TUD 2.1 Credits: 2 Coefficients : 2	State of the art in electrical engineering	1	1	1h30			22h30	02h30		100%
	Energy and environment	1	1	1h30			22h30	02h30		100%
TU Transversal Code: TUT 2.1 Credits: 1 Coefficients : 1	Technical English	1	1	1h30			22h30	02h30		100%
Total semester 3		30	17	13h30	7h30	4h00	375h00	375h00		

- **Semester 4**

Teaching unit	Entitled	Credits	Coefficient	Weekly hourly volume			Volume Hourly Half-yearly (15 weeks)	Complementary Work in Consultation (15 weeks)	Mode of evaluation	
				Course	TD	TP			Continuous Monitoring	Review
TU Fondamental Code: TUF 2.2.1 Credits: 10 Coefficients : 5	Linear and continuous servo systems	6	3	3h00	1h30		67h30	82h30	40%	60%
	Combinatorial logic and sequential	4	2	1h30	1h30		45h00	55h00	40%	60%
TU Fondamental Code: TUF 2.2.2 Credits: 8 Coefficients : 4	Numerical methods	4	2	1h30	1h30		45h00	55h00	40%	60%
	Signal theory	4	2	1h30	1h30		45h00	55h00	40%	60%
TU Methodological Code: TUM 2.2 Appropriations: 9 Coefficients : 5	Electrical measurements and electronic	3	2	1h30		1h00	37h30	37h30	40%	60%
	TP Linear and continuous servo systems	2	1			1h30	22h30	27h30	100%	
	TP Combinatorial logic and sequential	2	1			1h30	22h30	27h30	100%	
	TP Numerical methods	2	1			1h30	22h30	27h30	100%	
TU Discovery Code : TUD 2.2 Credits: 2 Coefficients : 2	Architecture of automated systems	1	1	1h30			22h30	02h00		100%
	Electrical safety	1	1	1h30			22h30	02h00		100%
TU Transversal Code: TU 2.2 Credits: 1 Coefficients : 1	Techniques of expression and communication	1	1	1h30			22h30	02H00		100%
Total semester 4		30	17	13h30	6h00	5h30	375h00	375h00		

• **Semester 5**

Teaching unit	Entitled	Credits	Coefficient	Weekly hourly volume			Volume Hourly Half-yearly (15 weeks)	Complementary Work in Consultation (15 weeks)	Mode of evaluation	
				Course	TD	TP			Continuous Monitoring	Review
TU Fondamental Code: TUF 3.1.1 Credits: 10 Coefficients : 5	Control of linear systems	4	2	1h30	1h30		45h00	55h00	40%	60%
	Power electronics	4	2	1h30	1h30		45h00	55h00	40%	60%
	Modelling and identification of systems	2	1	1h30			22h30	27h30		100%
TU Fondamental Code: TUF 3.1.2 Credits: 8 Coefficients : 4	Microprocessors and Micro-controllers	6	3	3h00	1h30		67h30	82h30	40%	60%
	Programming in C++	2	1	1h30			22h30	27h30		100%
TU Methodological Code: TUM 3.1 Appropriations: 9 Coefficients : 5	TP Control of linear systems	2	1			1h30	22h30	27h30	100%	
	TP Power electronics	2	1			1h30	22h30	27h30	100%	
	TP Modelling and identification of systems	2	1			1h30	22h30	27h30	100%	
	TP Microprocessors and Micro-controllers	2	1			1h30	22h30	27h30	100%	
	TP Programming in C++	1	1			1h00	15h00	10h00	100%	
TU Discovery Code :TUD 3.1 Credits: 2 Coefficients : 2	Standards and Certification	1	1	1h30			22h30	02h30		100%
	Renewable energies: Production and storage	1	1	1h30			22h30	02h30		100%
TU Transversal Code: TUT 3.1 Credits: 1 Coefficients : 1	English and Automatic	1	1	1h30			22h30	02h30		100%
Total semester 5		30	17	13:30	4h30	7h00	375h00	375h00		

- **Semester 6**

Teaching unit	Entitled	Credits	Coefficient	Weekly hourly volume			Volume Hourly Half-yearly (15 weeks)	Complementary Work in Consultation (15 weeks)	Mode of evaluation	
				Course	TD	TP			Continuous Monitoring	Review
UE Fondamentale Code: UEF 3.2.1 Credits: 10 Coefficients : 5	Sampled Slave Systems	4	2	1h30	1h30		45h00	55h00	40%	60%
	Actuators	4	2	1h30	1h30		45h00	55h00	40%	60%
	Sensors and measurement chains	2	1	1h30			22h30	27h30		100%
UE Fondamentale Code: UEF 3.2.2 Credits: 8 Coefficients : 4	Industrial programmable machines (PLC)	6	3	3h00	1h30		67h30	82h30	40%	60%
	Communications buses and industrial networks	2	1	1h30			22h30	27h30		100%
EU Methodological Code: EMU 3.2 Appropriations: 9 Coefficients : 5	End of Cycle Project	4	2			3h00	45h00	55h00	100%	
	TP Sensors and Actuators	2	1			1h30	22h30	27h30	100%	
	TP Industrial programmable machines	2	1			1h30	22h30	27h30	100%	
	TP Communication buses and industrial networks	1	1			1h00	15h00	10am	100%	
EU Discovery Code : UED 3.2 Credits: 2 Coefficients : 2	Automatic electrical installations	1	1	1h30			22h30	2:30 am		100%
	Maintenance and reliability	1	1	1h30			22h30	2:30 am		100%
EU Transversal Code: UET 3.2 Credits: 1 Coefficients : 1	Professional project and business management	1	1	1h30			22h30	2:30 am		100%
Total semester 6		30	17	13:30	4h30	7h00	375h00	375h00		