

Order No. 1014 OF JULY 25, 2023

Common core teaching program with a view to obtaining the state engineering diploma in the science and technology field

Sector: Mechanical engineering

Semester 1

Teaching Unit	Subjects	Code	Credits	Coefficient	Weekly Hours			Semester Hours (15 weeks)	Evaluation Mode	
	Titled				Course	TU	Lab		Continuous Assessment	Exam
Fundamental Unit Code : FU 1.1 Credits : 10 Coefficients : 5	Mathematics (analysis 1)	IST 1.1	6	3	1h30	3h00		67h30	40%	60%
	Algebra 1	IST 1.2	4	2	1h30	1h30		45h30	40%	60%
Fundamental Unit Code : FU 1.2 Credits : 14 Coefficients : 8	Elements of Chemistry (Structure of Matter).	IST 1.4	7	4	1h30	3h00	1h30	90h00	40% TU 20% , Lab 20%	60%
	Elements of Mechanics (Physics 1).	IST 1.5	7	4	1h30	3h00	1h30	90h00	40% TU 20% , Lab 20%	60%
Methodological Unit Code : MU 1.1 Credits : 4 Coefficients : 4	probability and statistics	IST 1.3	2	2	1h30	1h30		45h30	40%	60%
	Computer Architecture and Applications.	IST 1.6	2	2			3h00	45h00	100%	
Transversal Unit Code : TU 1.1 Credits : 2 Coefficients : 2	Ethical and Deontological Dimension (The Foundations)	IST 1.7	1	1	1h30			22h30		100 %
	Foreign Language 1 (English))	IST 1.8	1	1		1h30		22h30	100 %	
Total hours			30	19	9h00	13h30	6h00	427h30		

Semester 2

Teaching Unit	Subjects	Code	Credits	Coefficient	Weekly Hours			Semester Hours (15 weeks)	Evaluation Mode	
	Titled				Course	TU	Lab		Continuous Assessment	Exam
Fundamental Unit Code : FU 2.1 Credits : 10 Coefficients : 5	Mathematics (analysis 2)	IST 2.1	6	3	1h30	3h00		67h30	40%	60%
	Algebra 2	IST 2.2	4	2	1h30	1h30		45h30	40%	60%
Fundamental Unit Code : FU 2..2 Credits : 14 Coefficients : 8	Electricity and Magnetism. (Physics 2)	IST 2.3	7	4	1h30	3h00	1h30	90h00	40% TU 20% , Lab 20%	60%
	Thermodynamics.	IST 2.4	7	4	1h30	3h00	1h30	90h00	40% TU 20% , Lab 20%	60%
Methodological Unit que Code : MU 2.1 Credits : 4 Coefficients : 4	Technical Drawing.	IST 2.5	2	2			3h00	45h00	100%	
	Programming (Computer Science 2).	IST 2.6	2	2			3h00	45h00		
Transversal Unit Code : TU 2.1 Credits : 1 Coefficients : 1	Foreign Language 2 (English))	IST 2.7	1	1		1h30		22h30	100 %	
Discovery Unit Code : DU 2.1 Credits : 1 Coefficients : 1	Engineering Professions.	IST 1.8	1	1	1h30			22h30		100 %
Total hours			30	19	7h30	12h00	9h00	427h30		

Semester 3

Teaching Unit	Subjects	Code	Credits	Coefficient	Weekly Hours			Semester Hours (15 weeks)	Evaluation Mode	
	Titled				Course	TU	Lab		Continuous Assessment	Exam
Fundamental Unit Code : FU 3.1 Credits : 11 Coefficients : 6	Applied mathematics	IST 3.1	6	3	1h30	3h00		67h30	40%	60%
	waves and vibrations	IST 3.2	5	3	1h30	1h30	1h30	67h30	40% TU 20% , Lab 20%	60%
Fundamental Unit Code : FU 3.2 Credits : 14 Coefficients : 8	Building materials	IST 3.3	5	3	1h30	1h30	1h30	67h30	40%	60%
	fluid mechanics 1	IST 3.4	5	3	1h30	1h30	1h30	45h00	40%	60%
	rational mechanics	IST 3.5	4	2	1h30	1h30	1h30	67h30	40% TU 20% , Lab 20%	60%
Methodological Unit Code : MU 3.1 Credits : 2 Coefficients : 2	computer science 3	IST 3.6	2	2	1h30		1h30	45h00	40%	60%
Discovery Unit Code : DU 3.1 Credits : 2 Coefficients : 2	Electronic	IST 3.7	1	1	1h30			22h30		100%
	Electrical Engineering	IST 3.8	1	1	1h30			22h30		100%
Transversal Unit Code : TU 3.1 Credits : 1 Coefficients : 1	Technical English	IST 3.9	1	1		1h30		22h30	40%	60%
Total hours			30	19	12h00	10h30	7h30	427h30		

Semester 4

Teaching Unit	Subjects	Code	Credits	Coefficient	Weekly Hours			Semester Hours (15 weeks)	Evaluation Mode	
	Titled				Course	TU	Lab		Continuous Assessment	Exam
Fundamental Unit Code : FU 4.1 Credits : 13 Coefficients : 7	Applied thermodynamics	IST 4.1	5	3	1h30	1h30	1h30	67h30	40% TU 20% , Lab 20%	60%
	heat transfer	IST 4.2	6	3	1h30	3h00		67h30	40%	60%
	Energy conversion	IST 4.3	2	1	1h30			22h30		100%
Fundamental Unit Code : FU 4.2 Credits : 12 Coefficients : 7	Material resistance	IST 4.4	5	3	1h30	1h30	1h30	67h30	40% TU 20% , Lab 20%	60%
	Hydraulics and pneumatics	IST 4.5	4	2	1h30	1h30		45h00	40%	60%
	measurement and instrumentation	IST 4.6	3	2	1h30		1h30	45h00	40%	60%
Methodological Unit Code : MU 4.2 Crédits : 4 Coefficients : 3	numerical methods	IST 4.7	2	1	1h30		1h30	45h00	40%	60%
	computer aided drawing	IST 4.8	2	2			1h30	22h30	100%	
Discovery Unit Code : DU 4.1 Credits : 1 Coefficients : 1	energy production and transport	IST 1.9	1	1	1h30			22h30		100%
Transversal Unit Code : TU 4.1 Credits : 1 Coefficients : 1	information, expression and communication technology	IST 1.10	1	1		1h30		22h30	40%	60%
Total hours			30	19	12h00	9h00	7h30	427h30		