

b. Synthetic table of modules and units of study by semester

**Institute of Applied Sciences and Technology in Constantine,
Specialty: Industrial Engineering and Maintenance**

Semester 1

						ECTS
UE	Modules	CM	TD	TP	Total	Coef.
UE1.1 Introduction to Mechanics and Materials	M 111- MECA 1 - Statics	6	15	9	30	3
	M 112 – MECHANICAL DESIGN 1	6	9		15	1
	M 113 - INDUSTRIAL DRAWING 1			24	24	2
	M 114 - MATERIALS 1 Properties and Designation	9	12	9	30	2
	M 115 – MANUFACTURING TECHNOLOGY	3	9	18	30	2
Total UE1.1		24	45	60	129	10
UE1.2 Discovery of Electrical Engineering	M 121 - ELEC 1 - Direct Current Electricity	6	15	9	30	2
	M 122 - ELEC 2 - Alternating Current Electricity	6	15	9	30	2
	M 123 - AUTO 1 - Basics of Automation	6	9	15	30	2
	M 124 - Wiring and Maintenance of Electrical Systems		6	18	24	2
	M 125 - Organization and Maintenance Methods 1	12	12		24	2
Total UE1.2		30	57	51	138	10
UE1.3 Discovery of Transversal Skills	M 131 - MATHS 1	12	24	0	36	3
	M 132 - COM 1 (Communication Expression)		12	12	24	2
	M 133 - ENGLISH 1		12	12	24	2
	M 134 - SAFETY 1		15		15	1
	M 135 - PPP 1 (Personal and Professional Project)		6	9	15	1
	M 136 - Company Internship					1
Total UE1.3		12	69	33	114	10
Total		66	171	144	381	30

Institute of Applied Sciences and Technology in Constantine, Specialization:
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Semester 2

						ECTS
UE	Modules	CM	TD	TP	Total	Coefficient
UE2.1 Deepening in mechanics and materials	M 211 - MECA 2 - Resistance of Materials	9	18	18	45	2
	M 212 - INDUSTRIAL DRAWING 2		15	18	33	2
	M 213 - MATERIALS 2 - Testing and behavior	6	12	12	30	2
	M 214 - PNEUMATICS - HYDRAULICS	6	12	18	36	2
	M 215 - Organization and Maintenance Methods 2	6	12	12	30	2
Total UE2.1		27	69	78	174	10
UE2.2 Deepening In Electrical Engineering	M 221 - ELECTRONICS 1	6	12	18	36	2
	M 222 - ELECTRONICS 2	6	12	18	36	2
	M 223 - AUTO 2	9	9	12	30	2
	M 224 - ELECTRICAL ENGINEERING 1	12	15	9	36	2
	M 225 - THERMAL ENGINEERING 1	9	12	15	36	2
Total UE2.2		36	51	87	174	10
UE2.3 Deepening in transversal skills	M 231 - MATHS 2	21	21		42	3
	M 232 - COM 2 (Communication Expression)		15	15	30	2
	M 233 - ENGLISH 2		15	15	30	2
	M 234 - PPP 2 (Personal and Professional Project)		6	9	15	1
	M 235 - COMPUTER SCIENCE 1			30	30	1
	M 236 - ORGANIZATION of the COMPANY	12	12		24	1
Total UE2.3		33	69	69	171	10
Total		96	189	234	519	30

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Semester 3

						ECTS
UE	Modules	CM	TD	TP	Total	Coefficient
UE3.1 Advanced Mechanics and Materials	M 311 - MECA 3 (Dynamic Kinematics)	12	15	18	45	2
	M 312 - MECHANICAL DESIGN 2 (CAD)			30	30	2
	M 313 - MATERIALS 3 - Non-Destructive Testing		12	18	30	2
	M 314 - MAINTENANCE MANAGEMENT	9	12	15	36	2
	M 315 - RELIABILITY	12	18		30	2
Total UE3.1		33	57	81	171	10
UE3.2 Improvement Electrical Engineering	M 321 - Wiring and Electrical System Maintenance	6	6	24	36	2
	M 322 - ELECTROTECHNIQUE 2	9	12	9	30	2
	M 323 - AUTO 3	9	12	12	33	2
	M 324 - Power Electronics	6	12	12	30	2
	M 325 - THERMODYNAMICS	12	12	12	36	2
Total UE3.2		48	57	66	171	10
UE3.3 Development of Transversal Skills	M 331 - MATHS 3	21	21		42	2
	M 332 - COM 3 (Communication Expression)		15	15	30	2
	M 333 - ENGLISH 3		15	15	30	2
	M 334 - PPP 3 (Personal and Professional Project)		6	9	15	1
	M 335 - COMPUTER SCIENCE 2 (Programming)		18	18	36	2
	M 336 - PROJECT MANAGEMENT		6	18	24	1
Total UE3.3		21	81	75	177	10
Total		102	195	222	519	30

Institute of Applied Sciences and Technology in Constantine, Specialization: Industrial Engineering and Maintenance						
Semester 4						
						ECTS
UE	Modules	CM	TD	TP	Total Coefficient	
UE4.1 Specialization in mechanics and materials	M 411 - MECA 4 (Cinétique, Energétique)	6	9	3	18	2
	M 412 - MECA5 (Mécanique des fluides)	6	12	12	30	3
	M 413 - CONCEPTION MECANIQUE 3 (CAO)		12	18	30	2
	M 414 - INTERNSHIP					3
Total UE4.1		12	33	33	78	10
UE4.2 Specialization in Engineering electrical	M 421 –Câblage et maintenance des systèmes électriques	6	6	24	36	2
	M 422 - MAINTENANCE IMMOBILIERE		9	9	18	2
	M 423 - MACHINES THERMIQUES et THERMODYNAMIQUES	9	12	9	30	3
	M 424 - INTERNSHIP					3
Total UE4.2		15	33	30	78	10
UE4.3 Specialization in Skills transversales	M 431 - MATHS 4	12	12		24	2
	M 432 - COM 4 (Communication Expression)		15		15	1
	M 433 - ANGLAIS 4		15		15	1
	M 434 - QUALITE	6	9		15	1
	M 435 - MANAGEMENT DE LA QUALITE	6	9		15	1
	M 436 - INTERNSHIP					4
Total UE4.3		24	60	0	84	10
Total		51	126	63	240	30

Institute of Applied Sciences and Technology in Constantine, Specialization: Industrial Engineering and Maintenance						
Semester 5						
						ECTS
UE	Modules	CM	TD	TP	Total Coefficient	
UE 5.1 and 5.2 Master's Note of Internship						
	INTERNSHIP UE 1					10
Total UE 5.1						10
	INTERNSHIP UE 2					5
	TUTORIAL PROJECT					5
Total UE 5.2						10
UE 5.3 Transversal Skills	Internship Report					5
	Internship Defense					5
Total						30

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Semester 6						
						ECTS
UE	Modules	CM	TD	TP	Total Coefficient	
UE 6.1 Expertise in Mechanics and Materials	M 611 - MECA 6 Mécanique vibratoire	9	15	18	42	2
	M 612 - MECA 7 Mécanique de la rupture, Expertise	9	9	18	36	2
	M 613 - PROPORTIONAL HYDRAULICS		18	12	30	2
	M 614 - MAINTENANCE OPERATIONS			36	36	2
	M 615 - COUT DE LA MAINTENANCE	15	15		30	2
Total UE6.1		33	57	84	174	10
UE 6.2 Expertise in Electrical Engineering	M 621 –GMAO - Gestion de la Maintenance Assistée par Ordinateur		12	24	36	2
	M 622 - AUTO 4- Asservissement et régulation	9	18	9	36	2
	M 623 - AUTO 5 - Asservissement et régulation	9	12	9	30	2
	M 624 - OPERATIONS MAINTENANCE			36	36	2
	M 625 - RESEAUX et AUTOMATES	9	12	15	36	2
Total UE6.2		27	54	93	174	10
UE 6.3 Expertise in Transversal Skills	M 631 - LEGISLATION	12	6		18	1
	M 632 - COM 5 (Communication Expression)		15	15	30	2
	M 633 - ENGLISH 4		15	15	30	2
	M 634 - MANAGEMENT	18	18		36	2
	M 635 – SECURITE 2	12	12		24	1
	M 636 - ECONOMIE	18	12		30	2
Total UE6.3		60	78	30	168	10
Total		120	189	207	516	30