

Semester 1						
Code	Course	ECTS	Lecture	Exercises	LAB	Total
LS1ALGE	Algebra I (CE-IEM-CCNE)	3	15	15		30
LS1ANAL	Calculus I (CE-IEM-CCNE)	4	18	27		45
LS1AROR	Computer Architecture (CCNE-BC)	3	18	12		30
LS1CIEL	Electric Circuits	5	18	24	18	60
LS1ELNU	Digital Electronics I	4	15	18	12	45
LS1FRAN	English (CE-IEM-CCNE-BC)	2		30		30
LS1ININ	Introduction to Computer Science (CCNE-BC)	4	15	18	12	45
LS1OPTI	Optics	4	15	21	9	45
Total	8	29	114	165	51	330

Semester 2						
Code	Course	ECTS	Lecture	Exercises	LAB	Total
LS2ALGE	Algebra II (CE-IEM-CCNE)	3	15	15		30
LS2ANAL	Calculus II (CE-IEM-CCNE)	4	18	27		45
LS2DRHO	Human Rights (CE-IEM-CCNE-BC)	2	30			30
LS2ELAN	Analog Electronics I (IEM-CCNE)	4	15	18	12	45
LS2PRST	Structured Programming (CCNE-BC)	4	12	18	15	45
LS2REIN	Computer Network I (CCNE-BC)	5	21	21	18	60
LS2STPA	Applied Statistics and Probability	4	18	27		45
LS2THSI	Signal Theory	3	15	15		30
Total	8	29	144	141	45	330

Semester 3						
Code	Course	ECTS	Lecture	Exercises	LAB	Total
LS3ANAL	Calculus III (GIM-GRIT)	3	12	18		30
LS3BDDR	Relational Database I (CCNE-BC)	4	15	15	15	45
LS3ELAN	Analog Electronics II	4	15	18	12	45
LS3ELNU	Digital Electronics II	4	15	18	12	45
LS3LAOO	Object Oriented Programming	4	15	15	15	45
LS3REEW	Wide Area Network*	4	15	15	15	45
LS3REIN	Computer Network II (CCNE-BC)*	4	12	15	18	45
LS3STDO	Data Structure (CCNE-BC)	4	12	18	15	45
LS3TEAN	Analog Communications	4	15	15	15	45
Total	8	31	114	132	99	345

Semester 4						
Code	Course	ECTS	Lecture	Exercises	LAB	Total
LS4ATGL	Computer Software Engineering	4	15	15	15	45
LS4AULI	Linear Control (IEM-CCNE)*	4	12	15	18	45
LS4CIPR	Programming Circuits (IEM-CCNE)	4	12	15	18	45
LS4EXCO	Communication Skills (CE-IEM-CCNE-BC)	2		15	15	30
LS4LITR	Transmission lines	4	15	18	12	45
LS4RELL	Local Area Network	4	15	15	15	45
LS4SYEX	Operating Systems (IEM-CCNE)	4	15	15	15	45
LS4TENU	Digital Communications	4	15	15	15	45
LS4TRNS	Digital Signal Processing*	4	12	12	21	45
Total	8	30	99	120	126	345

Semester 5						
Code	Course	ECTS	Lecture	Exercises	LAB	Total
LS5ADRE	Network Administration	4	15	15	15	45
LS5ANGL	Foreign Language (Frensh) (CE-IEM-CCNE-BC)	2		30		30
LS5DEWE	Web Development (Client side)	4	15	15	15	45
LS5MITE	MicroWaves and Teledetection	4	12	18	15	45
LS5PRVH	VHDL Programming (IEM-CCNE)	4	15	15	15	45
LS5PRAN	Antena and Propagation	4	15	15	15	45
LS5SYOP	OptoElectronics Systems	4	15	15	15	45
LS5WLES	WLAN and Security	4	15	15	15	45
Total	8	30	102	138	105	345

Semester 6						
Code	Course	ECTS	Lecture	Exercises	LAB	Total
LS6STAG	Internship	6				
LS6PRFE	Senior Project (≈ 180 h / étudiant-projet)	12			180	180
LS6DRGT	General and Labor law(CE-IEM-CCNE-BC)	1	15			15
LS6COEL	Electromagnetic Compatibility*	3	9	12	9	30
LS6TESA	Satellite Communication*	3	15	15		30
LS6TEFI	Fixed Telephony*	3	15	6	9	30
LS6TEMO	Mobile Telephony*	3	12	9	9	30
LS6ARCS	Client Server Architecture*	4	15	15	15	45
LS6PRRS	Network Systems Programming*	4	15	15	15	45
LS6PRTR	Real Time Programming*	4	15	15	15	45
Total	7	31	60	45	225	330

Total ECTS : 180
Total Hours : 2025

* : Elective courses - ECTS : European Credit Transfer and accumulation System