

1st year

	CLASSES	CREDITS
SEMESTER 1	Soft & Human Skills 1	5
	Integration and probabilities	5
	Introduction to Algorithmic, Digital Systems Design	5
	Fundamental Circuit Theory	5
	Physics for Electrical Engineering	5
	CLASSES	CREDITS
SEMESTER 2	Soft & Human Skills 2	5
	Numerical Analysis and Statistics	5
	Signal and Control	5
	Electric circuits and systems	5
	Components and Architecture	5
	Connected Objects OR Electrical Plane OR Introduction to Telecommunications	5

2nd year

	Track	CLASSES	CREDITS
	Acquisition, processing and transmission of information	SYNTHESE ET CONCEPTION DES CVS (5 ECTS credits)	30
		MACHINES ELECTRIQUES (5 ECTS credits)	
		PROPAGATION ELECTROMAGNETIQUE (5 ECTS credits)	
		TRAITEMENT DE L'INFORMATION (5 ECTS credits)	
		SOFT AND HUMAN SKILLS (5 ECTS credits)	
		SCIENTIFIC COMPUTING 2 (5 ECTS credits)	

		CLASSES	CREDITS
SEMESTER 3	Computational physics	SYNTHESE ET CONCEPTION DES CVS (5 ECTS credits)	30
		MACHINES ELECTRIQUES (5 ECTS credits)	
		PROPAGATION ELECTROMAGNETIQUE (5 ECTS credits)	
		TRAITEMENT DE L'INFORMATION (5 ECTS credits)	
		SOFT AND HUMAN SKILLS (5 ECTS credits)	
		SCIENTIFIC COMPUTING 2 (5 ECTS credits)	
Energy	Energy	ARCHITECTURES ET DEVELOPPEMENT DE SYSTEMES INFORMATIQUES (5 ECTS credits)	30
		SYNTHESE ET CONCEPTION DES CVS (5 ECTS credits)	
		MACHINES ELECTRIQUES (5 ECTS credits)	
		RESEAUX ELECTRIQUES (5 ECTS credits)	
		AUTOMATIQUE DES SYSTEMES LINEAIRES (5 ECTS credits)	
		SOFT AND HUMAN SKILLS (5 ECTS credits)	
Systems integration	Systems integration	MODELISATION ET TECHNOLOGIE (5 ECTS credits)	
		CIRCUITS ET ANTENNES (5 ECTS credits)	
		ARCHITECTURE DES SYSTEMES NUMERIQUES (5 ECTS credits)	
		OPTO HYPER (5 ECTS credits)	
		NANO SATELLITE (5 ECTS credits)	
		Soft and Human Skills	
Communicating systems	Communicating systems	OPTO HYPER (5 ECTS credits)	
		NANO SATELLITE (5 ECTS credits)	
		MATHEMATIQUES APPLIQUEES (5 ECTS credits)	
		ELECTROMAGNETISME : PHENOMENES PHYSIQUES ET SIMULATIONS (5 ECTS credits)	
		ANTENNE ET RAYONNEMENT (5 ECTS credits)	
		Soft and Human Skills	

Semester 4

Computational physics	MATHEMATIQUES APPLIQUEES (5 ECTS credits)	
	ELECTROMAGNETISME : PHENOMENES PHYSIQUES ET SIMULATIONS (5 ECTS credits)	
	SIGNAL ET ANALYSE NUMERIQUE (5 ECTS credits)	
	MECATRONIQUE (5 ECTS credits)	
	Soft and Human Skills	
	Numerical Project (5 ECTS credits)	
Artificial Intelligence for Information Processing (AIIP)	Applied mathematics	
	Image Processing and Modeling	
	Digital Systems Architecture	
	1st Specialization Choice: Signal - Advanced Methods for the SIA track OR Signal - Advanced	
	2nd Specialization Choice: Foundations of AI OR Introduction to AI	
	Soft and Human Skills	
Mechatronic systems	SYSTEMES AUTOMATIQUES ET NON LINEAIRES (5 ECTS credits)	
	COMMANDE NUMERIQUE (5 ECTS credits)	
	ARCHITECTURES ET COMMANDES DES SYSTEMES ELECTRIQUES (5 ECTS credits)	
	MATERIAUX (5 ECTS credits)	
	MECATRONIQUE (5 ECTS credits)	
	Soft and Human Skills	
Electrical systems of the future	SYSTEMES AUTOMATIQUES ET NON LINEAIRES (5 ECTS credits)	
	COMMANDE NUMERIQUE (5 ECTS credits)	
	ARCHITECTURES ET COMMANDES DES SYSTEMES ELECTRIQUES (5 ECTS credits)	
	MISE EN OEUVRE CELLULES DE COMMUTATION (5 ECTS credits)	
	ENERGIES RENOUVELABLES ET FACTS (5 ECTS credits)	
	Soft and Human Skills	
	SYSTEMES AUTOMATIQUES ET NON LINEAIRES (5 ECTS credits)	

Real-time automatic systems	COMMANDE NUMERIQUE (5 ECTS credits)	
	ARCHITECTURES ET COMMANDES DES SYSTEMES ELECTRIQUES (5 ECTS credits)	
	SYSTEMES A EVENEMENTS DISCRETS ET ECHANTILLONNES (5 ECTS credits)	
	INGENIERIE DES RESEAUX ET DES SYSTEMES TEMPS-REELS (5 ECTS credits)	
	Soft and Human Skills	

3rd year

Track	CLASSES	CREDITS
System Integration (InSYS)	1er Approfondissement	30
	2nd Approfondissement	
	SYSTEMES ANALOGIQUES-RF (5 ECTS credits)	
	SYSTEMES NUMERIQUES (5 ECTS credits)	
	SYSTEMES MIXTES (5 ECTS credits)	
	SOFT AND HUMAN SKILLS (5 ECTS credits)	
	CLASSES	CREDITS
Communicating Systems	METHODES NUMERIQUES (5 crédits ECTS)	30
	SYSTEMES HAUTES FREQUENCES EMBARQUES (5 crédits ECTS)	
	CIRCUITS HYPERFREQUENCES ET CEM (5 crédits ECTS)	
	PHYSIQUE APPLIQUEE ET HAUTES FREQUENCES (5 crédits ECTS)	
	PHENOMENES LIES A LA PROPAGATION ET RADAR (5 crédits ECTS)	
	SOFT AND HUMAN SKILLS 3EA S9 (5 crédits ECTS)	
Control Architectures and Computer Science for Embedded Systems	COMMANDE, FILTRAGE, DIAGNOSTIC DES SYSTEMES (5 crédits ECTS)	30
	OPTIMISATION DES SYSTEMES ET LEUR COMMANDE (5 crédits ECTS)	
	MODELISATION, ANALYSE, SIMULATION DES SYSTEMES DISCRETS (5 crédits ECTS)	
	SYSTEMES ASSERVIS AVANCES (5 crédits ECTS)	
	SYSTEMES INFORMATIQUES CRITIQUES AVANCES (5 crédits ECTS)	
	SOFT AND HUMAN SKILLS 3EA S9 (5 crédits ECTS)	

SEMESTER 5

Electrical Conversion and energies networks	SYSTEMES ET RESEAUX DE PUISSANCE (SRP)	30
	CONCEPTION DES CVS (CVS)	
	CVS ET SYSTEMES AVANCES (CSA)	
	ACTIONNEURS ET GENERATEURS (AG)	
	SMARTGRIDS ET MICRO-RESEAUX (SGM)	
	SOFT AND HUMAN SKILLS (5 ECTS credits)	
Electrodynamics and Advanced Mechatronics	SYSTEMES ET RESEAUX DE PUISSANCE (SRP)	30
	CONCEPTION DES CVS (CVS)	
	CVS ET SYSTEMES AVANCES (CSA)	
	ACTIONNEURS ET GENERATEURS (AG)	
	SMARTGRIDS ET MICRO-RESEAUX (SGM)	
	SOFT AND HUMAN SKILLS (5 ECTS credits)	
Electrodynamics and Advanced Mechatroni	PHYSIQUE POUR LA MECATRONIQUE	30
	METHODES NUMERIQUES ET OPTIMISATION	
	CONCEPTION DES SYSTEMES ELECTROMECHANIQUES	
	ARCHITECTURES DES SYSTEMES MECATRONIQUES	
	MECATRONIQUE APPLIQUEE	
	SOFT AND HUMAN SKILLS (5 ECTS credits)	
Physique Numérique	PHYSIQUE POUR LA MECATRONIQUE	30
	METHODES NUMERIQUES POUR LES PROBLEMES DE DIFFRACTION (5 ECTS credits)	
	CEM ET MATHEMATIQUES APPLIQUEES (5 ECTS credits)	
	METHODES NUMERIQUES ET OPTIMISATION-2 (5 ECTS credits)	
	SOFT AND HUMAN SKILLS (5 ECTS credits)	
	HIGH PERFORMANCE COMPUTING (5 ECTS credits)	