

Master in English

1st year

	Track	CLASSES	CREDITS	
SEMESTER 1	Soft and Human Skills	French (FLE-PIM)	4	
		Conferences on space and aeronautics	1	
		Communication	1	
		Sport	1	
			CLASSES	CREDITS
	Mathematics	Theory of distributions for signal processing	2	
		Probability / Statistics	2	
		Stochastic process	2	
	Programming	Basis of Programming/ Matlab	1	
		C programming	1	
		Microprocessor	2	
	Digital electronics	VHDL digital design	3	
		PBL : Digital electronics design	2	
Introduction to digital communication	Signal processing	1.5		
	Digital signal processing	1.5		
	Digital communications	1.5		
	Channel coding	1.5		
	Simulation of communication chains	2		
Soft and Human Skills	French (FLE)	1		
	English	1		
	Sport	1		
	Conferences on Space and aeronautics	1		
	Junior Research project	1		

SEMESTER 2			
	Digital electronics	Digital electronics project	3
		Front-end acquisition	3
	Optics	Optoelectronics	2
		Laser and optical fiber sensing techniques	1
		Practical Hyper / Opto	1
	RF	Antennas	1.5
		Passive RF	1
		Active RF circuits	1
		MEMS	2
		Hyper project	1.5
	Telecommunication systems	Mobile & multimedia communications	4
Telecommunication Project		2	
Satellite Project		2	

2nd year

	Track	CLASSES	CREDITS
	Soft and human skills	Satellite comm. Market & regulation & space law	1.5
		Project management	1.5
		Conferences on satcom	1
		Tutored project	4

	CLASSES	CREDITS	
SEMESTER 1	Advanced telecommunication techniques I	Network & Telecom. Protocols	2
		Advanced digital communication	2
	Advanced telecommunication techniques II	Spread Spectrum Techniques	1.5
		Digital filter banks	1.5
		RF Satellite channel	1
		Digital receivers & SDR technology	2
	Components of a SATCOM system	Satellite communications	1.5
		Satellite payloads & Earth Stations & Terminals	2
		Communication satellites	1.5
		Optical satellite communications	1
	Space techniques and applications	Satellite based computer networks	2
		Mobile & multimedia satellite communications	2.5
		Introduction to GNSS systems	1.5
	SEMESTER 2	5 to 6 month final internship	30