

Master in Branch Telecommunications

Speciality Telecommunications systems

Brief

The Master of Telecommunications systems at Khemis Miliana University is the basic speciality in the field of science and technology. Telecommunications training allows students to understand and acquire a basis knowledges on various topics such as the new technologies of information and communication systems, also the systems and telecommunications networks (computer networks, wired and wireless networks, digital signal and image processing and all types of SMART technologies). At the Master's level, students must complete three semesters of differents maters and a final project that will be defended at the end of the fourth semester.

Field	Branch	Speciality
<i>Sciences and Technologies</i>	Telecommunications	Telecommunications systems

First Semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	Volume (hour)
Fundamental Unit	Advanced digital communications	6	3	3h00	1h30		67h30
	Random signals and stochastic processes	4	2	1h30	1h30		45h00
	Radiocommunication	4	2	1h30	1h30		45h00
	FPGA programmable circuits	4	2	1h30	1h30		45h00
Methodological unit	Object-oriented programming in C++	3	2	1h30		1h00	37h30
	TP Advanced digital communications	2	1			1h30	22h30

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	Volume (hour)
	TP Random signals and stochastic processes	2	1			1h30	22h30
	TP FPGA programmable circuits	2	1			1h30	22h30
Discovery unit	Routing and access networks	1	1	1h30			22h30
	Standards and protocols	1	1	1h30			22h30
Transversale Unit	Technical English and terminology	1	1	1h30			22h30

Second Semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	Volume (hour)
Fundamental Unit	Digital signal processing	6	3	3h00	1h30		67h30
	Antennas	4	2	1h30	1h30		45h00
	Transmission channels	4	2	1h30	1h30		45h00
	Coding and compression	4	2	1h30	1h30		45h00
Methodological unit	Image processing	3	2	1h30		1h00	37h30
	TP Digital signal processing	2	1			1h30	22h30
	TP Antennas and transmission channels	2	1			1h30	22h30
	TP Coding and compression	2	1			1h30	22h30
Discovery unit	Embedded systems and telecommunications	1	1	1h30			22h30
	Radar techniques	1	1	1h30			22h30
Transversale Unit	Ethics, deontology and intellectual property	1	1	1h30			22h30

Third Semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	Volume (hour)
Fundamental Unit	Wireless and mobile networks	6	3	3h00	1h30		67h30
	Optical communications	4	2	1h30	1h30		45h00
	Technology and protocols for multimedia	4	2	1h30	1h30		45h00
	RF and Microwave (Passive/Active) devices	4	2	1h30	1h30		45h00
Methodological unit	Digital television	3	2	1h30		1h00	37h30
	TP Wireless and mobile networks	2	1			1h30	22h30
	TP Optical communications	2	1			1h30	22h30
	TP Technology and protocols for multimedia	2	1			1h30	22h30
Discovery unit	Space telecommunication	1	1	1h30			22h30
	Radio navigation systems	1	1	1h30			22h30
Transversale Unit	Documentary research and brief design	1	1	1h30			22h30

Semester 4

Internship in a company sanctioned by a thesis and a defense.

	VHS	coefficient	Credits
Personal work	550	09	18
Company internship	100	04	06
Seminars	50	02	03
Other (Framing)	50	02	03
Total Semester 4	750	17	30