

TELECOMMUNICATION ENGINEERING

ACADEMIC YEAR 2007/2008

Degree	Telecommunication Engineering
Centre	Technical College Campus de Cantoblanco 28049 – Madrid Phone: 91 497 22 26/ 22 23 http://www.eps.uam.es
Academic Credits	315
1 st and 2 nd cycle	

Total Credits	Compulsory Credits	Optional Credits	Free Election Credits	Total
First Cycle	148,5	12	19,5	180
Second Cycle	99	24	12	135
Total	247,5	36	31,5	315

FIRST CYCLE

First Course	Compulsory Credits 58,5	Optional Credits --	Free Election Credits --
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Code	Subject	Type	Credits	Semester
15296	Physics I	(Tr)	7,5	1
15297	Mathematical Analysis I	(Tr)	6	1
15298	Algebra and Differential Equations	(Tr)	6	1
15299	Fundamentals of programming	(Tr)	7,5	1
15300	Introduction to Engineering	(Ob)	3	1
15301	Physics II	(Tr)	6	2
15302	Mathematical Analysis II	(Tr)	6	2
15303	Discrete Mathematics and Probability Theory	(Tr)	4,5	2
15304	Digital Electronic Circuits	(Tr)	6	2
15305	Electronics and Circuits	(Tr)	6	2

Second Course	Compulsory Credits 61,5	Optional Credits (*)	Free Election Credits (*)
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Code	Subject	Type	Credits	Semester
15306	Partial Differential Equations and Numerical Analysis	(Tr)	6	1
15307	Fundamentals of Computers	(Tr)	6	1
15308	Analog Electronic Circuits	(Tr)	6	1
15311	Linear Systems	(Tr)	7,5	1
15315	Random Signals	(Ob)	6	1
15309	Fundamentals of Electromagnetic Fields: Broadcast and Propagation of Waves	(Tr)	6	2
15310	Data Structures and Algorithms	(Ob)	6	2
15313	Analysis of Electric Circuits	(Tr)	4,5	2
15314	Digital Electronic Systems	(Tr)	6	2
15319	Communication theory	(Tr)	7,5	2

Third Course	Compulsory Credits 28,5 (*)	Optional Credits (*)	Free Election Credits (*)
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Code	Subject	Type	Credits	Semester
15312	Data Communications	(Tr)	6	1
15317	Architecture of Networks I	(Tr)	7,5	1
15318	General Economy	(Ob)	6	1
15316	Advanced Electronics	(Tr)	4,5	2
15320	Architecture of Networks II	(Tr)	4,5	2

SECOND CYCLE

Fourth course	Compulsory Credits 60	Optional Credits --	Free Election Credits --
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Code	Subject	Type	Credits	Semester
15321	Operating Systems	(Tr)	6	1
15322	Services, Systems and Networks	(Tr)	9	1
15323	Design of Circuits and Electronic Systems	(Tr)	6	1
15324	Digital Signal Processing	(Tr)	9	1
15325	Technology and Architecture of Computers	(Tr)	6	2
15326	Telecommunication Systems	(Tr)	6	2
15327	Broadcast by Physical Media	(Tr)	9	2
15328	Optical Communications	(Tr)	9	2

Fifth course	Compulsory Credits 39	Optional Credits 24	Free Election Credits 12
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Code	Subject	Type	Credits	Semester
15329	Radiation and Radiocommunication I	(Tr)	6	1
15330	Projects	(Tr)	6	1
15331	Radiation and Radiocommunication II	(Tr)	6	2
15332	Electronic Instrumentation	(Tr)	6	2
15333	Final Degree Project	(Ob)	15	

(Tr): Troncal = Compulsory Credits

(Ob): Obligatorio = Compulsory Credits

(Op): Optativo = Optional Credits

Optional Subjects Offer

SUBJECT	CREDITS
ROUTE: SIGNS AND COMMUNICATIONS	
15334 Robotics	6
15335 Mobile Communications	6
15336 Digital Television	6
15337 Advanced Random Signals	6
15338 Advanced Topics in Electronic Engineering	6
15339 Advanced Topics in Sign Processing	6
15340 Advanced Topics in Communications	6
ROUTE: SYSTEMS	
15341 Artificial Intelligence	7,5
15342 Object-Oriented Programming	7,5
15343 Databases	6
15344 Client-Server Systems	6
15345 Knowledge Engineering	6
15346 Software Engineering	6
15347 Advanced Topics in Computer Science	6
15348 Communication Systems in Business	7,5
ROUTE: MANAGEMENT	
15335 Mobile Communications	6
15346 Software Engineering	6
15348 Communication Systems in Business	7,5
15349 Business Economics	6
15350 Organization of Technological Business	6
15351 Internet Technologies	6
COMMON TO ALL THE ROUTES	
15352 History of the Engineering	6
15353 Optimization and Simulation	6
15354 Natural Language Processing	6