

JOINT DEGREE IN COMPUTER ENGINEERING AND MATHEMATICS

ACADEMIC YEAR 2007/2008

Studies	Joint Degree in Computer Engineering and Mathematics
Centre	Technical College Campus de Cantoblanco 28049 – Madrid Phone: 91 497 22 26/ 22 23 http://www.eps.uam.es
Academic Credits	398,5
Teachings	1 st and 2 nd cycle

CYCLE	Compulsory Credits		Optional Credits		Total
	Inf.	Mat.	Inf.	Mat.	
First Cycle	121,5	118	--	--	239,5
Second Cycle	57	58	28	16	159
TOTAL	178,5	176	28	16	398,5

FIRST CYCLE

First Course	Compulsory Credits 78	Optional Credits --	Free Election Credits --
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Code	Subject	Syllabus	Type	Credits	Semester
10882	Introduction to Computer Science	Computer Science	(Ob)	7,5	1
10883	Programming Methodology and Technology I	Computer Science	(Ob)	7,5	1
14435	Calculus I	Mathematics	(Ob)	12	1
14438	Sets and Numbers	Mathematics	(Ob)	12	1
10887	Introduction to Data Structures	Computer Science	(Ob)	7,5	2
10888	Computer Structure and Technology I	Computer Science	(Ob)	7,5	2
14433	Linear Algebra	Mathematics	(Ob)	12	2
14436	Calculus II	Mathematics	(Ob)	12	2

Second Course	Compulsory Credits 82	Optional Credits --	Free Election Credits --
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Code	Subject	Syllabus	Type	Credits	Semester
10881	Physics I	Computer Science	(Ob)	7,5	1
11065	Programming Methodology and Technology II	Computer Science	(Ob)	7,5	1
11066	Computer Structure and Technology II	Computer Science	(Ob)	7,5	1
14440	Calculus III	Mathematics	(Ob)	8	1
14441	Ordinary Differential Equations	Mathematics	(Ob)	8	1
10886	Physics II	Computer Science	(Ob)	7,5	2
11070	Operating Systems I	Computer Science	(Ob)	7,5	2
11072	Theory of Automata and Formal Languages I	Computer Science	(Ob)	9	2
11073	Statistics	Computer Science	(Ob)	7,5	2
14434	Geometry I	Mathematics	(Ob)	12	2

Third Course	Compulsory Credits 79,5	Optional Credits --	Free Election Credits --
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Code	Subject	Syllabus	Type	Credits	Semester
11067	Electronics	Computer Science	(Ob)	7	1
11332	Computer Networks I	Computer Science	(Ob)	7	1
14307	Numerical Analysis I	Mathematics	(Ob)	10	1
14444	Complex Analysis I	Mathematics	(Ob)	8	1
14451	Discrete Mathematics	Mathematics	(Ob)	8	1
11071	Data Structures II	Computer Science	(Ob)	7,5	2
11336	Language Processors	Computer Science	(Ob)	9	2
11338	Computer Networks II	Computer Science	(Ob)	7	2
14314	Geometry II	Mathematics	(Ob)	8	2
14439	Topology	Mathematics	(Ob)	8	2

SECOND CYCLE

Fourth Course	Compulsory Credits 64	Optional Credits 14	Free Election Credits --
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Code	Subject	Syllabus	Type	Credits	Semester
11330	Computer Architecture	Computer Science	(Ob)	9	1
11331	Artificial Intelligence	Computer Science	(Ob)	7,5	1
14446	Integral and Measure Theory	Mathematics	(Ob)	8	1
14447	Algebra I	Mathematics	(Ob)	8	1
11337	Knowledge Engineering	Computer Science	(Ob)	7,5	2
14445	Differential Equations and Functional Analysis	Mathematics	(Ob)	8	2
14448	Probability II	Mathematics	(Ob)	8	2
14449	Algebra II	Mathematics	(Ob)	8	2

Optional Subjects Offer (Fourth Course)

Subject	Syllabus	Type	Credits	Semester
Computer Science optional subject	Computer Science	(Op)	7	1
Computer Science optional subject	Computer Science	(Op)	7	2

Fifth Course	Compulsory Credits 51	Optional Credits 30	Free Election Credits --
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Code	Subject	Syllabus	Type	Credits	Semester
11342	Software Engineering I	Computer Science	(Ob)	7,5	1
11343	Computer Systems I	Computer Science	(Ob)	7,5	1
14321	Numerical Analysis II	Mathematics	(Ob)	9	1
11348	Software Engineering II	Computer Science	(Ob)	10,5	2
11349	Computer Systems II	Computer Science	(Ob)	7,5	2
14322	Geometry III	Mathematics	(Ob)	9	2

Optional Subjects Offer (Fifth Course)

Subject	Syllabus	Type	Credits	Semester
Computer Science optional subject	Computer Science	(Op)	7	1
Mathematics optional subject	Mathematics	(Op)	8	1
Computer Science optional subject	Computer Science	(Op)	7	2
Mathematics optional subject	Mathematics	(Op)	8	2

(Tr): Troncal = Compulsory Credits

(Ob): Obligatorio = Compulsory Credits

(Op): Optativo = Optional Credits