

ATTACHED TABLE 3 (Students admitted in and after AY 2012)

“Courses concerning subjects in or related to the teaching profession”

Graduate Department of Computer and Information Systems

Types of teaching certificates		Code	Course Name	Credits	Minimum of the necessary credits
Specialized certificate for teaching in junior high school (Mathematics)	Subjects regarding Mathematics	CSC01	Information Security	2	At least 24
		CSC03	Applied Statistics	2	
		CSA02	Generation of Combinatorial Configurations	2	
		CSA06	Computation Models : Term Rewriting Systems	2	
		CSA07	Topics in Numerical and Applied Computation I	2	
		CSA08	Topics in Numerical and Applied Computation II	2	
		CSA09	Computational Complexity Theory	2	
		CSA10	Theory of Automata and Languages	2	
		CSA11	Advanced Analysis	2	
		CSA13	Algebraic Systems and Combinatorics	2	
		CSA14	Nonassociative Algebras and Lie Algebras	2	
		SYA07	Modeling of Advanced Devices	2	
		ITC01	Java 2D/3D Graphics	2	
		ITA04	Finite Element Modeling and Visualization	2	
		ITA06	Image Recognition and Understanding	2	
Specialized certificate for teaching in high school (Information)	Subjects regarding Information	CSC04	Quantum Information	2	At least 24
		CSA05	Formal Specifications of Processing	2	
		CSA12	Theory of Genetic Algorithms	2	
		CSA15	Computational Physics and Simulation	2	
		CSA16	Computational Superstring Theory	2	
		SYA01	Application-Specific Highly-Parallel Algorithms/Architectures	2	
		SYA04	Optoelectronics Computer and Communication Devices	2	
		SYA06	Advanced Devices for Computer and Communication Systems	2	
		CNC01	Computer Communications and Networking	2	
		CNC02	Network Management	2	
		CNA01	Advanced Internet Technology and Applications	2	
		CNA02	Multimedia Networking	2	
		CNA04	Performance Evaluation of Network Systems	2	
		CNA05	Distributed Algorithms for Networks	2	
		CNA06	Advanced Internetworking Technologies	2	
		ITA01	Computer Music	2	
		ITA02	Advanced Architectures for Synthetic Worlds	2	
		ITA03	Biomedical Modeling and Visualization	2	
		ITA07	Advanced Signal Processing	2	
		ITA08	Remote Sensing	2	
		ITA10	Spatial Hearing and Virtual 3D Sound	2	
		ITA16	Advanced Database Management Systems	2	
		SEA01	Parallel Distributed & Internet Computing	2	
		SEA02	Distributed Systems: Principles and Paradigms	2	
		SEA04	Declarative Programming	2	
		PMA01	Cloud Computing	2	

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Types of teaching certificates		Code	Course Name	Credits	Minimum of the necessary credits
Specialized certificate for teaching in junior high school (Mathematics)	Subjects regarding Mathematics	117	Finite Element Modeling and Visualization	2	At least 24
		118	Java 2D/3D Graphics	2	
		701	Topics in Numerical and Applied Computation I	2	
		702	Topics in Numerical and Applied Computation II	2	
		612	Modeling of Advanced Devices	2	
		413	Computation Models : Term Rewriting Systems	2	
		706	Theory of Automata and Languages	2	
		713	Algebraic Systems and Combinatorics	2	
		717	Nonassociative Algebras and Lie Algebras	2	
		704	Computational Complexity Theory	2	
		710	Advanced Analysis	2	
		301	Advanced Image Processing and Algorithms	2	
		302	Image Recognition and Understanding	2	
		317	Generation of Combinatorial Configurations	2	
		313	Evolutionary Algorithms and Applications	2	
		709	Probability, Entropy and Fractals	2	
Specialized certificate for teaching in high school (Information)	Subjects regarding Information	110	Computer Music	2	At least 24
		112	Advanced Architectures for Synthetic Worlds	2	
		116	Biomedical Modeling and Visualization	2	
		209	Application-Specific Highly-Parallel Algorithms/Architectures	2	
		210	Parallel Languages & Multimedia Tools	2	
		211	Supercompilers and Parallel Program Synthesis	2	
		213/918	Parallel Distributed & Internet Computing	2	
		215	Parallel/Distributed Languages and Algorithms	2	
		303	Advanced Signal Processing	2	
		311	Remote Sensing	2	
		315	Spatial Hearing and Virtual 3D Sound	2	
		403	Advanced Database Management Systems	2	
		406	Autonomous Decentralized Systems	2	
		408	Formal Specifications of Processing	2	
		411	Distributed Systems: Principles and Paradigms	2	
		415/901	Cloud Computing	2	
		416/917	Advanced Internet Technology and Applications	2	
		603	Optoelectronics Computer and Communication Devices	2	
		604	Semiconductor Manufacturing System	2	
		611	Advanced Devices for Computer and Communication Systems	2	
		711	Theory of Genetic Algorithms	2	
		714	Declarative Programming	2	
		718	Quantum Information Theory	2	
		719	Computational Physics and Simulation	2	
		720	Computational Superstring Theory	2	
		801	Computer Communications and Networking	2	
		803	Multimedia Networking	2	
		805	Network Management	2	
		807	Performance Evaluation of Network Systems	2	
		808	Distributed Algorithms	2	
		809	Advanced Internetworking Technologies	2	