

	Cod	Subject	Type	Exam	Semester (Contact hours/week)						Credit	CONDITIONS	Responsible instructor
Obligatory subjects					1	2	3	4	5	6			
		Discrete Mathematics	Lecture	Exam	2						3		Dr. Sándor Szabó
		Discrete Mathematics	Seminar	Mark	2						4		Dr. Sándor Szabó
		Calculus	Lecture	Exam	2						3		Dr. Margit Pap
		Calculus	Seminar	Mark	2						4		Dr. Margit Pap
		Linear Algebra	Lecture	Exam	2						3		András B. Frigyik, PhD
		Linear Algebra	Seminar	Mark	2						4		András B. Frigyik, PhD
		Probability and Mathematical Statistics	Lecture	Exam		2					3	Calculus Lecture and Calculus Seminar	András B. Frigyik, PhD
		Mathematical Logic for Computer Science	Lecture	Exam	2						3		Dr. Sándor Jenei
		Introduction to Computer Science	Seminar	Mark			4				7		Dr. Sándor Jenei
		Algorithms and Data Structures	Seminar	Mark		4					7		Dr. Sándor Jenei
		Formal Languages and Automaton	Seminar	Mark			4				7		Dr. Sándor Jenei
		Programming Methodology I.	Seminar	Mark		4					7	Programming I.	Dr. Gábor Balló
		Systems Design	Lecture	Exam				2			3		Dr. Gábor Balló
		Systems Design	Seminar	Mark					2		4	Systems Design	Dr. Gábor Balló
		Programming Languages	Lecture	Exam				2			3		Dr. Gábor Almási
		Programming I.	Seminar	Mark	2						4		Dr. László Gimesi
		Programming II.	Seminar	Mark		2					4	Programming I.	Dr. László Gimesi
		Software Technology I.	Seminar	Mark		4					7	Programming I.	Dr. József Laczkó
		Computer Architecture	Lecture	Exam	2						3		Dr. Gábor Almási
		Operating Systems	Lecture	Exam						2	3	Computer Architecture	Bogdán Zaválnij, PhD
		Computer Networking I.	Lecture	Exam		2					3		Dr. Gábor Pauler
		Computer Networking I.	Seminar	Mark				2			4	Computer Networking I. Lecture	Dr. Gábor Pauler
		Computer Networking II.	Lecture	Exam				2			3	Computer Networking I. Lecture	Dr. József Laczkó
		Internet and Web Services	Seminar	Mark				2			4		Dr. József Laczkó
		Information System Architecture	Lecture	Exam						2	3		Dr. József Laczkó

		Probability and Mathematical Statistics	Lecture	Exam				2			4	Calculus Lecture and Calculus Seminar	András B. Frigyik, PhD
		Programming Languages	Seminar	Mark				2			4		Dr. Gábor Almási
		Database design, implementation and management	Lecture	Exam				2			3		Dr. Mátyás Koniorczyk
		Database design, implementation and management	Seminar	Mark				2			4		Dr. Mátyás Koniorczyk
		Software Technology II.	Seminar	Mark			2				4	Software Technology I.	Dr. József Laczkó
		Programming Methodology II.	Seminar	Mark			4				7	Programming Methodology I.	Dr. Gábor Balló
		Distributed Systems and Parallel Programming	Lecture	Exam					2		3	Computer Architecture	Bogdán Zaválnij, PhD
		Operating Systems	Seminar	Mark						2	4	Cannot precced Operating Systems Lecture	Bogdán Zaválnij, PhD
		Thesis								X	20		
		Elective Subject					X				4		
		Elective Subject						X			10		
		Facultative Subject						X			10		

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180

Elective Subject													
					Autumn	Spring							
		Datamining shells in Business planing	Seminar	Mark		4					7		Dr. Gábor Pauler
		Oracle Programming with PL/SQL Collections	Seminar	Mark	2						4	Programming II., Database design, implementation and management Lecture and Seminar	Dr. László Gimesi
		Biorobotics	Seminar	Mark		3					5	Linear Algebra Lecture and Seminar	Dr. József Laczkó
		Advanced Database Design	Seminar	Mark	4						7	Database design, implementation and management lec.	Dr. Gábor Pauler
		Visualization of Graphs	Lecture	Exam	2						3		Dr. Sándor Szabó
		History of Information Systems	Lecture	Exam	2						3		Dr. László Gimesi
		IT R&D	Lecture	Exam		2					3		Dr. Mátyás Koniorczyk
		Coding Theory	Lecture	Exam		2					3	Linear Algebra Lecture and Seminar	Dr. Sándor Jenei

		Coding Theory	Seminar	Mark		2					4	Programming I., Cannot precee Coding Theory Lecture	Dr. Sándor Jenei
		Introduction to Linux	Seminar	Mark	2						4		Dr. Gábor Balló
		CorelDRAW in practice	Seminar	Mark	2						4		Dr. László Gimesi
		Programming Neural Networks in Forex Applications	Seminar	Mark	4						7	Programming I.	Dr. Gábor Pauler
		Parallel Programming	Seminar	Mark	2						4	Cannot preceed Distributed Systems and Parallel Programming Lecture	Bogdán Zaválnij, PhD
		Parallel Programming II.	Seminar	Mark		2					4	Parallel Programming	Bogdán Zaválnij, PhD
		SQL.NET	Seminar	Mark	4						7	Database design, implementation and management lec.	Dr. Gábor Pauler
		The Methodology of Thesis Writing and Presentation	Seminar	Mark	2						4		Dr. Gábor Balló
		Basics of Programming	Seminar	Mark	4						6		Dr. Mátyás Koniorczyk
		Basic Mathematics	Seminar	Mark	4						6		Dr. Alice Fialowsky
		Computer Graphics	Lecture	Exam		2					3	Programming II.	Dr. László Gimesi
Facultative Subject													
Criterion													
Internship										6 week			Dr. Gábor Pauler

The criterium can worth only 0 crediter.

Administrative notes:

Duration of the education in semesters:

6 semesters

Total credits:

180

Comprehensive exam topics:

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Requirements of the diploma thesis:

According to the actual announcement at the Institute of Mathematics's web page

Language requirements:

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The topics of the final exam and its valuation:

Oral exam based on two randomly chosen topics (mathematics and computer science) from a list of topics announced in advance. The mark is the average of the marks given by the exam committee.

Level of education:

Batchelor of Science (BSc)

Name of qualification:

BSc in Computer Science

Aim of the education:

The aim of the education is to educate professionals in computer science, who are able to develop, introduce, operate and maintain software applications and systems, either as members of working teams or alone.

Generic and professional competences developed:

Science and basics: 30-60 credits

Fields of education and their ratio:

Computer science basics: 20-35 credits

Professional core material: 60-100 credits

Roles of organizing optional courses:

Via the study administrative integrated system (ETR)

EA/AÍ
EA/Koll.
EA/Szig
Szig/Szig
Zárószig/szig.
GY/AÍ
GY/Gyakj.
Lab/Gyakj.
Szem/Gyakj.
TGY/AÍ
TGY/Gyakj.