

For all the courses it is required to take the lecture and the seminar/labcourse together. The prerequisite for the exam is to obtain the term mark first.

Name of the program: Computer Science MSc		Program Leader: Dr. Zoltán Fülöp							
		Coordinator: Dr. Tamás Vinkó							
course code	title and type of the course	responsible	prerequisite	semester				credit	type of exam
				0	1	2	3		
				number of contact hours					

Mandatory mathematical and computer science studies. Minimum requirement is 23 credits.

MMEN101E	Graph theory lecture	Csaba, Béla		2				3	exam
MMEN101G	Graph theory practice	Nagy V., Gábor		2				1	term mark
IMEN101E	Automata and Formal languages lecture	Fülöp, Zoltán		2				3	exam
IMEN101G	Automata and Formal languages practice	Fülöp, Zoltán		1				1	term mark
IMEN105E	On-line algorithms lecture	Iván, Szabolcs		2				3	exam
IMEN105G	On-line algorithms practice	Iván, Szabolcs		1				1	term mark
IMEN108E	Advanced approximate and symbolic computations lecture	Vinkó, Tamás			2			3	exam
IMEN108G	Advanced approximate and symbolic computations lab	Vinkó, Tamás			1			1	term mark
IMEN102E	Application of Linear programming lecture	London, András		2				3	exam
IMEN102G	Application of Linear programming practice	London, András		1				1	term mark

Elective courses (one of them is mandatory):

IMEN111E	Mathematical foundations of logic and functional programming lecture	Iván, Szabolcs				2		3	exam
IMEN075E	Artificial neural networks and their applications	Tóth, László			2			3	exam

Sum of credits:

23

Elective core studies in mathematics and computer science. Minimum requirement is 13 credits.

MMEN102E	Analysis lecture	Makay, Géza			2			3	exam
MMEN102G	Analysis practice	Makay, Géza			2			2	term mark
IMEN221E	Game theory lecture	Pluhár, András					2	3	exam
IMEN221G	Game theory practice	Pluhár, András					1	1	term mark
IMEN223E	Nonlinear programming lecture	Szabó, Péter Gábor					2	3	exam
IMEN223G	Nonlinear programming lab	Szabó, Péter Gábor					1	1	term mark
IMEN210E	Data mining lecture	Berend, Gábor				2		3	exam
IMEN210G	Data mining practice	Berend, Gábor				2		2	term mark
IMEN704E	Tree automata lecture	Fülöp, Zoltán	2					3	exam
IMEN704G	Tree automata practice	Fülöp, Zoltán	1					1	term mark

spring

spring

Sum of credits:

22

Mandatory computer science studies. Minimum requirement is 24 credits.

IMEN103E	Advanced programming lecture	Ferenc, Rudolf		2				3	exam
IMEN103G	Advanced programming lab	Ferenc, Rudolf		2				2	term mark
IMEN104E	Advanced image processing lecture	Palágyi, Kálmán		2				3	exam
IMEN104G	Advanced image processing lab	Palágyi, Kálmán		1				1	term mark
IMEN106E	Machine learning lecture	Tóth, László			3			4	exam
IMEN106G	Machine learning practice	Tóth, László			1			2	term mark
IMEN107E	Advanced graphical algorithms lecture	Nagy, Antal			2			2	exam
IMEN107G	Advanced graphical algorithms lab	Nagy, Antal			1			2	term mark

IMEN109E	Program systems development lecture	Bilicki, Vilmos				2			3	exam
IMEN109G	Program systems development lab	Bilicki, Vilmos				2			2	term mark

Sum of credits:

24

Elective computer science studies. Minimum requirement is 24 credits.

IMEN293E	Image registration lecture	Tanács, Attila				2			2	exam	spring
IMEN293G	Image registration lab	Tanács, Attila				1			2	term mark	
IMEN241E	Embedded systems lecture	Kiss, Ákos				2			3	exam	autumn
IMEN241G	Embedded systems lab	Kiss, Ákos				2			2	term mark	
IMEN702e	Parallel programming lecture	Kertész, Attila				2			3	exam	spring
IMEN702g	Parallel programming practice	Kertész, Attila				2			2	term mark	
IMEN249E	Software development lecture	Alexin, Zoltán				2			3	exam	autumn
IMEN249G	Software development lab	Alexin, Zoltán				2			2	term mark	
IMEN703	Legal, Ethical and Informatics Issues of Personal Data Protection lecture	Alexin, Zoltán				2			3	exam	autumn
IMEN901E	Network Science lecture	Vinkó, Tamás				2			3	exam	
IMEN298E	Computer Vision lecture	Kató, Zoltán				2			2	exam	autumn (biennially), minimum 5 students
IMEN298G	Computer Vision lab	Kató, Zoltán				1			2	term mark	
IMEN269E	Distributed Application Development lecture	Alexin, Zoltán				2			3	exam	autumn
IMEN269G	Distributed Application Development lab	Alexin, Zoltán				2			2	term mark	
IMEN001E	Special course 1. (lec+lab) lecture					2			4	exam	
IMEN001G	Special course 1. (lec+lab) lab					1			0	term mark	
IMEN002E	Special course 2. (lec+pra) lecture					2			4	exam	
IMEN002G	Special course 2. (lec+pra) gy					1			0	term mark	
IMEN003E	Special course 3. (lec) lecture					2			3	exam	
IMEN004E	Special course 4. (lec+lab2) lecture					2			5	exam	
IMEN004G	Special course 4. (lec+lab2) lab					2			0	term mark	
IMEN005E	Special course 5. (lab) lab					4			4	term mark	

Sum of credits

54

Thesis work. Minimum requirement is 30 credits.

IMEN501	Thesis work 1. practice							2	10	term mark
IMEN551G	Thesis work 2. practice							5	20	term mark

Sum of credits

30

Internship

IMEN320G	Professional practice (6 weeks)							240	0	signature
----------	---------------------------------	--	--	--	--	--	--	-----	---	-----------

Free choice courses. Minimum requirement is 6 credits.

X*	Special course MA, MSc lecture (including Coursera)					2			2	exam
XN0011	Language course (8x2) practice					0			0	signature
XN0141	Language course with credit practice					2			2	term mark

Summary

Mandatory mathematics and computer science studies	23
Elective mathematics and computer science studies	13
Mandatory informatics studies	24
Elective informatics studies	24
Free choice	6
Thesis work	30
Sum of credits	120