

MSc Computer Science Engineering

Name of degree programme: Computer Science Engineering (MSc)

Academic level of degree: Masters

Qualification obtained: Computer Science Engineer

Duration of degree programme: 4 semesters

Necessary no. credits for degree: 120 credits

Curriculum (beginning in **Autumn** semester)

(For description of courses please click course code)

Compulsory courses: (92 credit points)

	Neptun code of course	Name of course	lessons / week	seminars / week	assessment type *	credit points	semester
.	<u>GKNM_INTA056</u>	Logic	2	2	v	5	1
2.	<u>GKNM_INTA058</u>	IT Project Management	2	2	v	4	1
3.	<u>GKNM_MSTA002</u>	Theory of Algorithms	2	2	v	5	1
4.	<u>GKNM_MSTA025</u>	Data Analysis	4	0	v	4	1
5.	<u>KGNM_VKTA005</u>	Management Competencies	2	2	f	5	1
6.	<u>GKNM_AUTA011</u>	Automatic Controls	2	0	v	5	2
7.	<u>GKNM_INTA055</u>	Formal Languages and Automata	4	0	v	4	2
8.	<u>GKNM_INTA057</u>	System and Software Testing	2	2	v	4	2
9.	<u>GKNM_TATA019</u>	Coding theory	4	0	v	5	2
10.	<u>KGNM_GETA025</u>	Advanced Corporate Finance	0	2	v	4	2

11.	<u>GKNM_INTA098</u>	Thesis Consultation I. (Master Programme)	0	0	v	15	3
12.	<u>GKNM_MSTA003</u>	Numerical Analysis	2	2	f	5	3
13.	<u>GKNM_INTA059</u>	Knowledge Base Technologies and Planning	2	2	v	4	4
14.	<u>GKNM_INTA060</u>	Optimization of Discrete Systems	2	2	v	4	4
15.	<u>GKNM_INTA063</u>	Compilers	2	2	v	4	4
16.	<u>GKNM_INTA099</u>	Thesis Consultation II. (Master Programme)	0	0	f	15	4

Hungarian Language (compulsory)

Nr.	Neptun code of course	Name of course	lessons / week	seminars / week	assessment type *	credit points
1	<u>KGNB_NOKA036</u>	Hungarian Language & Culture 1	0	3	a	0
2	<u>KGNB_NOKA037</u>	Hungarian Language & Culture 2	0	3	a	0

Differentiated professional courses

22 credit points should be obtained from this group of courses.

Nr.	Neptun code of course	Name of course	lessons / week	seminars / week	laboratory / week	assessment type *	credit points
1.	<u>GKNM_AUTA010</u>	Interface Technologies	2	2	0	v	5
2.	<u>GKNM_AUTA029</u>	Virtual Planning of Devices	2	0	1	v	5
3.	<u>GKNM_FKTA031</u>	Photometry and Colorimetry	2	2	0	v	4
4.	<u>GKNM_FKTA032</u>	Computer Image Analysis	2	2	0	v	4

5.	<u>GKNM_INTA064</u>	Modern Technologies of System Development	2	0	0	v	3
6.	<u>GKNM_INTA066</u>	Adaptive Systems	3	0	0	v	4
7.	<u>GKNM_INTA067</u>	Computational Intelligence	2	2	0	v	5
8.	<u>GKNM_INTA068</u>	Software Examination	3	0	0	v	4
9.	<u>GKNM_INTA069</u>	Introduction to Bioinformatics	3	0	0	v	4
10.	<u>GKNM_INTA070</u>	Complexity Theory	3	0	0	v	4
11.	<u>GKNM_INTA071</u>	Document Management Systems	2	0	0	v	3
12.	<u>GKNM_INTA072</u>	Data Mining	2	1	0	v	4
13.	<u>GKNM_INTA073</u>	Platform-Independent Programming	2	1	0	v	4
14.	<u>GKNM_INTA074</u>	Programming in LabView	0	3	0	v	4
15.	<u>GKNM_MSTA024</u>	Stochaistic processes	2	2	0	v	4
16.	<u>GKNM_MSTA034</u>	Parallel programming	1	2	0	v	4
17.	<u>GKNM_TATA046</u>	Information security	2	0	2	v	5
18.	<u>GKNM_TATA048</u>	Internet of Things	3	0	1	v	5
19.	<u>GKNM_TATA051</u>	Cloud computing	2	0	2	f	5

Free optional courses

6 credit points should be obtained from this group of courses.

Nr.	Neptun code of course	Name of course	lessons / week	seminars / week	assessment type *	credit points
1.	<u>GKNM_FKTA012</u>	Nanoelectronics	2	0	v	3
2.	<u>GKNM_FKTA013</u>	Measuring Theories and Techniques	2	2	v	5

3.	<u>GKNM_FKTA035</u>	Nuclear Technology	2	0	v	2
4.	<u>GKNM_MGTA021</u>	Risk Analysis	2	0	f	5
5.	<u>KGNB_NOKM022</u>	Exchange Course 2.	0	0	f	3
6.	<u>KGNM_VKTA003</u>	Leadership and Organizational Communication	2	2	v	5

*** type of assessment**

f - evaluation based on student's performance and work during the semester

v - evaluation based on student's exam grade in a 5-grade system:

excellent (5) – good (4) – satisfactory (3) – passed (2) – fail (1)

Programme supervisor: Dr János Kovács



Link to the supervisor's CV: https://admissions.sze.hu/images/cv/Kovacs%20János_2020_en.pdf

Please find details of **thesis** and **final exams** on: http://kgk.sze.hu/en_GB/thesis-final-exam

Information about **admission procedure**: <http://admissions.sze.hu/>