

Orientation information of Business Informatics – Master's Program in English

Welcome to the Széchenyi István University. The following information can help you with a successful start in the new semester.

Level of education: master's degree (MSc)

Qualification specified in diploma: Business Informatics

Duration of education: 4 semesters

Required number of ECTS credits: 120

Responsible department: Department of Computer Science (https://it.sze.hu/en_GB/welcome)

Student contact: Németh Richárd (nemeth.richard@sze.hu)

Program supervisor: Dr Ferenc Erdős

Educational objectives

The goal of the education programme is to provide students with high-level knowledge built on a strong foundation of business, management and technical sciences related to the fields of Computer Science and Information and Communications Technologies (ICT) in order to enable them to understand, design, implement, integrate and manage complex systems, and furthermore, to coordinate and perform research and development tasks for business IT purposes. The programme will equip students with knowledge of IT project management, Enterprise Resource Planning, knowledge base technologies, data analysis, algorithms, process management, simulations for business decision-making, managerial accounting, strategic management and advanced-level corporate finance, and also combine a scientific perspective with the practical approaches. With the solid academic basis provided, students will be able to access further studies in our English language doctoral programmes.

The master's program is in English that will enable students to secure positions and/or participate in a project in the IT industry internationally. They will also be able to continue their studies abroad or fulfill leadership roles in multinational firms.

The content and proportion of training fields is the following:

Field of training	Credits	Percentage
Business Informatics compulsory courses	25	21%
Economy and Natural Sciences compulsory courses	29	24%
Differentiated professional elective courses	30	25%
Freely elected courses	6	5%
Thesis work	30	25%
Total	120	100%

Specialization/modules: There are no specializations in the degree.

Practical training/Internship: Needs to be undertaken at a company independent from the university and to last for a minimum of six weeks.

The supervisory system of knowledge: It is composed of performing the requirements detailed in the curriculum, finishing professional practice, creating thesis work and passing the final exam.

Requirements of the thesis

The thesis has to solve a business IT-related task of a specialization or work out a research topic during two semesters based on the knowledge of the student, complemented by studying the literature and supervised by consultants. The thesis demonstrates the candidate's ability to apply the knowledge learned, to carry out analytical and design tasks, to be familiar with the literature and to use it to create value.

Conditions for taking the final exam

All requirements of the curriculum must be met, furthermore:

- Collect at least 120 credits, in which the thesis work represents 30 credits.
- Fulfill the requirements of the "Hungarian Language and Culture" courses.
- The requirements of a compulsory internship must be fulfilled.
- The thesis work must be judged and accepted by an external reviewer.

Parts of the final exam

The candidate presents and defends his/her thesis work. During the complex exam, the members of the committee ask questions on the subject of the thesis to check the skills of the candidate.

The result of the final exam

The committee assesses the result of the final exam with a single mark by averaging the grades awarded for the thesis defense and the complex exam. If this grade is "fail", the committee decides whether to accept the thesis work in whole or in part.

Obligatory subjects

No.	Code	Title	Theory	Practice	Exam type	Credits	Suggested semester	Prerequisites
1	GKNM_INTA058	IT Project Management	2	2	v	4	1	
2	GKNM_INTA061	Enterprise Resource Planning	0	4	v	6	1	
3	GKNM_MSTA002	Theory of Algorithms	2	2	v	5	1	
4	GKNM_MSTA025	Data Analysis	4	0	v	4	1	
5	KGNM_MMTA014	Advanced Strategic Management	2	0	v	4	1	
6	KGNM_MMTA062	Simulations for Business Decision Making	1	2	v	4	1	
7	GKNM_INTA059	Knowledge Base Technologies and Planning	2	2	v	4	2	
8	GKNM_INTA064	Modern Technologies of System Development	2	0	v	3	2	
9	GKNM_INTA065	ERP Implementation Methodology	3	0	v	4	2	
10	KGNM_GETA010	Managerial accounting	2	2	v	4	2	
11	KGNM_GETA015	Management Control	2	0	v	4	2	
12	KGNM_GETA025	Advanced Corporate Finance	0	2	v	4	2	
13	KGNM_MMTA012	Process Management	2	0	v	4	2	
14	GKNM_INTA098	Thesis Consultation I. (Master Programme)	0	0	f	15	3	
15	GKNM_INTA099	Thesis Consultation II. (Master Programme)	0	0	f	15	4	GKNM_INTA098

Total credits: 84

Differentiated professional elective subjects

No.	Code	Title	Theory	Practice	Lab.	Exam type	Credits	Prerequisites
1	AKNM_NKTA018	Intercultural Manager Communication	2	2	0	v	6	
2	GKNM_INTA055	Formal Languages and Automata	4	0	0	v	4	
3	GKNM_INTA057	System and Software Testing	2	2	0	v	4	
4	GKNM_INTA060	Optimization of Discrete Systems	2	2	0	v	4	
5	GKNM_INTA063	Translation Programs	2	2	0	v	4	
6	GKNM_INTA067	Computational Intelligence	2	2	0	v	5	
7	GKNM_INTA068	Software Examination	3	0	0	v	4	
8	GKNM_INTA069	Introduction to Bioinformatics	3	0	0	v	4	
9	GKNM_INTA071	Document Management Systems	2	0	0	v	3	
10	GKNM_INTA072	Data Mining	2	1	0	v	4	
11	GKNM_INTA070	Complexity Theory	3	0	0	v	4	
12	GKNM_MSTA003	Numerical Analysis	2	2	0	v	5	
13	GKNM_MSTA024	Stochastic Processes	2	2	0	v	4	
14	GKNM_TATA046	Information Security	2	0	2	v	5	
15	GKNM_TATA048	Internet of Things	3	0	1	v	5	
16	GKNM_TATA051	Cloud-computing	2	0	2	f	5	
17	KGNM_GETA019	Research Methodology	0	2	0	v	4	
18	KGNM_NETA025	Business Planning and Controlling	1	2	0	v	5	

19	KGNM_VKTA003	Leadership and Organizational Communication	2	2	0	v	5	
20	KGNM_VKTA005	Management Competencies	2	2	0	f	5	

At least 30 credits must be collected until the end of studies from this group of subjects.

Optional subjects (Freely elected courses)

No.	Code	Title	Theory	Practice	Lab.	Exam type	Credits	Prerequisites
1	GKNM_FKTA012	Nanoelectronics	2	0	0	v	3	
2	GKNM_FKTA013	Theory and Techniques of Measurement	2	2	0	v	5	
3	GKNM_FKTA035	Nuclear Technology	2	0	0	v	2	
4	GKNM_MGTA021	Risk Analysis	2	0	0	f	5	
5	KGNB_NOKM022	Exchange Course 2.	0	0	0	f	3	
6	AKNM_SSTA131	Sociology of the Consumption Society	1	1	0	v	4	
7	KGNM_MMTA083	Business Competence Training	0	4	0	f	5	
8	KGNM_MMTA077	Marketing Strategy	2	2	0	v	6	
9	KGNM_MMTA027	International and Intercultural Marketing	1	2	0	v	5	
10	KGNM_MMTA020	Media Knowledge and Public Relations Planning	2	2	0	v	6	
11	KGNM_MMTA079	Advanced Human Resource Management	2	2	0	v	6	

At least 6 credits must be collected until the end of studies from this group of subjects.