CORVINUS UNIVERSITY of BUDAPEST

Business Informatics Master's program

training program

For students who start in the fall semester of 2025/2026

Business Informatics Master's program

Valid: For students starting their studies in the 2025/2026/1 semester
General Informations:
Person responsible for the major: dr. Zoltán Szabó, associate professor
Place of the training: Budapest
Training schedule: full-time
Language of the training: English
Is it offered as dual training: no
Specializations:

1. **Name of specialisation:** Business Analyst & Governance
2. **Name of specialisation:** Data Analytics
3. **Name of specialisation:** Digital innovation

Training and outcome requirements:

1. Master's degree title: Business Informatics (gazdaságinformatikus)
2. The level of qualification attainable in the Master's programme, and the title of the certification
- qualification level: master- (magister, abbreviation: MSc)
- qualification in Hungarian: okleveles gazdaságinformatikus
- qualification in English: Business Informatics Engineer

3. Training area: informatics
4. Degrees accepted for admittance into the Master's programme
4.1. Accepted with the complete credit value: business informatics undergraduate degree.
4.2. May be primarily considered with the completion of the credits defined in section 9.4: Computer Science Engineer, Computer Scientist, and Computer Science Operational Engineering undergraduate degrees.

4.3. May also be considered with the completion of the credits defined in section 9.4 are completed: undergraduate and Master's courses as well as courses defined in Act LXXX of 1993 on higher education that are accepted by the higher education institution's credit transfer committee based on a comparison of the studies that serve as the basis of the credits.

5. Training duration, in semesters: 4 semesters
6. The number of credits to be completed for the Master's degree: 120 credits
- degree orientation: balanced (40-60 percent)
- thesis credit value: 30 credits
- minimum credit value of optional courses: 6 credits

7. International Standard Classification of Education field of education code: 481
8. Master's degree training objectives and professional competences

The objective of the programme is the training of Business Informatics Engineers capable of understanding complex business processes, uncovering issues, and developing alternative solutions. They are capable of recognising expectations towards IT systems that support value-creating processes, of developing applications and managing finished applications, and of performing and coordinating research and development tasks. They are prepared to continue their training at the PhD level.

8.1. Attained professional competences
8.1.1. The Business Informatics Engineer has
a) knowledge
- Possesses a mastery of English that is sufficient for the training, reading technical literature in English, understanding and processing technical texts, and performing the professional tasks that may be performed with the field of education, and constant professional self-improvement.
- Knows and understands the company's system of activities, the concepts of value chain and supply chain, the principles of process-oriented management, the process of corporate strategy development.
- Knows and understand relationships between corporate functions, including the primary concepts and processes regarding marketing, finance and accounting, human resource management, innovation management, and value-creating process management.
- Possesses detailed knowledge regarding information systems, understands the principles and methods of architecture-development.
- Knows the principles and development methods of business, information, and data architecture, the main interrelationships of implementation, and change management tasks.
- Understands the connections between information and business architecture and is capable of mapping business needs to IT requirements.
- Knows the basic characteristics of the various layers of information architecture (transaction processing, operative support, decision support, group work, work processes) and their interrelationships.
- Possesses detailed knowledge regarding all fields of information management, including the conceptual system and interrelationships of informatics strategy, process management, system organisation, knowledge management, IT service management, project management, risk management, performance management, IT asset management, IT safety and IT audit.
- Possesses a comprehensive knowledge regarding regulation issues and problems of information society, including the interpretation of various fields (media, telecommunication, economy), and IT law respects.
- Is aware of global trends, the limits of the scientific field in his/her IT specialisation, its role in IT and social innovation, and the resulting new requirements.
- Knows the methods of solving issues related to the fields of applications and the methods, processes, and limits of the tasks that aim to solve them.
- Knows and understands the concepts, interrelationships, applications, and limits of statistics and computer science.

b) skills
- Plans and manages the development of IT applications and methods that solve real business and organisational issues.

- Is capable of understanding and analysing business processes, exploring the software applications that help execute them, and adapting them to business-organisational requirements.
- Is capable of utilising system development principles and methods, and managing the execution of developmental tools (business modelling and the tools of computer-supported development).
- Is capable of performing tasks related to planning, creating, and managing databases.
- Is capable of adapting economy applications, initiating the organisational changes necessary for the implementation of IT applications, eveningmating introduction risks and planning measures to eliminate them, and of cooperation in execution.
- Is capable of managing the IT unit of an organisation, if needed, outsources IT tasks.
- Is capable of applying the learned methods to handle operational risks.
- Is capable of planning and managing development projects and uncovering various organisational solutions in IT-related tasks.
- Cooperating with and IT auditor, is capable of ensuring the conditions and controls of processes.
- Is capable of uncovering and communication business opportunities in IT applications.

c) attitudes

- Monitors professional and technological development regarding the IT and corporate (public administration, public service) fields.
- Utilises a critical viewpoint, a new view, new solutions and methodologies in his/her specialist field and scientific field.
- Uses scientific arguments for the necessary innovation while planning and leading research and development.
- Considers mediating professional results between the representatives of the IT field and other representatives of the application field
- Accepts and develops work and organisational culture, consequently endorses professional ethical principles related to IT security.
- Is dedicated to observing and enforcing quality requirements.
- Respects differing opinions, strives for convincing others with professional arguments.
- Considers conveying and realising environmentally conscious behaviour important.
- Takes on an active, managerial role in projects and in task-oriented work groups, constantly develops his/her own project management skills and abilities, and focuses on shared success in initiatives and decisions.

d) autonomy and responsibilities

- Performs his/her tasks, thinks through and develops professional issues in an independent IT job, in an appropriate, but self-decided way.
- Feels responsibility to adhere to and enforce deadlines.
- Takes responsibility for his/her own work and the work of any colleagues working with him/her (in the same projects).
- Manages critical IT systems with a developmental and operational responsibility.

9. About the Master's programme

9.1. Professional properties

9.1.1. The scientific fields and areas that the training is based on are:

- natural science and economy studies (Computing Science, Operation Research, Multivariate Statistics, Management Control, Strategy, Managerial Accounting) 18-30 credits;
- business informatics professional studies (Software Engineering, Network Technologies, Security, System Development, Data Mining, Data Warehousing, Corporate Architecture, Informatics Strategy, Process Management) 20-25 credits.

9.1.2. Considering optional specialisations, specialist knowledge learned in specialist fields appropriate for the requirements of the informatics profession. The credit value of specialisation recommended by the training institution is 25-50 credits.

9.2. Internship requirements

The internship is a professional training that contains at least 240 certified work hours that lasts for at least 6 weeks defined by the curriculum of the higher education institution.
Defined in the Study and Examination Regulations.

9.3. For persons with degrees defined in sections 4.2 and 4.3, the minimal requirements of admittance to the Master's programme training cycle

9.3.1. For those with degrees defined in sections 4.2 and 4.3 – except for holders of Computer Science Operational Engineering undergraduate degrees as per section 4.2 – the minimum number to enter the Master's training cycle of credits is 70 from the following fields**:**

- 10 credits from the fields of natural science studies (Analysis, Probability Theory, Statistics, Operation Research, Mathematics, Computer Science);
- 20 credits from the fields of economic and human studies [Economics, Corporate Economics, Finance, Legal Studies, European Union Studies, Management, Management Theory (Decision Theory, Methodology) Studies];
- 40 credits from the fields of informatics studies (Computer Architectures, Operating Systems, Computer Networks, Programming Theory, Programming Languages, Program Design, Database Management, IR Architectures, Development, and Management, Quality Assurance, Integrated Developmental Tools, Development Support, Informatics Audit, Integrated Corporation Management Systems, Special Applications).
- The prerequisite of admittance into the Master's programme is for the student to have at least 40 credits in the listed area based on his/her undergraduate studies. Missing credits must be attained in the Master's programme as defined in the higher education institution's Study and Exam Regulations.

9.3.2. For entering the Master's programme with a Computer Science Operational Engineering undergraduate degree, a minimum of 60 credits is necessary from the following subject areas:

- introduction to natural sciences (Analysis, Statistics, Operational Research) 10 credits, economic and human studies (Economics, Financial Studies, Accounting, Controlling) 20 credits;
- informatics studies (Computer Architectures, Databases, Business Intelligence, Corporate Management Systems, Quality Assurance, IT Audit, System Development) 30 credits.
- The prerequisite of admittance into the Master's programme is for the student to complete 60 credits in the listed fields of study in parallel with the Master's programme, in the first two semesters after admittance, as defined in the higher education institution's Study and Exam Regulations.

10. Degree thesis/ Dissertation

The aim of the dissertation is to certify the student's knowledge and expertise in a chosen topic, scientific data collection, systematization, analysis and processing related to the chosen topic, discussion of the chosen phenomenon or problem, hypothesis creation, problem solving, analysis of alternative hypotheses, analysis and in refuting the counter-arguments, in a coherent, consistent, language-oriented written explanation of his thoughts, views, positions, statements.

11. Type of Degree thesis

a) Research thesis.
b) Project thesis
c) Artistic thesis.

12. Requirements for the issue of a final certificate

The University will issue a final certificate to the student who has obtained
- the study and examination regulation prescribed in the curriculum, and
- the required internship (professional experience),
- the required credits.

13. Conditions for admission to the final examination

Joint conditions for admission to the final exam:
a) obtaining a final certificate,
b) submission of the dissertation by the deadline,
c) evaluation of the dissertation with a different grade than the deadline,
d) registration for the final exam by the deadline,
e) the student has no overdue payment debt to the University for the given training,
f) accounted for with assets owned by the University (borrowed books, sports equipment, etc.).

A student who has not fulfilled any of the provisions of the points a)-f) cannot be admitted to the final examination.

14. Parts of the final exam

The final exam consists of the defense of the dissertation and the written complex exam.

15. Topics for the complex exam

The subjects of the complex exam:
- Software Engineering
- Information Systems Driving Digital Transformation
- specializáció tárgyai

16. Determining the result of the final exam

The arithmetic mean of the following three digits, rounded to two decimal places:
a) The grade given to the dissertation by the reviewer(s) - determined with a five-point qualification - in case of several reviewers the average of the marks of the reviews is rounded to two decimal places, and
b) the grade obtained for the defense of the dissertation, the answer to the questions related to the dissertation - established with a five-level qualification
c) the grade obtained in the complex examination – determined with a five-level qualification.

17. Components of diploma qualification, method of calculation

The result of the diploma is the arithmetic mean of the following two digits, rounded to two decimal places:

a) the credit-weighted average of the marks of the compulsory and compulsory elective subjects (if the student has taken more than the compulsory elective subjects, then all the subjects taken) in the amount of credits prescribed in the curriculum, and

b) the result (grade) of the final examination.

18. Conditions for issuing a diploma

A prerequisite for the award of a diploma certifying the completion of higher education studies is the successful completion of the final examination.

MNGINF24ABP - Business Informatics master programme in Budapest, in English, full time training Curriculum for 2025/26/1 fall semester for beginning students

Subject Code	Subject Name	Type	Number of classes per week		Credits	Evaluation	Fall or Spring Semester	2025/26 Academic year		2026/27 Academic year		Credit	Subject leader	Institute	Requirement		Equivalent subject		PSO
			Lectu	Semi				Fall	Spring	Fall	Spring				Code	Name	Code	Name	
Core courses								**12**	**12**	**0**	**0**	**24**							
INIR033NAMB	Software Engineering	C	2	2	6	pg	Fall	6					Csaba Csáki	Institute of Data Analytics and Information Systems			ADIN042NAMB	Software Engineering	no
ADIN129NAMB	Information Systems Driving Digital Transformation	C	2	2	6	ex	Fall	6					Zoltán Szabó	Institute of Data Analytics and Information Systems			ADIN043NAMB	Information Systems Driving Digital Transformation	yes
ADIN135NAMB	Information Technology and Law	C	2	2	6	ex	Spring		6				Zsolt György Balogh	Institute of Data Analytics and Information Systems			ADIN044NAMB	Information Technology and Law	yes
INIR061NAMB	Business Intelligence	C	2	2	6	pg	Spring		6				Andrea Kő	Institute of Data Analytics and Information Systems			ADIN045NAMB	Business Intelligence	no
IT module, complete at least 12 credits								**6**	**6**	**0**	**0**	**12**							
INIR060NAMB	Process Management and ERP	CE	2	2	6	pg	Fall	6					Katalin Ternai	Institute of Data Analytics and Information Systems			ADIN046NAMB	Process Management and ERP	no
INIK005NAMB	E-Business	CE	2	2	6	ex	Fall	6					Róbert Pintér	Institute of Data Analytics and Information Systems			ADIN047NAMB	E-Business	yes
ADIN048NAMB	IT service management	CE	2	2	6	ex	Fall	6					Zoltán Szabó	Institute of Data Analytics and Information Systems					yes
ADIN049NAMB	Network Technologies	CE	2	2	6	ex	Spring		6				Szabina Eszter Fodor	Institute of Data Analytics and Information Systems			293NBISK603M	Network Technologies	no
293NBISK604M	IT Security	CE	2	2	6	ex	Spring		6				Krisztián Varga	Institute of Data Analytics and Information Systems			ADIN050NAMB	IT Security	yes
Business module, complete at least 12 credits								**6**	**6**	**0**	**0**	**12**							
KOZG075NAMB	Managerial Economics	CE	2	2	6	ex	Fall	6					András Olivér Németh	Institute of Economics			KOZG008NAMB	Managerial Economics	yes
MARK073NAMB	Marketing Management	CE	2	2	6	ex	Fall	6					Tamás Gyulavári	Institute of Marketing and Communication Sciences			MARK006NAMB	Marketing Management	yes
PENZ008NAMB	Financial Statements and Analysis	CE	2	2	6	ex	Fall	6					Éva Gulyás	Institute of Accounting and Law			293NACCK640M	Financial Statements and Analysis	yes
VEZ0051NAMB	Management and Organization	CE	2	2	6	ex	Fall	6					Balázs György Vaszkun	Institute of Strategy and Management			293NMANK620M	Management and Organization	yes
VTSM125NAMB	Organizational Behavior and Leadership	CE	2	2	6	ex	Fall	6					Andrea Toarniczky	Institute of Strategy and Management			VEZ0038NAMB	Organizational Behavior and Leadership	no
VTVK051NAMB	Management Control Systems	CE	2	2	6	pg	Fall	6					Anita Reizingerné Ducsai	Institute of Accounting and Law					no
VEZ0085NAMB	Strategic Management	CE	2	2	6	ex	Fall	6					Péter Füzes	Institute of Strategy and Management			VTVT024NAMB	Strategic Management	no
293NFINK564M	Advanced Corporate Finance	CE	2	2	6	ex	Spring		6				Svetoslav Valeriev Covachev	Institute of Finance			PENZ009NAMB	Advanced Corporate Finance	yes
293NFINK502M	Applied Corporate Finance	CE	0	4	6	ex	Spring		6				Kata Váradi	Institute of Finance			PSBV098NAMB	Applied Corporate Finance	no
Methodology module, complete at least 6 credits								**0**	**6**	**0**	**0**	**6**							
ADIN051NAMB	Computer Science	CE	2	2	6	ex	Fall	6					Attila Tasnádi	Institute of Data Analytics and Information Systems			293NBISK600M	Computer Science	yes
OPDO035NAMB	Quantitative Methods	CE	2	2	6	ex	Fall, Spring	(6)	6				Kristóf Ábele-Nagy	Institute of Operations and Decision Sciences			293NMATK600M	Quantitative Methods	yes

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			Lectu	Semi				Fall	Spring	Fall	Spring				Code	Name	Code	Name	
Specialization																			
Business Analyst & Governance specialization								**0**	**0**	**18**	**12**	**30**							
ADIN052NAMB	Digital Strategy and EAM	CE	2	2	6	pg	Fall			6			Zoltán Szabó	Institute of Data Analytics and Information Systems					no
ADIN053NAMB	IT Governance	C	2	2	6	pg	Fall			6			Péter Fehér	Institute of Data Analytics and Information Systems			293NBISK611M	IT Governance	no
ADIN054NAMB	IT Project Management	CE	2	2	6	ex	Fall			6			Gábor György Klimkó	Institute of Data Analytics and Information Systems			293NBISK607M	IT Project Management	yes
ADIN055NAMB	AI and data strategy	CE	2	2	6	ex	Spring				6		Réka Franciska Vas	Institute of Data Analytics and Information Systems					yes
ADIN056NAMB	Digitalization and Financial technologies	CE	2	2	6	pg	Spring				6		Krisztián Varga	Institute of Data Analytics and Information Systems					no
Data Analytics specialization								**0**	**0**	**18**	**12**	**30**							
ADIN057NAMB	Data analysis and modelling in Python	CE	1	3	6	pg	Fall			6			Szabina Eszter Fodor	Institute of Data Analytics and Information Systems					no
ADIN058NAMB	Data engineering	CE	2	2	6	ex	Fall			6			Ildikó Borbásné Szabó	Institute of Data Analytics and Information Systems					no
ADIN059NAMB	Analytics and its enabling technologies	CE	1	3	6	pg	Fall			6			Andrea Kő	Institute of Data Analytics and Information Systems					no
ADIN055NAMB	AI and data strategy	CE	2	2	6	ex	Spring				6		Réka Franciska Vas	Institute of Data Analytics and Information Systems					no
ADIN060NAMB	Data Science project in Business	CE	1	3	6	pg	Spring				6		Tibor Kovács	Institute of Data Analytics and Information Systems					no
Digital innovation specialization								**0**	**0**	**12**	**18**	**30**							
ADIN052NAMB	Digital Strategy and EAM	CE	2	2	6	pg	Fall			6			Zoltán Szabó	Institute of Data Analytics and Information Systems					no
ADIN054NAMB	IT Project Management	CE	2	2	6	ex	Fall			6			Gábor György Klimkó	Institute of Data Analytics and Information Systems			293NBISK607M	IT project management	yes
ADIN061NAMB	Artificial Intelligence in the Organization	CE	2	2	6	ex	Spring				6		Csaba Csáki	Institute of Data Analytics and Information Systems					yes
VALL006NAMB	Innovation and technology management	CE	1	3	6	pg	Spring				6		Éva Pintér	Institute of Entrepreneurship and Innovation					yes
ADIN056NAMB	Digitalization and Financial technologies	CE	2	2	6	pg	Spring				6		Krisztián Varga	Institute of Data Analytics and Information Systems					no
Thesis Work - 30 credits								**0**	**0**	**15**	**15**	**30**							
ADIN062NAMB	Thesis Work I.	C	0	7	15	pg	Fall			15			Zoltán Szabó	Institute of Data Analytics and Information Systems					yes
ADIN063NAMB	Thesis Work II.	C	0	7	15	pg	Spring				15		Zoltán Szabó	Institute of Data Analytics and Information Systems	ADIN062NAMB	Thesis Work I.			yes
Criterium								**0**	**0**	**0**	**0**	**0**							
INIR003NAMB	Internship	C			0	s	Spring				0		Zoltán Szabó	Institute of Data Analytics and Information Systems					no
Elective courses								**6**	**0**	**0**	**0**	**6**							
	Elective courses	E					Fall, Spring												
TS00001NMMB	Sports/Physical Education	E	0	2	2	pg	Fall	2					Csaba Vladár	Centre for Physical Educations and Sports					

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			Lectu	Semi				Fall	Spring	Fall	Spring				Code	Name	Code	Name	
	Foreign language	E	0	4	0	pg	Fall, Spring							Centre of Foreign Language Education and Research					
IOK0001NABB	Hungarian Language SHI I.*	E/C	0	4	3	pg	Fall	3					Judit Magyar	Centre of Foreign Language Education and Research					
IOK0004NABB	Hungarian Language SHI II.*	E/C	0	4	3	ex	Spring		3				Judit Magyar	Centre of Foreign Language Education and Research					
Total credits (semester)								**30**	**30**	**33**	**27**	**120**							

Remarks
Type: C=compulsory courses, CE=core elective courses, E=elective (optional) courses
Methods of assessment: ex=exam (exam at the end of the semester, but other forms of assessment are possible during the semester), pg=grade based on the practical assignments given during the course of the semester,
A subject that can be completed in a preferential study order (PSO) on the basis of Section 92 of the Study and Examination Regulation (SER)

Students wishing to take part in sport can take one semester without paying a fee and the following semesters the students can only take physical education with the payment of a specified fee.

Foreign language
During their studies, students can learn a language in the form of paid subjects within the framework of elective subjects.

Curriculum

It is recommended to include the subjects in the schedule according to the sample curriculum. The student may deviate from this, taking into account:
1. the pre-study order,
2. semester of announcing subjects
3. Completion of an average of 30 credits per semester
4. In addition to the compulsory subjects, students may take elective subjects from the offer of elective subjects (see Neptun) as well as foreign languages.
5. A minimum of 2/3 of the required amount of credit must be completed at Corvinus University.

* Hungarian Language is a compulsory subject for the students participating in the Stipendium Hungaricum scholarship program in the first two semesters.

The detailed rules related to the admission of the subjects and the completion of the subjects are included in the Study and Examination Regulations!

Please note that curriculum changes are possible!