

UK 066/977

CURRICULUM FOR THE
MASTER'S PROGRAM IN
**ECONOMIC AND BUSINESS
ANALYTICS.**



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§ 1 Qualification Profile

(1) The Master's program in Economic and Business Analytics is an advanced academic and method-oriented program of education. It qualifies students to process and solve complex practice-oriented business and economic problems.

(2) Graduates of the program acquire analytical problem solving skills in order to be able to initiate, accompany and implement theory-driven and data-supported decision processes in private companies, non-profit organizations and organizational units under public law. The program qualifies graduates for a range of different activities in their capacity as economic experts, for managerial tasks in companies, in particular in the field of complex data analysis. Graduates are qualified to work in companies and institutions operating in a complex economic environment (for example for consulting firms or companies in the field of financial management), or for strategic management activities in private and public companies, and for data-based tasks in public administration.

(3) Apart from theory-driven training in applied business and economic topics, which are based on the latest findings in the respective subject areas, the method orientation (business analytics, econometrics) is of special importance. This method orientation gives graduates specialized problem solving skills with regard to business and economic problems on the basis of fact-based findings. Thus the Master's program acknowledges the fact that the quantity of available data has greatly increased in all organizations and the analysis of this data has thus become an important strategic factor for success.

(4) The degree program imparts the necessary specialized methodical skills as well as the technological know-how, in order to draw attention to systemic connections, to create awareness for the problem and be able to deduce concrete paths for action based on data available in the databases of the respective organizations. Graduates acquire advanced knowledge of modern methods of empirical economic research, which are used as an instrument of analysis in many economic research subjects and serve as a basis for innovative approaches.

(5) The interdisciplinary character of the program is evident from the master's thesis seminar and the seminars in the elective subjects which are offered by representatives of business administration or business informatics and economics in the spirit of double-teachings. Master's theses are supervised by one representative of business administration, business economics or economics.

(6) The Master's program in Economic and Business Analytics is particularly suited to students,

- who are interested in business or economic questions and contexts and who, after having completed a Bachelor's program in Business and Economics, have the basic theoretical knowledge in this subject matter and now wish to specialize in certain subfields and in the corresponding methods;
- who wish to apply the acquired qualifications in different fields of activity in the private sector and politics, for the purpose of analysis and solutions, and who will later make important contributions to professional practice;
- who are striving for an academic career and wish to acquire further scientific qualifications for a doctorate or PhD degree in the field of business and economics.

(7) After completing the Master's program, graduates should be able to:

- prepare the bases for decision-making and recommendations for action for political and/or economic decision makers in the private-sector and organizational units in the public-sector;
- evaluate (business) administrative and socio-political strategies and measures and advise the development of these;

- select adequate theoretical and empirical analysis frameworks for concrete questions and/or to adapt these if necessary, and to carry out investigations independently by applying suitable methods;
- to interpret the results of empirical analyses, appraise them critically and to communicate these to experts and laymen.

§ 2 Admissions

(1) The Master's program in Economic and Business Analytics falls in the category of social sciences, economics and business studies in accordance with § 54 para. 1 of the Austrian Universities Act (UG) and builds on the Bachelor's program in Business & Economics offered at the Johannes Kepler University Linz. This program respectively the Diploma degree program in Business & Economics, the Bachelor's degree program in Business Administration, and the Bachelor's program in International Business Administration grant admission to the Master's program in Economic and Business Analytics without any restrictions.

(2) In addition, graduates of Bachelor's programs or other programs at a recognized national or international postsecondary educational institution of at least the same level of higher education are entitled to admission to the Master's program if their degree programs are close to the Bachelor's program in Business & Economics or to one of the Bachelor's programs at JKU listed in para. 1.

(3) In order to compensate for significant subject-related differences, supplementary examinations may be prescribed, which must be taken by the end of the second semester of the Master's program.

(4) The Master's program in Economic and Business Analytics is taught in English.

§ 3 Structure and Outline

(1) The Master's program in Economic and Business Analytics takes four semesters and students are required to earn 120 ECTS . These ECTS must include the following subjects and study achievements:

Name	ECTS
Compulsory subjects	48
Elective subjects	36
Master's thesis (including master's thesis colloquium and the master's thesis seminar)	24
Free electives	12
Total	120

(2) Within the framework of free electives, exams (including course examinations) are to be taken amounting to 12 ECTS. These can be selected from the entire range of exams offered by recognized post-secondary educational institutions both within Austria and abroad and they serve, above all, to acquire additional qualifications which go beyond the scope of the specialist field of this Master's program. These can be taken throughout the whole period of study.

(3) With regard to the free electives to be completed within the framework of the Master's program in Economic and Business Analytics, courses not chosen from the compulsory and elective subjects of this curriculum are recommended.

(4) The recommended ideal course of study would be the one indicated in Appendix 1. This recommendation assumes full-time studies. The Master's program is also, however, manageable for students with significant working hours or caring responsibilities (part-time). Some of the courses and examinations are either available in an asynchronous digital form, at special times such as outside of regular working hours or at alternative selectable times or in the form of courses in the summer. In the case of part-time studies, fewer courses are attended than in the full-time program which leads to a corresponding longer period of study. Appendix 2 is a recommendation for "part-time studies" with double the period of study.

§ 4 Compulsory Subjects/Modules

(1) The following compulsory subjects have to be taken amounting to 48 ECTS:

Code	Name	ECTS
977PADT21	Principles in Applied Economics, Digital Transformation and Technologies	24
977PAME19	Principles in Analytic Methods	24

(2) In the event that individual courses from the compulsory subjects have already been completed as part of the Bachelor's program, which qualified students for this Master's program, then these may not be selected again, rather others must be taken on this subject from the courses on offer. If these do not suffice to complete the subject with the prescribed amount of ECTS, then any other courses from the compulsory and /or elective subjects of the curriculum, which were not selected within the framework of other subjects, have to be completed to make up for the missing ECTS.

§ 5 Elective Subjects/Modules

(1) Within the framework of the elective subjects, courses totaling 36 ECTS must be completed which have to be selected from two or three elective subjects. If three elective subjects are selected, courses amounting to at least 10 ECTS have to be completed in each of the three electives. As an alternative, two elective subjects can be chosen whereby in this case students have to choose courses from the elective Analytic Methods totaling at least 20 ECTS and from another elective to the tune of at least 10 ECTS. The following subjects are available as elective subjects:

Code	Name	ECTS
977DESC21	Digital Economy and Supply Chain Management	0 / min. 10
977ORMA19	Organization and Markets	0 / min. 10
977FINE19	Financial Economics	0 / min. 10
977HEAL19	Health	0 / min. 10
977ANME22	Analytic Methods	0 / min. 10

(2) If some individual courses from the elective subjects have already been completed as part of the Bachelor's program, which qualified students for this Master's program, then these may not be selected again, rather others must be taken on this subject from the offered courses. In the event that these do not suffice, to complete the subject with at least 10 ECTS, then any other courses from the compulsory and/ or elective subjects of the curriculum, which were not selected within the framework of other subjects, are to be completed to make up for the missing ECTS.

§ 6 Courses

(1) The names and the types of all courses of the compulsory and elective subjects, as well as their ECTS credits, their duration in hours per week, their codes, their registration requirements, the number of participants and their admission procedures (in case of limited availability of places) are described in the JKU Course Catalog (studienhandbuch.jku.at).

(2) The possible types of courses as well as the examination regulations are described in §§ 13 and 14 of the JKU statute (Section "Studienrecht").

§ 7 Replacement of Subjects and Courses

Subjects/modules pursuant to §§ 4 and 5 and courses pursuant to § 6 para. 1 may, at the student's request, be replaced by other subject areas respectively courses specific to the studies to a total of 18 ECTS. This presupposes that the latter are not detrimental to the goal of the academic, vocational education and that the selection of the suggested subjects/modules, respectively courses, seems reasonable with regard to the goals as outlined in the Qualifications Profile and the academic context and supplements the academic, vocational education. A request to replace the subject/module respectively course must be submitted to the Vice-Rector of Academic Affairs.

§ 8 Master's Thesis

(1) A Master's thesis is required as part of the Master's program in Economic and Business Analytics in accordance with § 81 Austrian Universities Act (UG) and § 36 of the JKU statute (Section "Studienrecht").

(2) The Master's thesis is a written paper and is worth 20 ECTS credits.

(3) The Master's thesis serves as proof of the student's ability to work on a task independently, methodically and in an academic manner with the correct content. The topic is to be selected from one of the elective subjects according to § 5 and must be organized so that it is possible and acceptable to process it within a period of six months.

(4) The assignment of a Master's thesis topic requires the completion of 24 ECTS from the compulsory subjects in this curriculum.

(5) The Master's thesis is principally to be written in English. In exceptional cases, the Master's thesis can be written in another language if the supervisor agrees.

(6) In association with the writing of the Master's thesis, a master's thesis seminar (2 ECTS) and a master's thesis colloquium (2 ECTS) must be completed. The master's thesis seminar will be taught by a representative from business administration or business informatics as well as economics.

§ 9 Examination Regulations

(1) The rules governing examinations for subject examinations and the examination criteria for course examinations can be found in the JKU Course Catalog.

(2) The Master's program in Economic and Business Analytics will be concluded with a final exam. The master's examination is a general examination in the form of subject examinations about the compulsory and elective subjects pursuant to §§ 4 and 5. Students also require a positive grade on their Master's thesis, the master's thesis colloquium, the master's thesis seminar and the free electives to earn a final degree.

§ 10 Academic Degree

(1) Graduates of the Master's program in Economic and Business Analytics shall be awarded the academic degree of "Master of Science", abbreviated "MSc" or "MSc (JKU)".

(2) The notification about the academic degree will be issued in both German and English.

§ 11 Legal Validity

(1) This curriculum comes into effect on October 1, 2022.

(2) The curriculum of the Master's program in Economic and Business Analytics in the version published in the official newsletter of Johannes Kepler University Linz on June 17, 2021, 31st piece, item 432 will expire at the end of September 30, 2022. The transitional provisions contained therein shall remain in force as long as they still have a factual scope of application.

(3) § 12 and Appendix 1 und 2 as published in the official newsletter of the Johannes Kepler University Linz on May 23, 2023, 23rd piece, item 411 will take effect on October 1, 2023.

§ 12 Transitional Provisions

(1) In addition to the equivalences stipulated in the Course Catalog, the following transitional provisions shall apply to students admitted to the Master's program in Economic and Business Analytics before the winter semester 2022/23.

1. Students who have successfully completed the course "KV Introduction in Digital Transformation and Technologies" (6 ECTS) in the subject of „Principles in Applied Economics, Digital Transformation and Technologies" before 1.10.2022, shall be entitled to complete this subject before 30.9.2024 in accordance with the regulations in effect until 30.9.2022.

2. Students who have successfully completed the course "KS Feminist Economics" (4 ECTS) in one of the subjects of "Analytic Methods I" or "Analytic Methods II" before 1.10.2022 may use this course to complete the subject of "Analytic Methods"

3. Students who have successfully completed the course "KS Monetary Economics: Theory and Policy" (4 ECTS) in the subject of „Financial Economics" before 1.10.2022, shall be entitled to complete this subject before 30.9.2024 in accordance with the regulations in effect until 30.9.2022.

4. In addition the following equivalence table applies:

Examinations in the Master's program Economic and Business Analytics 2021	Examinations in the Master's program Economic and Business Analytics 2022
977MAKSMAK19: Master's thesis colloquium (3 ECTS) + 977MASEMASS19: Master's thesis seminar (1 ECTS)	977MAKSMAK22: Master's thesis colloquium (2 ECTS) + 977MASEMASS22: Master's thesis seminar (2 ECTS)
977MAKSMAK19: Master's thesis colloquium (3 ECTS)	977MAKSMAK22: Master's thesis colloquium (2 ECTS) + 1 ECTS free electives

(2) If the application of the transitional provisions set out in the study handbook results in an ECTS surplus of completed examinations, this can be used for the free electives.

(3) Students who have successfully completed the course "KS Financial and Macroeconometrics" (4 ECTS) in the subject „Analytic Methods" before October 1, 2023, shall be entitled to use this course for completion of this subject.

(4) Students who have successfully completed the course "KS Monetary and Macroeconomics" (6 ECTS) in the subject of „Financial Economics" before October 1, 2023, shall be entitled to use this course for completion of this subject.

Idealtypical course of study - Master Economic and Business Analytics 066/977

Variante 60 - full-time studies

Subject/module/course	ECTS	Semester			
		1	2	3	4
Principles in Applied Economics, Digital Transformation and Technologies	24	18	6		
Compulsory					
Modul (KS+IK) Python Programming for Economic and Business Analytics		x			
KS Introduction to Analytics and Digital Transformation			x		
KS + IK Empirical Economics		x			
KS + IK Intermediate Microeconomics		x			
Mandatory Electives			x		
Principles in Analytic Methods	24	12	12		
Modul (VL + UE) Data Mining			x		
KS Decisions in firms		x			
KS + IK Operations Research		x			
KS + IK Treatment Evaluation			x		
Restricted Electives*	36		12	24	
Organization and Markets			x	x	
Digital Economy and Supply Chain Management			x	x	
Financial Economics			x	x	
Health			x	x	
Analytic Methods			x	x	
Master's thesis colloquium and master thesis seminar	4				4
Master's thesis	20				20
Free Electives	12			6	6
Gesamt	120	30	30	30	30

*At least 10 ECTS in one Restricted Elective

Idealtypical course of study - Master Economic and Business Analytics 066/977

Variante 30 - part-time studies

Subject/module/course	ECTS	Semester							
		1	2	3	4	5	6	7	8
Principles in Applied Economics, Digital Transformation and Technologies	24	12	6	6					
Compulsory									
Modul (KS+IK) Python Programming for Economic and Business Analytics		x							
KS Introduction to Analytics and Digital Transformation			x						
KS + IK Empirical Economics		x							
KS + IK Intermediate Microeconomics				x					
Mandatory Elective			x						
Principles in Analytic Methods	24	6	12	6					
Modul (VL + UE) Data Mining			x						
KS Decisions in firms				x					
KS + IK Operations Research		x							
KS + IK Treatment Evaluation			x						
Restricted Electives*	36				18	12	6		
Organization and Markets					x	x	x		
Digital Economy and Supply Chain Management					x	x	x		
Financial Economics					x	x	x		
Health					x	x	x		
Analytic Methods					x	x	x		
Master's thesis colloquium and master thesis seminar	4							4	
Master's thesis	20								20
Free electives	12						6	6	
Total	120	18	18	12	18	12	12	10	20
*At least 10 ECTS in one Restricted Elective									