

Curriculum for the master's programme in Business Analytics

English translation: Master's programme in Business Analytics

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University Gazette 2002 Universities Act as of 24 January 2020, 7th edition, number 50 Typing error correction: University Gazette 2002 Universities Act of 22 September 2020, 34th edition, number 187 University Gazette 2002 Universities Act as of 25 June 2021, 40th edition, number 168

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§ 1 Objectives and qualification profile

(1) The master's programme in Business Analytics at the University of Vienna aims to familiarise students with the methods and instruments needed in predictive and prescriptive analytics for business analytics and decision support. Students specialise in a field of business administration to carry out data analyses and develop and implement prototypical decision support systems. Students are able to independently solve and interpret business-related decision problems and make recommendations for action using extensive data sets. Students of business analytics need a high level of analytical thinking. Students of the master's programme in Business Analytics acquire advanced knowledge of the theoretical as well as practical concepts of statistics, operations research, data science and information system design, while taking into account business-related, ethical and legal aspects of dealing with large amounts of data. Moreover, students are prepared for continuing their academic education in a PhD programme in a subject area relating to business and economics.

Teaching is based on the most recent research findings (research-led teaching). Students learn to analyse and critically reflect on academic findings thus enabling them to critically observe recent academic developments also after graduation and using them for their activities in research or business practice.

The master's programme in Business Analytics places special attention on project-based learning, which includes self-directed and mainly self-organised learning after a period of instruction. Projects are mainly targeted at teamwork and interaction, both through personal or computer-mediated contact. Collaboration in project teams on which students reflect should introduce them to economic and academic practice.

(2) Beyond a bachelor's qualification, graduates of the master's programme in Business Analytics at the University of Vienna are qualified to carry out academic research independently or to work as highly qualified professionals in a field relating to business administration. In the latter, they are able to independently perform different tasks, solve problems and make recommendations for action using methods of predictive and prescriptive analytics. Graduates of the master's programme in Business Analytics are able to apply a wide range of methods, qualifying them to analyse and solve issues in an analytical way in related disciplines as well.

The master's programme in Business Analytics is characterised by group and team work, through which students acquire a wide range of soft skills. In addition to professional qualifications, students of the degree programme also develop the ability to work in teams, acquire social and ethical competences, learn to responsibly deal with data and information and to incorporate current findings from gender and diversity research into their activities. For this purpose, students work, for example, in interdisciplinary project teams.

The master's programme in Business Analytics is targeted at students who have graduated from a bachelor's or diploma programme in the field of business and economics, business informatics, computer science, statistics, economics or mathematics and who aim to acquire methods of business analytics and apply them in an application area of business administration. Students acquire knowledge of analytics and decision support, statistical methods, operations research and relevant concepts of computer science.

§ 2 Duration and scope

(1) The workload for the master's programme in Business Analytics comprises 120 ECTS credits. This is equivalent to a degree programme duration of four semesters.

(2) The programme is deemed completed if 60 ECTS credits as defined in the provisions on compulsory modules, 34 ECTS credits as defined in the provisions on alternative compulsory modules and/or elective modules, 24 ECTS credits as defined in the provisions on the master's thesis and 2 ECTS credits as defined in the provisions on the master's examination have been obtained.

§ 3 Entry requirements

(1) To be admitted to the master's programme in Business Analytics students must have completed an eligible bachelor's programme or an eligible degree programme at the same level of university education at a recognised Austrian or foreign post-secondary educational institution.

(2) The following bachelor's programmes at the University of Vienna are certainly eligible: Business Administration, International Business Administration, Economics, Statistics, Business Informatics, Computer Science and Mathematics.

(3) The master's programme is held in English. Therefore, students must have English language proficiency corresponding to level B2 (Common European Framework of Reference for Languages). For admission to the programme, applicants are selected in a selection procedure. Further regulations on the selection procedure will be specified in provisions by the Rectorate of the University of Vienna published in the University Gazette.

§ 4 Academic degree

Graduates of the master's programme in Business Analytics are awarded the degree "Master of Science", abbreviated as MSc.

Where the academic degree is stated this must be after the name.

§ 5 Structure – Modules with allocated ECTS credits

(1) Overview

A. Alternative compulsory module: Foundations of Business Analytics (14 ECTS credits)

This compulsory module aims at providing students with a basis for further studies in business analytics. Furthermore, it serves to ensure that all students have the same/uniform level of knowledge.

a. Foundations of Business Analytics for Business Administration Students (14 ECTS credits)

or

b. Foundations of Business Analytics for Computer Scientists (14 ECTS credits)

B. Group of compulsory modules: Advanced Analytics (14 ECTS credits)

The Advanced Analytics group of compulsory modules aims at familiarising students with the methodological foundations of statistics, operations research and the perspective of business administration on data science.

- a. Advanced Business Analytics (6 ECTS credits)
- b. Advanced Operations Research (8 ECTS credits)

C. Group of compulsory modules: Doing Data Science, Ethical and Legal Issues (28 ECTS credits)

The Doing Data Science, Ethical and Legal Issues group of compulsory modules combines the compulsory modules that students of the master's programmes in Data Science, Digital Humanities and Business Analytics have to complete and/or that are offered in a similar form in all three master's programmes.

- a. Doing Data Science, Ethical and Legal Issues (12 ECTS credits)
- b. Data Analysis Project and Seminar (16 ECTS credits)

D. Compulsory module: Data Science Electives (12 ECTS credits)

Depending on their personal preferences, students can choose courses offered in the course directory of the Faculty of Computer Science of the University of Vienna.

E. Alternative group of compulsory modules: Business Administration (20 ECTS credits)

Subject to availability, students complete a minor in business administration.

- a. Banking and Finance (20 ECTS credits)
- b. Marketing and International Marketing (20 ECTS credits)
- c. Supply Chain Management (20 ECTS credits)
- d. Smart Production (20 ECTS credits)
- e. Organisation and Personnel (20 ECTS credits)
- f. Electronic Business (E-Business) (20 ECTS credits)*

F. Compulsory module: Business Analytics (4 ECTS credits)

Depending on their personal preferences, students choose courses offered in the course directory of the Faculty of Business, Economics and Statistics of the University of Vienna.

G. Compulsory module: Master's Thesis Seminar (2 ECTS credits)

Subject to availability, students select a master's thesis seminar from the courses offered by the Faculty of Business, Economics and Statistics or by the Faculty of Computer Science. As part of this seminar, the master's thesis is drafted, supervised and presented in an intermediate state.

The master's thesis comprises 24 ECTS credits. The master's examination comprises 2 ECTS credits.

(2) Module descriptions

(A) Alternative compulsory module: Foundations of Business Analytics

This compulsory module aims at providing students with a basis for further studies in business analytics. Furthermore, it serves to ensure that all students have the same/uniform level of knowledge. Graduates of a bachelor's programme in Business Administration, International Business Administration, Economics or Statistics have to complete the module Foundations of Business Analytics for Business Administration Students. Graduates of a bachelor's programme in Computer Science or Business Informatics have to complete the module Foundations of Business Analytics for Computer Scientists.

^{*} The compulsory courses as well as some elective courses in this module are held in German.

Graduates of a bachelor's programme in Mathematics have to complete one of the two modules, depending on their knowledge of business administration or computer science. The directorate of studies specifies in advance which module they have to complete.

(1) Alternative compulsory module: Foundations of Business Analytics for Business Administration Students

FBA-BA	Alternative compulsory module: Foundations of Business Analytics for Business Administration Students	14 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	Students familiarise themselves with a programming lapprogramming methods of data analysis and for devel procedures. They acquire knowledge of data methods of data. Furthermore, the ensure that all students have a uniform level of knowledge of knowledge of knowledge of knowledge.	nguage required for loping optimisation lodelling and the le module serves to ge.
Module structure	 Computer science contents KU Programming for Business Analytics* (4 SSt KU Modelling and Handling of Large Databases credits, pi) *The positive completion of KU Programming for Busin prerequisite for participation in KU Modelling and Har Databases. 	., 8 ECTS credits, pi) (4 SSt., 6 ECTS ness Analytics is a ndling of Large
Proof of performance	Passing of all continuous assessment courses (pi) specifi ECTS credits)	ed in the module (14

(2) Alternative compulsory module: Foundations of Business Analytics for Computer Scientists

FBA-CS	Alternative compulsory module: Foundations of Business Analytics for Computer Scientists	14 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	Students familiarise themselves with the fundamental co oriented business administration. They acquire know models in different fields of business administration and these to questions of business administration appropriat Furthermore, the module serves to ensure that all stude level of knowledge.	oncepts of decision- wledge of decision ad are able to apply ely. ents have a uniform
Module structure	 Business administration and computer science of KU Foundations of Business Decision-Making* (credits, pi) KU Modelling and Handling of Large Databases credits, pi) *The positive completion of KU Foundations of Business a prerequisite for participation in KU Modelling and Handling and Handl	contents (4 SSt., 8 ECTS (4 SSt., 6 ECTS 5 Decision-Making is andling of Large

ing no marked a	and chinese any chinese any of the chinese any of the chinese and the chinese
Proof of	Passing of all continuous assessment courses (pi) specified in the module (14
performance	ECTS credits)

(B) Group of compulsory modules: Advanced Analytics

ABA	Compulsory module: Advanced Business Analytics 6 ECTS credits	
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	This module aims at providing students with (advanced) knowledge in the fields of statistics and analytics. Students familiarise themselves in detail with methods of data analysis that are used in different areas of business administration and acquire knowledge of quantitative modelling as well as numerical solution techniques. They learn to take a business administration perspective on methods of data science and process models. The courses in this module are oriented towards methodology while maintaining a close link to the different application areas in business administration.	
Module structure	Operations research and statistics contents: - KU Advanced Business Analytics (3 SSt., 6 ECTS credits, pi)	
Proof of performance	Passing of the continuous assessment course (pi) specified in the module (6 ECTS credits)	

AOR	Compulsory module: Advanced Operations	8 ECTS credits
	Research	
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	This module aims at providing students with (advanced field of operations research. Students familiarise thems methods of decision analysis that are used in differen administration and acquire knowledge of quantitative r numerical solution techniques. The courses in this m towards methodology while maintaining a close lin application areas in business administration.	d) knowledge in the selves in detail with it areas of business nodelling as well as nodule are oriented k to the different
Module structure	Operations research contents:	
	Subject to availability, students select courses correspon total. <i>Either</i> the following two courses:	ding 8 ECTS in
	- KU Linear, Nonlinear and Integer Optimisation credits, pi)	(2 SSt., 4 ECTS
	and - KU Graph Algorithms and Network Flows, (2 SS pi)	st., 4 ECTS credits,
	<i>Or</i> the following course:	
	- KU Advanced Operations Research (4 SSt., 8 EC	TS credits, pi)
Proof of	Passing of all continuous assessment courses specified in	n the module (pi) (8
performance	ECTS credits)	

(C) Group of compulsory modules: Doing Data Science, Ethical and Legal Issues

ELD	Compulsory module: Doing Data Science, Ethical and Legal Issues	12 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	In the course of an introductory project in heterogeneous acquire skills to successfully plan and solve application field of data science. Furthermore, students learn about the ethical and learise when dealing with real data.	bus teams, students on problems in the gal challenges that
Module structure	Contents from the fields of law and ethics as well as a fir project in the field of data analysis - VU Data Ethics and Legal Issues (4 SSt., 6 ECTS - VU Doing Data Science (4 SSt., 6 ECTS credits, 1	st interdisciplinary s credits, pi) pi)
Proof of performance	Passing of the continuous assessment course (pi) specific ECTS credits in total)	ed in the module (12

ВАР	Compulsory module: Data Analysis Project and Seminar	16 ECTS credits
Prerequisite	22 ECTS credit in total from the group of compulsory modules Foundations of Business Analytics and the group of compulsory modules Advanced Analytics	
Recommended prerequisite	none	
Module outcomes	In the course of a group project, students acquire the skill to solve data science issues in an application area of business administration using the methods and techniques that the students have already acquired during their studies. In the course of the seminar, students acquire the ability to research, analyse and prepare relevant academic questions in the field of business analytics as well as the ability to work in an academic way, as required for the master's thesis.	
Module structure	 Team project carried out under realistic conditions and a LP Data Analysis Project (8 SSt., 12 ECTS credits, e) SE Research Seminar (3 SSt., 4 ECTS credits, p) 	a team seminar s, pi))
Proof of performance	Passing of all continuous assessment courses (pi) specific ECTS credits)	ed in the module (16

(D) Compulsory module: Data Science Electives

DSE	Compulsory module: Data Science Electives	12 ECTS credits
Prerequisite	none	
Recommended prerequisite	Foundations of Business Analytics	
Module outcomes	Students extend their knowledge in the field of data science according to their own preferences in the subject areas of data mining, machine learning, analysis of high-dimensional data and data visualisation.	

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Module structure	Subject to availability, students select one or several courses in the field of computer science and business informatics corresponding to 12 ECTS credits in total. The courses currently eligible for this compulsory module are listed in the course directory of the University of Vienna.
Proof of performance	Passing of all course examinations (npi) and continuous assessment courses (pi) specified in the module (12 ECTS credits in total)

(E) Alternative group of compulsory modules: Business Administration

Subject to availability, students select one minor (an alternative compulsory module) from the specialisation courses.

BAM-BF	Alternative compulsory module: Banking and	20 ECTS credits
	Finance	
Prerequisite	none	
~ 11		
Recommended	none	
prerequisite		
Module outcomes	The objective of this module is to offer a solid and well-fe	ounded education in
	finance. Students acquire knowledge of fundamental cor	ncepts in the fields
	of asset pricing and financial markets, banking and finar	ncial intermediation
	as well as corporate finance.	
	-	
Module structure	Compulsory courses:	
	- VO Basics of Finance (2 SSt., 4 ECTS credits, np	i)
	- KU Asset Pricing 1 (2 SSt / ECTS credits ni)	-)
	- KU Banking and Financial Intermediation 1 (2 S	St 4 ECTS credits
	ni)	50, 4 Dorb croand,
	- KU Corporate Finance 1 (2 SSt / FCTS credits	ni)
	Ro corporate i manee i (2 55t., 4 1015 creans,	p1)
	Flective course:	
	Subject to availability students select a course in	a field of finance
	corresponding to 4 ECTS gradits	a new or manee
	The courses that can be selected will be approximated in t	ha agura diratar
	of the University of Vienne	the course unectory
Droofof	Descing of all course examinations (nui) or $\frac{1}{2}$	aggaggement courses
	rassing of an course examinations (npi) and continuous	assessment courses
performance	(pi) specified in the module (20 EC18 credits in total)	

BAM-MIM	Alternative compulsory module: Marketing and International Marketing I	20 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	
Module outcomes	Students acquire detailed knowledge of (internationa thus gain an understanding of (international) marketin business function. Based on the knowledge acquired, gu lead their future businesses in a market-oriented way.	l) marketing. They ag as an integrating aduates are able to

Module structure	Compulsory courses:	
	 KU International Marketing Management 1 (2 SSt., 4 ECTS credits, pi) KU Konsumentenverhalten (2 SSt., 4 ECTS credits, pi)* KU Marketing Kommunikation 1 (2 SSt., 4 ECTS credits, pi)* 	
	*These two courses are held in German. As an alternative to the courses KU Konsumentenverhalten and KU Marketing Kommunikation 1, students may select the following English-language courses, subject to availability:	
	 KU International Marketing Management 2 (2 SSt., 4 ECTS credits, pi) KU International Marketing Simulation (2 SSt., 4 ECTS credits, pi) 	
	Elective course 1: Subject to availability, students choose courses comprising 4 ECTS credits in total from the following list:	
	 KU Marktforschung 1 (2 SSt., 4 ECTS credits, pi) KU International Marketing Research 1 (2 SSt., 4 ECTS credits, pi) 	
	Elective course 2:	
	Subject to availability, students choose courses comprising 4 ECTS credits	
	KU Shoppor Marketing (2 SSt 4 ECTS gradits pi)	
	 UE Marketing Dramaturgie B (2 SSt., 4 ECTS credits, pi) UE Marketing Dramaturgie B (2 SSt., 4 ECTS credits, pi) 	
Proof of	Passing of all continuous assessment courses (ni) specified in the module	
performance	(20 ECTS credits)	
Language	This module can be completed in English. Subject to availability, individual courses may be offered in German. For these courses, language proficiency in German corresponding to level B2 of the Common European Framework of Reference is recommended.	

BAM-SCM	Alternative compulsory module: Supply Chain Management I	20 ECTS credits	
Prerequisite	none		
Recommended prerequisite	none		
Module outcomes	This module aims at equipping students with profound knowledge in the field of supply chain management. The focus is, in particular, on quantitative methods. Upon completion of this module, students are able to solve fundamental issues of supply chain management.		
Module structure	 KU Operations Strategy and Tactical Planning (2 SSt., 4 ECTS credits, pi) KU Supply Chain Management (4 SSt., 8 ECTS credits, pi) KU LP Modelling I (2 SSt., 4 ECTS credits, pi) KU Transportation Logistics (2 SSt., 4 ECTS credits, pi) 		
Proof of performance	Passing of all continuous assessment courses (pi) specified in the module (20 ECTS credits)		

BAM-SP	Alternative compulsory module: Smart Production I	20 ECTS credits
Prerequisite	none	
Recommended prerequisite	none	

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Module outcomes	This module aims at equipping students with profound knowledge in the			
	field of smart production (intelligent production). The focus is, in			
	particular, on quantitative methods.			
	Upon completion of this module, students are able to solve fundamental			
	issues of production planning.			
Module structure	- KU Operations Strategy and Tactical Planning (2 SSt., 4 ECTS			
	credits, pi)			
	- KU Production Analysis (4 SSt., 8 ECTS credits, pi)			
	- KU Simulation I (2 SSt., 4 ECTS credits, pi)			
	- KU Logistics and Material Management (2 SSt., 4 ECTS credits, pi),			
Proof of	Passing of all continuous assessment courses (pi) specified in the module			
performance	(20 ECTS credits)			

BAM-OP	Alternative compulsory module: Organisation and 20 ECTS credits		
D/INI-OI	Parsonnal I		
Decement at a			
Prerequisite	none		
Recommended	none		
prerequisite			
Module outcomes	This module aims at familiarising students with central concepts of		
	analysing organisations and of personnel management.		
	The module focuses on an economic perspective which is complemented by		
	aspects of behavioural science and social sciences as appropriate		
Modulo structuro	KIL Contracts, Coordination and Incontines (a SSt. 4 ECTS aredite		
Module structure	- KO Contracts, Coordination and Incentives (2 SSt., 4 EC15 credits,		
	- KU Organisation Theory I (2 SSt., 4 ECTS credits, pi)		
	- KU Personnel Economics I (2 SSt., 4 ECTS credits, pi)		
	- SE Seminar on Organisation and Personnel (2 SSt., 4 ECTS credits,		
	pi)		
	KII Introduction to Economic Sociology (2 SSt. 4 ECTS credits ni)		
Dreafof	Paging of all continuous according to surger (ni) aposified in the module		
Proof of	Passing of all continuous assessment courses (pl) specified in the module		
performance	(20 EUTS credits)		

BAM-EB	Alternative compulsory module: Electronic Business 20 ECTS credits		
Prerequisite	none		
Recommended prerequisite	none		
Module outcomes	Students acquire fundamental as well as advanced interdisciplinary, specialist knowledge of and competences in business administration enabling them to apply their methodological skills to perform and solve management tasks in the context of common information and communication technologies.		
Module structure	Compulsory courses:		
	 KU Einführung in das Electronic Business (2 SS.t, 4 ECTS credits, pi) 		
	 UE Case Studies of eBusiness and eLogistics (2 SSt., 4 ECTS credits, pi) 		
	- SE Neuere Entwicklungen in eBusiness und eLogistics (2 SSt., 4 ECTS credits, pi)		
	Elective courses: Subject to availability, students choose courses comprising 8 ECTS credits in total from the following list:		
	 UE Applications of eBusiness and eLogistics (2 SSt., 4 ECTS credits, pi) 		
	- UE Collaboration and eBusiness (2 SSt., 4 ECTS credits, pi)		

	- KU eServices (2 SSt., 4 ECTS credits, pi)
	- KU eServices (2 SSt., 4 ECTS credits, pi)
Proof of	Passing of all continuous assessment courses (ni) specified in the module
norformanco	(20 FCTS gradits)
I anguago	This module cannot be completed in English since the compulsory courses
Language	a swell as some clastice courses are hold in Corman
	as well as some elective courses are neith in German.
	For these courses, language proficiency in German corresponding to level
	B2 of the Common European Framework of Reference is recommended.
Recommendation	It is recommended to complete the course SE Neuere Entwicklungen in
	eBusiness und eLogistics only after successfully completing the
	introductory course KU Einführung in das Electronic Business.
	However, it is generally possible to complete the entire module within one
	semester.
	semester.

(F) Compulsory module: Business Analytics Elective

BAE	Compulsory module: Business Analytics Elective	4 ECTS credits
Prerequisite	none	·
Recommended prerequisite	none	
Module outcomes	To complement the knowledge acquired, students extend business administration, economics, economic sociology operations research according to their personal preferen	d their knowledge of 7, statistics or Ices.
Module structure	Subject to availability, students choose a course compri in total from the range of courses offered by the F Economics and Statistics. The courses currently eligible module are listed in the course directory of the Universit	sing 4 ECTS credits aculty of Business, for this compulsory ty of Vienna.
	Students may also choose courses from the n administration that they did not select or choose Programming for Business Analytics and/or KU Found Decision-Making of the alternative compulsory module approval from the directorate of studies, students of relevant internships abroad and/or courses at other un this module.	ninor in business e the courses KU dations of Business (A). Subject to prior may also complete iversities as part of
Proof of performance	Passing of all courses specified in the module (4 ECTS cr	redits)

(G) Master's Thesis Seminar

M-SE	Compulsory module: Master's Thesis Seminar	2 ECTS credits
Prerequisite	Foundations of Business Analytics; Advanced Business A Advanced Operations Research; Doing Data Science, Eth Issues; Data Analysis Project and Seminar	Analytics; nical and Legal

Recommended prerequisite	none
Module outcomes	The students are able to write a master's thesis and present an intermediate state of the thesis.
Module structure	SE Master's Thesis (1 SSt., 2 ECTS credits, pi)
Proof of performance	Passing of the continuous assessment course (pi) specified in the module (2 ECTS credits in total)

§ 6 Master's thesis

(1) The master's thesis serves to demonstrate the student's ability to achieve adequate standards of content and methodology when independently addressing academic topics. The assignment for the master's thesis must be chosen in a way that the student can reasonably be expected to complete it within six months.

(2) The topic of the master's thesis must be taken from one of the compulsory modules, alternative compulsory modules and/or the group of alternative compulsory modules. If a different topic is selected or if there is uncertainty regarding the allocation of the selected topic, the competent body responsible for study matters decides on whether or not it is admissible.

(3) The master's thesis comprises 24 ECTS credits.

§ 7 Master's examination

(1) To be admitted to a master's examination the student must have successfully passed all required modules and examinations and the master's thesis must have been positively assessed.

(2) The master's examination is a public defence and an examination on the academic disciplines related to the master's thesis. Grading will be conducted as stipulated in the Statutes of the University of Vienna.

(3) The master's examination comprises 2 ECTS credits.

§ 8 Mobility during the master's programme

The competent body responsible for study matters is responsible for the recognition of academic achievements completed abroad.

§ 9 Course classification

(1) All courses with non-continuous assessment (npi) have to be offered as one of the following types of courses:

• Lectures (*Vorlesung*, *VO*):

Lectures serve to present contents, methods and applications of a specific subject. Continuous assessment is not applied in lectures. Contents are presented in the form of presentations delivered by the lecturer or in a similar form. The course is completed with an oral or written examination.

(2) All courses with continuous assessment (pi) are offered as one of the following types of courses:

• Courses (*Kurse*, *KU*):

In courses, continuous assessment is applied. On the one hand, contents, methods and applications of a given subject area are taught. On the other hand, students complete tasks independently, such as giving presentations, developing solutions to given tasks, etc.

• Seminars (*Seminar*, *SE*):

In seminars, continuous assessment is applied. Seminars serve as a setting for academic discussions. Participants are expected to independently work on a topic and present the insights gained in the form of independent oral and written contributions, such as presentations and seminar papers.

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• Practical laboratory course (*Laborpraktikum*, *LP*):

In practical laboratory courses, continuous assessment is applied. Students demonstrate and practice the acquired knowledge and skills under "realistic conditions". The focus is on practical work and on carrying out experiments instructed and controlled by the lecturers. The lecturer has to announce the mode and type of the partial achievements that students have to complete.

• Exercises (*Übungen, UE*):

Exercises serve the purpose of acquiring, expanding and thoroughly working through course contents as well as practising relevant skills. Students are expected to actively participate in activities as deemed appropriate and to solve tasks independently. Students must generally complete these tasks outside of the designated course hours. During class, the lecturer comments on, evaluates and adds to the solutions provided by the students. Accordingly, continuous assessment is applied in exercises.

• Lecture with exercises (*Vorlesung mit Übungen, VU*):

Lectures with exercises are based on lectures. Each course unit comprises elements of continuous assessment. The proof of performance is based on multiple partial achievements.

§ 10 Courses with a limited number of participants and registration procedure

(1) The following general limits on the number of students apply in the following courses:

KU: 50 participants SE: 18 participants LP: 30 participants UE: 50 participants UE held in computer rooms: 25 participants VU: 25 participants

For courses allocated to other degree programmes, the limits on the number of students specified in the relevant curricula apply.

(2) Modalities concerning the registration for courses and examinations as well as the allocation of places in courses are governed by the stipulations in the Statutes of the University of Vienna.

§ 11 Examination regulations

(1) Proof of performance in courses

The lecturer of a course is responsible for making the necessary announcements according to the stipulations in the Statutes.

(2) Examination content

The examination content relevant to preparing and holding examinations must be in line with the required number of ECTS credits. This also applies to module examinations.

(3) Examination procedure

The examination procedure is subject to the stipulations of the Statutes of the University of Vienna.

(4) No double recognition and no dual use

Courses taken and examinations passed in the three-year bachelor's programme, which constitute entry requirements for the master's programme, cannot be recognised again in the master's programme. Courses taken and examinations passed from another compulsory or elective module of the degree programme cannot be recognised within another module within the same degree programme. This also applies to recognition procedures.

(5) Examination results must be allocated to the relevant module by the stated ECTS figure and must not be allocated to different proofs of performance.

§ 12 Entry into force

(1) This Curriculum will enter into force upon announcement in the University Gazette of the University of Vienna as of 1 October 2020.

(2) The amendments to the Curriculum as stated in the University Gazette of 25 June 2021, number 168, 40th edition enter into force on 1 October 2021.

(3) The amendments to the Curriculum as stated in the University Gazette of 27 June 2022, number 267, 45th edition enter into force on 1 October 2022.

§ 13 Transitional provisions

(1) This Curriculum applies to all students who commence their degree programme as of the winter semester of 2020/2021.

(2) If, at a later stage of the degree programme, courses are no longer offered which were compulsory under the original curricula, the competent body responsible for study matters decides ex officio (equivalence regulation) or at the request of the student which courses and examinations have to be completed instead.

(3) The competent body responsible for study matters specified in the organisational regulations is entitled to determine in general or on a case-by-case basis which of the courses taken and examinations passed will be recognised for this Curriculum.

Appendix

1st semester (28 ECTS credits)	Programming for Business Analytics 8 ECTS credits	Advanced Business Analytics	Business Administration Minor	Doing Data Science 6 ECTS credits	
	Foundations of Business Decision Making 8 ECTS credits	6 ECTS credits	8 ECTS credits		
2nd semester (32 ECTS credits)	Advanced Operations Research 8 ECTS credits	Modelling and Handling of Large Databases 6 ECTS credits	Business Administration Minor 12 ECTS credits	Data Ethics and Legal Issues 6 ECTS credits	
3rd semester (32 ECTS credits)	Data Science Electives 12 ECTS credits	Business Analytics Elective 4 ECTS credits	Research Seminar 4 ECTS credits	Data Science Project 12 ECTS credits	
4th semester (28 ECTS credits)	Master's Thesis (in the fields of the minor, business analytics, operations research, data science) SE Master's Thesis, public defence (24+2+2) 28 ECTS credits			inalytics,	

Recommended path through the master's programme:

Recommended path through the master's programme:

Modules and courses	SSt.	ECTS credits
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1st year			
Winter	Programming for Business Analytics/Foundations of	4	8
semester:	Business Decision Making		
	Business Administration Minor	4	8
	Advanced Business Analytics	3	6
	Doing Data Science	4	6
Summer	Advanced Operations Research	4	8
semester:			
	Modelling and Handling of Large Databases	4	6
	Business Administration Minor	6	12
	Data Ethics and Legal Issues	4	6
2nd year			
Winter semester:	Data Science Electives	-	12
	Research Seminar	3	4
	Business Analytics Elective	-	4
	Data Science Project	8	12
Summer	Master's Thesis Seminar	1	2
semester:			
	Master's Thesis	-	24
	Public Defence	-	2
	TOTAL:		120