

CURRICULUM

FOR THE MASTER'S DEGREE PROGRAM ON THE

DIGITAL ECONOMY



Pursuant to § 25 (1) item 10 of the Universities Act 2002 (*Universitätsgesetz* 2002), Federal Law Gazette (*Bundesgesetzblatt*, BGBl.) I no. 120/2002, last amended by the federal act promulgated in Federal Law Gazette I no. 93/2021, the following regulation is passed:

§ 1 Objectives

With the research-based, multidisciplinary Master's Degree Program on the Digital Economy, students with different educational backgrounds at the bachelor's level are given the tools to better understand the digitalization of our economy and society and to initiate, design, and implement digital innovations in organizations. These educational backgrounds include degrees in economics and social sciences, business law, and (business) information systems.

Graduates of this master's program have a profound understanding of the challenges and opportunities facing companies and society due to the digital transformation and of how companies can benefit from new digital developments.

The Master's Degree Program on the Digital Economy integrates aspects of economics, finance, computer science, law, management, marketing, and strategy with a focus on the digitalization of business. The theoretical foundation in these areas serves as a basis for the different perspectives in the development of digital business models: strategy, design, implementation, social and legal contexts, especially in specific in areas relevant to digitalization such as internet economics, IT law, information management, digital strategy, digital marketing, data science, artificial intelligence, and digital ethics.

Students learn in a variety of interactive learning situations. One of the main focuses is applying the skills learned to a variety of real-life projects conducted in cooperation with partners from the business community, the public sector, and civil society.

Job profiles include roles involving high levels of digital leadership, such as in the areas of digital product management, digital entrepreneurship, (IT) consulting, enterprise architecture management, digital transformation management, business development, or digital marketing in different areas of expertise and organizations, including both digital and traditional companies, public institutions, NGOs, NPOs, start-ups, and consulting firms. The interdisciplinary character of the Master's Degree Program on the Digital Economy, these different professional profiles, and the different student target groups are taken into account by three complementary specializations.

After completing the Master's Degree Program on the Digital Economy, students have acquired the following skills:

- Holistic understanding of the impact of digitalization on business and society
- Implementation skills in the sense of the constructive use, design, introduction, and management of digital technologies in companies
- Systemic thinking: Understanding and analyzing the interrelationships and interactions between agents, their actions, and IT processes in complex systems
- Ethical-social responsibility: Understanding the role of economic organizations and taking competing social, environmental, and ethical concerns and issues into account when dealing with data and within digital transformations
- Decision making: Critically evaluating a variety of potential courses of action and approaches to solutions and arguing persuasively for the approach of their choice
- Research: Following current research findings and technological developments and developing and implementing research projects in compliance with discipline-specific academic standards
- Reflection: Critically reflecting not only on one's own actions but also on processes in organizations
- Lifelong learning: Continuously developing one's own skills and competencies
- Communication: Appropriately communicating complex issues and problems

In addition, students have acquired the following subject-specific skills after completing this master's program:

- Analysis and synthesis: Developing and verifying hypotheses using data analytic methods; deriving and formulating strategies for digital businesses/organizations based on insights and methods from the microeconomics of information goods and platforms, information systems, statistics, strategic management, human resource management, innovation, marketing, finance, and logistics
- Designing digital business models: Applying the theoretical knowledge learned to build and develop digital business models, using different methodologies, including token economics, business process modeling
- Implementing digital business models: Gaining an in-depth understanding of the components of digital value creation and customer-centric marketing to design and prototype new business models
- Project management: Ability to organize and promote digital projects using various project management approaches prevalent in the field, including agile project management (e.g. Scrum)

- Management skills: Applying management and decision-making models to manage digital businesses and digital products
- Identifying, addressing, and solving problems: Using creativity techniques such as the lean start-up method and design thinking
- Contextual knowledge: Considering constraints and opportunities from legal, ethical, and societal perspectives when developing digital business models or handling data

§ 2 Admission Requirements

(1) The prerequisite for admission to the Master’s Degree Program on the Digital Economy is the completion of a previous degree within the meaning of § 64 of the Universities Act 2002. Admission to the Master’s Degree Program on the Digital Economy is regulated by a selection procedure pursuant to the Universities Act 2002.

(2) Dual application of examinations to the Master’s Degree Program on the Digital Economy through credit transfer of examinations completed in the first-degree program pursuant to (1) is not permissible.

§ 3 Classification, Structure, and ECTS Credits

(1) The Master’s Degree Program on the Digital Economy is a degree program in social and economic sciences within the meaning of § 54 (1) of the Universities Act 2002.

(2) The four-semester Master’s Degree Program on the Digital Economy is made up of 120 ECTS credits. The master’s thesis is worth 20 ECTS credits, and the subjects of the Master’s Degree Program on the Digital Economy account for the remaining 100 ECTS credits.

(3) The Master’s Degree Program on the Digital Economy is held entirely in English.

§ 4 Types of Examinations

The examination types indicated in this curriculum are defined in the Examination Regulations of WU (Vienna University of Economics and Business). This curriculum, together with the Examination Regulations, forms a curriculum pursuant to § 25 (1) item 10 of the Universities Act 2002.

Abbreviation key:

AG - <i>Arbeitsgemeinschaft</i> , workshop-type course
FP - <i>Fachprüfung</i> , subject examination
FS - <i>Forschungsseminar</i> , research seminar
LVP - <i>Lehrveranstaltungsprüfung</i> , course examination
MP - <i>Modulprüfung</i> , module examination
PI - <i>prüfungsimmanent</i> , course with continuous assessment of student performance
VUE - <i>Vorlesungsübung</i> , lecture with interactive elements

§ 5 Courses and Examinations

The courses and examinations of the Master’s Degree Program on the Digital Economy are as follows:

<i>Course title</i>	<i>ECTS credits</i>	<i>Credit hours</i>	<i>Type of examination</i>
<i>In Strategic Aspects (20 ECTS credits):</i>			
Digital Markets and Strategies	8	4	PI
Marketing and Innovation	4	2	PI
IT Governance, Risk, and Control	4	2	PI
Transformative Management	4	2	PI
<i>In Design Aspects (12 ECTS credits):</i>			
Business Process Management	4	2	PI
Value-based System Engineering	4	2	PI
System Development and Operations	4	2	PI
<i>In Implementation Aspects (12 ECTS credits):</i>			
Distributed Systems	4	2	PI
Security and Privacy	4	2	PI
Data Management and Analytics	4	2	PI
<i>In Legal Aspects (4 ECTS credits):</i>			
IT Law	4	2	PI
<i>In Research and Development (28 ECTS credits):</i>			
Business Project	12	4	PI
Research Lab or Industry Lab	12	4	FS
Master’s Thesis Seminar	4	2	FS

§ 6 Specializations

(1) As part of the Master’s Degree Program on the Digital Economy, students must complete one of the following specializations worth 24 ECTS credits and 8 weekly credit hours:

1. Information Systems
2. Digital Law and Economics
3. Digital Strategy, Marketing, and Transformation

(2) In the Information Systems Specialization, students are required to complete their choice of 24 ECTS credits selected from the courses listed under (5) below.

(3) The following courses and examinations worth 12 ETCS credits must be completed in the Digital Law and Economics Specialization:

<i>Course title</i>	<i>ECTS credits</i>	<i>Credit hours</i>	<i>Type of examination</i>
Advanced Topics in IT Law	6	2	PI
Economics of Digitalization	6	2	PI

Students are also required to complete an additional 12 ECTS credits selected from the courses listed under (5) below.

(4) The following courses and examinations worth 12 ETCS credits must be completed in the Digital Strategy, Marketing, and Transformation Specialization:

<i>Course title</i>	<i>ECTS credits</i>	<i>Credit hours</i>	<i>Type of examination</i>
Advanced Topics in Strategy	6	2	PI
Advanced Topics in Finance	6	2	PI
Advanced Topics in Logistics	6	2	PI
Advanced Topics in Marketing	6	2	PI
Critical Thinking in Data Analytics	6	2	PI

Students are also required to complete an additional 12 ECTS credits selected from the courses listed under (5) below.

(5) The following courses may be selected; please note that both courses in each topic must be completed:

<i>Course title</i>	<i>ECTS credits</i>	<i>Credit hours</i>	<i>Type of examination</i>
Blockchain and Distributed Ledger Technology I	6	2	PI
Blockchain and Distributed Ledger Technology II	6	2	PI
Business Process and Risk Management I	6	2	PI
Business Process and Risk Management II	6	2	PI
Data Science and Artificial Intelligence I	6	2	PI
Data Science and Artificial Intelligence II	6	2	PI
Digital Ecosystems I	6	2	PI
Digital Ecosystems II	6	2	PI
Digital Ethics and Sustainability I	6	2	PI
Digital Ethics and Sustainability II	6	2	PI
Digital Network Analytics I	6	2	PI
Digital Network Analytics II	6	2	PI

§ 7 Specific Requirements for Admission to Examinations

The completion of at least 18 ECTS credits from the subjects Strategic Aspects, Design Aspects, Implementation Aspects, and Legal Aspects is the prerequisite for admission to all courses and examinations in the specializations.

§ 8 Master's Thesis

- (1) Each student is obliged to submit a master's thesis worth 20 ECTS credits.
- (2) In their master's theses, the students have to demonstrate their ability to independently handle a topic with the help of academic research methods.
- (3) The topic of the master's thesis is to be chosen from one of the subjects of the Master's Degree Program on the Digital Economy. The students are entitled to propose a topic themselves or to select one from a number of suggestions made by the available supervisors. Apart from that, § 33 of the By-Laws of WU (Vienna University of Economics and Business) applies.

§ 9 Completion of the Master's Degree Program

After a student has successfully completed all required examinations and the master's thesis, a certificate will be issued evidencing the successful completion of the Master's Degree Program on the Digital Economy.

§ 10 Academic Degree

Graduates of the Master's Degree Program on the Digital Economy will be awarded the academic degree Master of Science (WU), abbreviated as MSc (WU).

§ 11 Effective Date

- (1) This regulation shall enter into force on October 1, 2021.
- (2) The amendments to this regulation as published in WU Bulletin no. 44 of June 30, 2021, shall enter into force on October 1, 2021.