Module manual

Master's program

Entrepreneurship and Digital Transformation (Master of Arts, M.A.)

Date: 2024/10/04

Content

Dear Readers,

Welcome to the master's programme Entrepreneurship and Digital Transformation of the HM Hochschule München University of Applied Sciences!

The digital transformation that is changing all areas of our economy and society is the decisive paradigm of our time. Entrepreneurship provides the right tools and methods for designing such dynamic processes. The Master's programme thus combines what belongs together: entrepreneurship and digitalisation. The aim is to motivate students in the future field of digitalisation to think and act entrepreneurially and thereby enable them to make our digital future worth living.

The international and interdisciplinary approach with students from different disciplines that work intensively on an entre- or intrapreneur project, distinguishes the master programme as a special feature. Together with the Strascheg Center for Entrepreneurship, the affiliated institute for entrepreneurship activities, the HM Hochschule München University of Applied Sciences has been very successful in the field of entrepreneurial thinking and acting for many years.

The module manual is aimed both at our students to help them shape a successful course of study. In addition, we would be pleased to assist prospective students in their decision to apply.

If you would like to get in touch with us, you will find all current contact details on our website: www.hm.edu/deepdive.

We thank you for your interest and wish all students much success and pleasure in learning.

Yours sincerely,

Your Deep Dive Team

2 Curriculum Overview (Studienplan)

Module no.	Module name	Module name (English)	SHW	ECTS credit points	Type of course	Type of exam and poss. evaluation
ED 1.1	Research Methods	Research Methods	2	5	SL/E/S/Proj.	Wr. exam or oral exam or mod. work
ED 1.2	Digital Technologies	Digital Technologies	4	5	SL/E	Wr. exam or oral exam or mod. work
ED 1.3	Entrepreneurship I	Entrepreneurship I	4	5	SL	Wr. exam or oral exam or mod. work
ED 1.4	Project I	Project I	6	15	Proj.	Mod. work (0.8) and pres. (0.2)
ED 1.5	Subject-specific compulsory elective group I	Subject-specific compulsory elective group II	3	5	SL/E/S/Proj.	Wr. exam or oral exam or mod. work or pres.
ED 1.6	Business Models in Digital Transformation	Business Models in Digital Transformation	4	5	SL/E	Mod. work (0.6) and pres. (0.4)
ED 1.7	Entrepreneurship II	Entrepreneurship II	4	5	SL	Wr. exam or oral exam or mod. work
ED 1.8	Project II	Project II	6	15	Proj.	Mod. work (0.8) and pres. (0.2)
ED 1.9	Subject-specific compulsory elective group II	Subject-specific compulsory elective group II	3	5	SL/E/S/Proj.	Wr. exam or oral exam or mod. work or pres.
ED 1.10	Master Thesis	Master Thesis		25		
Total SHW and ECTS			**36**	**90**		

Abbreviations: ECTS = European Credit Transfer and Accumulation System; E = Exercise; Proj. = Project; S = Seminar; SL= lecture in the form of a seminar; SHW = Semester hours per week

Note

Compulsory elective modules

The subject-specific compulsory elective modules have to be selected to the extent of 10 ECTS credit points from the compulsory and compulsory elective modules of all consecutive master programs of HM Hochschule München University of Applied Sciences, including faculties 03, 05, 07, 09, 10, 12, and 14. In consultation with the student, the project supervising professor, as well as the module administrators of the respective modules, the selection is to be made by the end of February for the summer term and by the end of September for the winter term. For this purpose, the student is required to compile a list of his/her 3 prioritized compulsory elective modules that have to be finalized in the above-mentioned period.

Master Thesis

The specific procedure is outlined in the document Guidelines Master Thesis, which can be found in the corresponding Moodle Course.

Other regulations

Please refer to the study and examination regulations for the master's program in Entrepreneurship and Digital Transformation, as well as the general study and examination regulations (SPO) of HM Hochschule München University of Applied Sciences.

Course catalogue

Compulsory module: Master thesis seminar

Course name **Course ID**	**Research Methods** ED 1.1
Semester	**1**
Frequency	Winter semester
Period	1 semester
Administrator	Prof. Dr. Thomas Peisl
Course instructor/s	Prof. Dr. Thomas Peisl
Language	English
Classification of the course	Master program *Entrepreneurship and Digital Transformation* Compulsory module
Teaching format **Credit hours**	Seminar (group size: ca. 40) **2** SWS
Workload	150 h Paper reading before the course: 20 h Presence in lecture: 16 h Self-study (including follow-up): 114 h
Credits	**5** ECTS
Prerequisites	None
Use of module	Pre-requisite for ED1.10 Master Thesis (recommended), Transfer to all research programs
Learning outcomes	**Method competency** Upon completion of this course students will be able to: - Define the adequate research methodology for the master thesis and apply it to data collection - Analyse the collected data and structure it in such way that it provides valuable information for the master thesis and can be used for conclusions - Examine and assess whether the methodology (research approach and findings) is consistent and conclusions based on the methodology can be retraced - Write a master thesis that meets the requirements of a scientific paper

Course contents	The following topics will be addressed in the course: - Introduction to the philosophy of science - Quantitative vs. qualitative methods of empirical social research - Relevant theories and concepts in the field of entrepreneurship and intrapreneurship - How to write a structured literature analysis in your master thesis - Development of research design (research questions, hypotheses) - Data collection and analysis - How to write a conclusion and discussion chapter in your master thesis - Software based reference systems (e.g. EndNote, Reference Manager)
Grading basis	Written exam or oral exam or module work or presentation
Literature	SAUNDERS, M., THRONHILL, A., LEWIS, P. (2019). *Research Methods for Business Students Paperback.* Eigth Edition. ISBN 978-1292208787 YIN, R. (2018). *Case Study Research and Applications.* Sixth edition. ISBN 978-1506336169 CRESWELL, J.W., POTH, C. N. (2017). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches.* Fourth Edition. Thousand Oaks: Sage Publications. ISBN 978-1506330204 SALDANA, J. (2015). *The coding manual for qualitative researchers*. Third Edition. Thousand Oaks: Sage Publications. ISBN 978-1473902497 EISENHARDT, K. (1995). *Building Theories from Case Study Research.* https://www.jstor.org/stable/258557?seq=1#metadata_info_tab_contents STAKE, R.E. (1995). *The art of case study research*. Thousand Oaks: Sage Publications. ISBN 9780803957671

Compulsory module: Digital Technologies

Course name **Course ID**	**Digital Technologies** ED 1.2
Semester	**1**
Frequency	Winter semester
Period	1 semester
Administrator	Prof. Dr. Rainer Schmidt
Course instructor/s	Prof. Dr. Rainer Schmidt
Language	English
Classification of the course	Master program *Entrepreneurship and Digital Transformation* Compulsory module
Teaching format **Credit hours**	Lecture (group size: ca. 40) **2** SWS Exercise **2** SWS (Total: **4** SWS)
Workload	Total: 180 h Presence in lecture: 45 h Preparation and self-study: 135 h
Credits	**5** ECTS
Prerequisites	None
Use of module	The teaching will be continued and deepened in module ED 1.6
Learning outcomes	**Professional competency** Upon completion of this course students will be able to: - Understand the impact of digitization on processes, products, services and business models - Apply the approaches and technologies relevant for digitization - Apply digital technologies to assure a seamless exchange of information also across organizational boundaries - Use digital technologies to automate and control the execution of tasks, e.g. performed in different organisations using both centralized and decentralized approaches - Apply collection and analysis of data to automated decisions

	- Use new kinds of user interfaces to enhance processes, products and services - Use social paradigms to collect knowledge and enable new business models **Self competency** Upon completion of this course students will be able to: - Explain the role of self-reflection in the learning process and for personal development with their own words - Understand their impact on other individuals and identify them **Social competency** Upon completion of this course students will be able to: - Conduct exercises and projects in interdisciplinary, intercultural teams - Explain their own values that are relevant for the implementation of innovation processes **Method competency** Upon completion of this course students will be able to: - Define adequate scientific methods and apply those for conducting projects to collect data and develop solutions - Cluster and analyze collected data, acquired insights, findings, and solutions
Course contents	Focus of the module will be adapted to the needs and previous knowledge of the students, covering the following in differing depths: - Definitions of Digitization and models of its impact. [1], [2], [3] - Automation, e.g. using Python - Basic technologies, such as Data Science [4], Artificial Intelligence [5], Cloud-Computing [6], Decision Support [7], Social Information Systems [8], Big Data [9], Cyber-Physical Systems, Internet of Things, Industrial Internet [13] - Seamless information exchange using Databases, JSON, XML etc. [9] - Business Process Management and Automation [10], [11], [6] - Decision support and information gathering: Artificial Intelligence, Data Science, Machine Learning, Deep Learning [4] [7] - Human computer interaction, e.g. Voicebots [12]

	- Social information systems [8] - Data Protection and Information Security
Grading basis	Written exam or oral exam or module work
Literature	Individual articles, such as: [1] C. Matt, T. Hess, and A. Benlian, 'Digital Transformation Strategies', *Bus Inf Syst Eng*, vol. 57, no. 5, pp. 339–343, Sep. 2015. [2] R. Schmidt, A. Zimmermann, M. Möhring, S. Nurcan, B. Keller, and F. Bär, 'Digitization – Perspectives for Conceptualization', in *Advances in Service-Oriented and Cloud Computing*, Taormina, Italy, 2015, pp. 263–275. [3] K. Dörner and D. Edelman, 'What "digital" really means | McKinsey & Company'. [Online]. Available: http://www.mckinsey.com/industries/high-tech/our-insights/what-digital-really-means. [Accessed: 06-May-2016]. [4] F. Provost and T. Fawcett, *Data Science for Business: What You Need to Know about Data Mining and Data-analytic Thinking*, 1 edition. Sebastopol, Calif.: O'Reilly Media, 2013. [5] S. J. Russell and P. Norvig, *Artificial intelligence: a modern approach*. Malaysia; Pearson Education Limited, 2016. [6] P. Mell and T. Grance, 'The NIST Definition of Cloud Computing', 10-Jul-2009. [Online]. Available: http://csrc.nist.gov/groups/SNS/cloud-computing/. [Accessed: 06-Jan-2011]. [7] R. Schmidt, M. Möhring, and A. Zimmerman, 'Dynamic Capabilities of Decision-oriented Service Systems', *IJISSS*, vol. 10, no. 3, pp. 41–63, Jul. 2018. [8] R. Schmidt, R. Alt, and S. Nurcan, 'Social Information Systems', in *Proceedings of the 52nd Hawaii International Conference on System Sciences*, Hawaii, 2019. [9] R. Schmidt, M. Möhring, S. Maier, J. Pietsch, and R.-C. Härting, 'Big Data as Strategic Enabler - Insights from Central European Enterprises', in *Business Information Systems*, W. Abramowicz and A. Kokkinaki, Eds. Springer International Publishing, 2014, pp. 50–60. [10] M. Dumas, M. La Rosa, J. Mendling, and H. A. Reijers, *Fundamentals of Business Process Management*. Berlin, Heidelberg: Springer Berlin Heidelberg, 2013.

	[11] J. Mendling *et al.*, 'Blockchains for Business Process Management-Challenges and Opportunities', *arXiv preprint arXiv:1704.03610*, 2017. [12] G. López, L. Quesada, and L. A. Guerrero, 'Alexa vs. Siri vs. Cortana vs. Google Assistant: a comparison of speech-based natural user interfaces', in *International Conference on Applied Human Factors and Ergonomics*, 2017, pp. 241–250. [13] R. Rajkumar, I. Lee, L. Sha and J. Stankovic, 'Cyber-physical systems: The next computing revolution,' *Design Automation Conference*, Anaheim, CA, 2010, pp. 731-736.

Compulsory module: Entrepreneurship I

Course name **Course ID**	**Entrepreneurship I** ED 1.3
Semester	**1**
Frequency	Winter semester
Period	1 semester
Administrator	Prof. Dr. Klaus Sailer
Course instructor/s	Prof. Dr. Klaus Sailer, Prof. Dr. Herbert Gillig, Prof. Dr. Bettina Maisch, Prof. Dr. Sebastian Dünnebeil
Language	English
Classification of the course	Master program *Entrepreneurship and Digital Transformation* Compulsory module
Teaching format **Credit hours**	Lecture (group size: 40) **4** SWS
Workload	Total: 150 h Presence in lectures: 45 h Preparation and self-study: 105 h
Credits	**5** ECTS
Prerequisites	The prerequisites are fulfilled with admission to the course of studies.
Use of module	The teaching will be continued and deepened in module ED 1.7 (Entrepreneurship II).

Learning outcomes	**Professional competency** Upon completion of this course students will be able to: - Name various models of innovation processes and describe their core elements and the different stages in an innovation process - Develop and apply business models in the field of digital transformation - Assign the different approaches of innovation processes to convenient projects (in particular for projects in the field of digital transformation) - Describe various sources of innovation - Name various approaches of personality profiles and assign the profiles to respective manifestations, compare the profiles, and discuss the influence of individuals with varying profiles on the success of an innovation project - Compare the different systems and approaches in the field of entrepreneurship in varying economic regions **Self competency** Upon completion of this course students will be able to: - Define the term self-reflection and critical thinking - Name the prerequisites for creativity and describe various approaches of creativity - Classify different creativity techniques for the individual phases of the innovation process **Social competency** Upon completion of this course students will be able to: - Describe tasks and roles of team members and/or employees in various organizations - Outline the explicit and implicit context of teamwork as well as its challenges - Know the basics of ethics (values, worldviews, societal influences) and describe his/her own values that are relevant for the implementation of innovation processes **Method competency** Upon completion of this course students will be able to: - Know methods, tools and approaches for various innovation types and processes - Demonstrate in which phase of the innovation process what type of tools are appropriate for what kind of tasks - Explain which tools provide what kind of results and how to use those results
Course contents	The following topics will be addressed in the course: - Introduction to innovation and entrepreneurship (definition, types, processes)

	- Entrepreneurial vs. intrapreneurial processes - The entrepreneurial personality and growth mindset - Teamdynamics and collaboration - Responsible entrepreneurship and (social) impact - Creativity and Future Thinking - Innovation eco systems and networks - Innovation models and methods (e.g. S-Curve, Diffusion of Innovation, Open Innovation, Design Thinking, Lean Startup, Real Time Innovation) and their core elements - Business model design (value proposition, architecture of value creation, revenue model) - *Intrapreneurship*: integration in corporate business and revenue model - Transformation, leadership and uncertainty
Grading basis	Written exam or oral exam or module work
Literature	AULET, B. (2013). *Disciplined Entrepreneurship*. New Jersey: John Wiley & Sons. ISBN 978-1118692288 BESSANT, J., TIDD, J. (2015). *Innovation and Entrepreneurship*. 3rd edition. Chichester: John Wiley & Sons. ISBN 9781118993095 BROWN, T. (2009). *Change by Design. How Design Thinking Can Transform Organizations and Inspire Innovation*. Harper Business. ISBN 9780061766084 CHESBROUGH, H.W. (2005). *Open Innovation: The New Imperative for Creating and Profiting from Technology.* Boston: Harvard Business Review Press. ISBN 1422102831 HISRICH, R., PETERS, M., SHEPHERD, D. (2013). *Entrepreneurship*. 9th International Edition. New York: McGraw-Hill Education. ISBN 978-007-132631-5 KAWASAKI, G. (2015). *The Art of the Start 2.0*. Portfolio Penguin. ISBN 9780241187265 KIM, W.C., MAUBORGNE, R. (2005). *Blue Ocean Strategy. How to create uncontested market space and make the competition irrelevant*. Boston: Harvard Business School Press. ISBN1-59139-619-0 OWENS, T., FERNANDEZ, O. (2014). *The Lean Enterprise: How corporations can innovate like startups*. Hoboken: Wiley & Sons. ISBN 9781118852170

	READ, S. et al. (2011). *Effectual entrepreneurship*. First Edition. New York: Routledge. ISBN 978-0415586443 RIES, E. (2017). *Lean Startup. How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Currency. ISBN 1524762407 ROGERS, E. (2003). *Diffusion of Innovations*. Fifth Edition. New York: Free Press. ISBN 0743222091

Compulsory module: Project I

Course name **Course ID**	**Project I** ED 1.4
Semester	**1**
Frequency	Winter semester
Period	1 Semester
Administrator	Prof. Dr. Klaus Sailer
Course instructor/s	Professors/supervisors of the project
Language	English
Classification of the course	Master program *Entrepreneurship and Digital Transformation* Compulsory module
Teaching format **Credit hours**	Project-based seminar **6** SWS
Workload	Total: 450 h Presence in project seminar: 68 h Group work: 382 h
Credits	**15** ECTS
Prerequisites	The prerequisites are fulfilled with admission to the course of studies.
Use of module	The teaching will be continued and deepened in module ED 1.8 (Project II).
Learning outcomes	**Professional competency** Upon completion of this course students will be able to:

	- Conduct the various stages of an innovation project based on the effectuation and human-centered methodology and apply it for their own project - Exploit various sources of information for recognizing innovative ideas - Select among various innovation methodologies the most promising one for their specific project - Define among various fields of problems the most promising one in terms of validation and develop solutions - Test results by means of qualitative methods, test various solutions through customer acceptance and to decide for one solution - Conduct an own project from topic identification to a sustainable business model and to defend it against experts and stakeholders - Analyze success factors and unique selling proposition of different (digital) business models - Create a comprehensive business model and arrange its implementation together with identified stakeholders - Create a team manifesto that manages collaboration and uses synergies of team members at best - Name relevant stakeholders and define their role in the project **Self competency** Upon completion of this course students will be able to: - Set up an evaluation system for assessing findings based on various influencing factors - Combine the different creativity methods with personality, leadership and management approaches for the development and implementation of holistic innovative concepts - Take a responsible role in a project team and document the findings **Social competency** Upon completion of this course students will be able to: - Evaluate their own efficiency, effectiveness and development opportunities within a team - Examine the alignment of their own values with the vision, project goals, and operative tasks and derive from that conclusions for further action in the innovation project - Create a vision and mission for their own project **Method competency** Upon completion of this course students will be able to: - Apply various methods and tools to their own project and evaluate the results

	- Develop their own strategic solution for an innovation project, by means of success patterns that had been created by themselves
Course contents	The following topics will be addressed in the course: - Building your team, team manifesto - Project collaboration and communication tools - Problem analysis and definition (analysis of needs) - Qualitative research methods (i.e. interview techniques, observation) - Stakeholder analysis - Definition of target groups, problem-solution fit - Market and competitor analysis - Technical concept (requirements, specification) - creation of first solutions and ideas (level of innovation, feasibility) - Business model (value proposition, unique selling point) - Design of a low-fidelity prototype and first testing
Grading basis	Project report (80%) Presentation (20%)
Literature	AULET, B. (2013). *Disciplined Entrepreneurship*. New Jersey: John Riley & Sons. ISBN 978-1-118-69228-8 BLANK, S., DORF, B. (2012). *The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company*. ISBN 9780984999309 KAWASAKI, G. (2004). *The Art of the Start. The time-tested, battle-hardened guide for anyone starting anything*. New York: Penguin Group. ISBN 1-59184-056.2 KAWASAKI, G. (2015). *The Art of the Start 2.0*. Portfolio Penguin. ISBN 9780241187265 RIES, E. (2017). *Lean Startup. How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Currency. ISBN 1524762407 SAILER, K. (et al.) (2018). *Real Time Innovation - Change the pattern. Change your thinking.* München: Strascheg Center for Entrepeneurship (Hrsg.). ISBN: 978-3-96222-001-3

Compulsory module: Business models in Digital Transformation

Course name **Course ID**	**Business Models in Digital Transformation** ED 1.6
Semester	**2**
Frequency	Summer semester
Period	1 Semester
Administrator	Prof. Dr. Thomas Kofler
Course instructor/s	Prof. Dr. Sebastian Dünnebeil
Language	English
Classification of the course	Master program *Entrepreneurship and Digital Transformation* Compulsory module
Teaching format **Credit hours**	Lecture (group size: ca. 40) **2** SWS Exercise **2** SWS (total: **4** SWS)
Workload	Total: 150 h Presence in lecture: 45 h Preparation and self-study: 105 h
Credits	**5** ECTS
Prerequisites	none
Use of module	This module deepens knowledge from the subjects Digital Technologies and Entrepreneurship I and applies theoretical methods and concepts taught there in practice.
Learning outcomes	**Professional competency** On successful completion of this module, students should be able to: - Name the elements of a business model and define the value of digital business values - Explain and clarify the differences and special features of a digitally transformed business model versus a business model without digital technologies - Describe the individual elements of a digitally transformed business model and explain the connections between them - Develop digitally transformed business models and identify the meaning of the different

	individual elements on the business model as a whole - Analyse the success factors and unique characteristics of different models as well as the intermediate steps in the development process - Evaluate the intermediate steps in the development process and identify success factors to generate a concept for a successful, measurable business model - Systematically evaluate the strengths and weaknesses of different implementations - Plan and prototypically implement a business model, identify key stakeholders and verify the effectiveness through prototypical use with stakeholders - Knowledge about potentials through technologies and their business impact **Self competency** Upon completion of this course students will be able to: - Use various creativity techniques in order to induce decision-making options or alternative solutions within an innovation project - Compare different perceptions of their own personality by conducting self assessments as well as external assessments **Social competency** Upon completion of this course students will be able to: - Conduct exercises and projects in interdisciplinary, intercultural teams - Identify how their own values and worldviews can be used for the joint creation of a vision **Method competency** Upon completion of this course students will be able to: - Generate dates, insights, perspectives and solutions through the application of various tools and methods in a concrete project - Derive patterns from examples, case studies, and exercises that increase the probability of success of projects
Course contents	Digitalization or digital transformation describes the continuous process of change towards digital processes, based on modern IT infrastructure, digital applications and networked systems and data. Digitization in this context describes the transformation of processes, products, and services - even the transformation of complete business

	models/strategies - by using information and communication technologies with the aim of creating value differently or more effectively and efficiently. The changes brought about by digitization (the use of modern digital technologies) are fundamental, disruptive and may be revolutionary. Companies face enormous risks, but also enormous opportunities by this change. A business model is the (simplified, structure-like, or structuring) representation of selected aspects of the resource transformation of the company as well as its exchange relationships with other market participants [6]. Digitally transformed business models use modern digital technologies to transform these business models and are already disrupting companies in all domains like telecommunications, transportation, e-commerce, automotive and many other industries. This course will explore how existing business models are implemented and a mapping on digital technologies can be executed. Furthermore, new digital business models will be developed. The following topics will be addressed in the course: - Introduction to digital business modelling including B2B vs. B2C strategies and processes - Process model for the development of decentralized, network-based business models for start-ups and existing businesses - Identification and application of key digital components for the digitization of business models - Methods, tools and idea generation for digital value creation processes, digital revenue modelling, digital strategies and leadership, digital workplace in the future - Application of methods/tools and frameworks based on various case studies (e.g. FinTech, Smart Home, E-Health)
Grading basis	Module work (60%) Presentation (40%)
Literature	[1] Gassmann, O., Frankenberger, K., & Csik, M. (2017). Geschäftsmodelle entwickeln: 55 innovative Konzepte mit dem St. Galler business model navigator. Carl Hanser Verlag GmbH Co KG. [2] Gassmann, O., Frankenberger, K., & Csik, M. (2014). The business model navigator. *Harlow: Pearson Education*.

	[3] Kollmann, T. (2011). *E-Entrepreneurship: Grundlagen der Unternehmensgründung in der Net Economy*. Springer-Verlag. [4] Hoffmeister, C. (2017). *Digital business modelling: digitale Geschäftsmodelle entwickeln und strategisch verankern*. Carl Hanser Verlag GmbH Co KG. [5] Jaeckel, M: Die Anatomie digitaler Geschäftsmodelle, Springer Vieweg 2016 [6] Becker, W. (2011): Business Models in Medium-Sized Enterprises, Stuttgart: Kohlhammer [7] Ries, E. (2017). The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses, Currency [8] Kofler, T. (2018). Das digitale Unternehmen: Systematische Vorgehensweise zur zielgerichteten Digitalisierung. Springer

Compulsory module: Entrepreneurship II

Course name **Course ID**	**Entrepreneurship II** ED 1.7
Semester	**2**
Frequency	Summer semester
Period	1 semester
Administrator	Prof. Dr. Verena Kaiser
Course instructor/s	Prof. Dr. Verena Kaiser, Prof. Dr. Dominik Hammer
Language	English
Classification of the course	Master program *Entrepreneurship and Digital Transformation* Compulsory module
Teaching format **Credit hours**	Lecture (group size: 40) **4** SWS
Workload	Total: 180 h Presence in lectures: 45 h Preparation and self-study: 135 h
Credits	**5** ECTS
Prerequisites	The prerequisites are fulfilled with admission to the course of studies.

Use of module	The module builds on the learning outcomes of the first semester and integrates them into a comprehensive model and theory building that is application-oriented.
Learning objectives	This module includes the introduction to entrepreneurial activities in the later stages of an innovation process, i.e. strategy implementation and internationalization of business. The teaching objectives synthesize the theoretical aspects of entrepreneurship and leadership in a startup and corporate environment. Students are enabled to understand: 1. Leadership competencies and skills development 2. Fostering an entrepreneurial mindset 3. Growth of entrepreneurial/intrapreneurial ventures 4. Marketing, financing, managing stakeholders, and pitching an entrepreneurial/intrapreneurial venture
Learning outcomes	**Professional competency** Upon completion of this course students will be able to: - Staff their entrepreneurial/intrapreneurial teams to complement their own skill sets - Develop a corporate, growth and internationalization strategy for a business - Identify and manage stakeholders - Create a marketing and financial plan for a business Develop a business plan and pitch deck **Self competency** Upon completion of this course students will be able to: - Understand and describe their own impact on other individuals **Social competency** Upon completion of this course students will be able to: - Determine an understanding of their own role based on their strengths and learning areas within a team - Discuss the governance structure of the organization **Method competency** Upon completion of this course students will be able to: - Demonstrate in which phase of the innovation process what type of tools are appropriate for what kind of tasks - Explain which tools provide what kind of results and how to use those results
Course contents	The following topics will be addressed in the course: - Leadership competencies and skills development - Fostering an entrepreneurial mindset - Growth of entrepreneurial/intrapreneurial ventures - Marketing, financing, managing stakeholders, and pitching an entrepreneurial/intrapreneurial venture - Startup vs. intrapreneurship: similarities and

	differences in the implementation stages - Communication and presentation (pitch to investors) - Legal form, intellectual property, patents - Internationalization - Management in an international and intercultural environment
Grading basis	Written exam or oral exam or module assignment
Literature	LEACH, J., MELICHER, R.W. (2017). *Entrepreneurial Finance.* Cengage Learning. ISBN 978-1305968356 KERR, W.R., NANDA, R., MCQUADE, J. (2014). *Financing Entrepreneurial Ventures*. Harvard Business Publishing GREENE, C. (2018). *Entrepreneurship. Ideas in Action.* Cengage Learning. ISBN 978-1337904698 LUSSIER, R.N., ACHUA, C.F. (2014). *Leadership. Theory, Application and Skill Development.* Cengage Learning. ISBN 978-1285866352 PENG, M., MEYER, K. *International Business.* Cengage Learning. ISBN 978-1473758438 THOMPSON, J. et. Al. (2019). *Strategic Management Awareness and Change.* Cengage Learning. ISBN 978-1473767423 LALOUX, F. (2016). *Reinventing organizations – An illustrated invitation to join the conversation on next-stage Organizations*. Nelson Parker.

Compulsory module: Project II

Course name **Course ID**	**Project II** ED 1.8
Semester	**2**
Frequency	Summer semester
Period	1 semester
Administrator	Prof. Dr. Herbert Gillig
Course instructor/s	Professors/supervisors of the project
Language	English

Classification of the course	Master program *Entrepreneurship and Digital Transformation* Compulsory module
Teaching format **Credit hours**	Project-based seminar **6** SWS
Workload	Total: 450 h Presence in project seminar: 68 h Group work: 382 h
Credits	**15** ECTS
Prerequisites	Successful completion of Project I
Use of Module	Module builds on the results of Project I. Continuation especially in the module „master thesis"
Learning outcomes	**Professional competency** Upon completion of this course students will be able to: - Refine and validate the developed prototype through iterative development cycles (sprints) - Evaluate the technical efficacy by testing with relevant stakeholders, leading to the establishment of a MVP - Formulate a digital business model, delineating the distinct roles of its components within the overarching model. Assess the feasibility, viability, desirability, and overall impact - Utilize the business model as a prototype for testing with key customers - Construct a comprehensive business plan encompassing all pertinent components, meticulously documented in a standardized format - Display the links between the individual chapters of a business plan and conduct a reality check of the assumptions - Engage in negotiations with strategic partners and potential customers - Identify and characterize diverse stakeholders, drawing conclusions about their influence and relevance through conversations and negotiations crucial for venture creation - Evaluate stakeholder support for an innovation projectt, prompting the identification and implementation of necessary change processes - Anticipate the scaling of the new venture and make entrepreneurial decisions accordingly - Devise a growth strategy - Position innovation within a macroeconomic context, assessing opportunities arising from internationalization

	- Optimize business processes, marketing activities, and market entry strategies with an international perspective in mind - Identify relevant stakeholders and their role in the innovation project - Formulate a compelling investor pitch, effectively communicating the project's value proposition **Self competency** Upon completion of this course students will be able to: - Seek feedback from external mentors and fellow students - Evaluate their own strengths and weaknesses and based on that derive activities in their teams and with external stakeholders - Take a responsible role in a project team and document the findings **Social competency** Upon completion of this course students will be able to: - Determine a structure within the team or organization that promotes entrepreneurial activities and apply it to their own project - Refine a vision and mission for their own project - Create a code of values and guidelines for their own project **Method competency** Upon completion of this course students will be able to: - Cluster the gained insights and analyze collected data, findings, and solutions - Evaluate findings, to plan decision-making on short or long-term progress of the project and create decision templates for it
Course contents	Project II builds on the results of Project I. The focus in Project II is on the implementation of the idea/concept as well as on management issues. The following topics will be addressed in the course: - Advancement and validation of prototype from a low-fidelity proptotype to MVP (Lean Startup) - Acquisition of first customers and strategic partners - Advancement of the business model (partners, costs, pricing) - *Intrapreneurship*: analysis of corporate stakeholders (enablers/disablers) and resources, creation of new structures, integration into corporate mission and corporate portfolio - Creating a marketing, sales and financial plan - Detailed planning of market entry - Integration in digital platforms - Setting up the logistics

	- Contracts and negotiations - Scaling and growth (road map) - Internationalization and intercultural management - How to pitch to investors
Grading basis	Project report (80%) Presentation (20%)
Literature	AULET, B. (2013). *Disciplined Entrepreneurship*. New Jersey: John Riley & Sons. ISBN 978-1-118-69228-8 BLAND, D. J., & OSTERWALDER, A. (2019). *Testing business ideas: A field guide for rapid experimentation*. John Wiley & Sons. ISBN 978-1-119-55144-7 CROLL, A., YOSKOWITZ, B. (2013). *Lean Analytics. Use data to build a better startup faster*. Sebastopol: O'Reilly. ISBN 978-1-449-33567-0 GARBUGLI, É. (2022). Lean B2B: *Build products businesses want*. 2nd Edition, Étienne Garbugli. ISBN 978-1118960875 MAURYA, A. (2022). *Running Lean: Iterate from Plan A to a Plan that works*. 3rd. Edition, O'Reilly and Associates. ISBN 978-1098108779 RIES, E. (2017). *Lean Startup. How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Currency. ISBN 1524762407 SAILER, K. (et al.) (2018). *Real Time Innovation - Change the pattern. Change your thinking.* Munich: Strascheg Center for Entrepreneurship (Hrsg.). ISBN: 978-3-96222-001-3

Compulsory module: Master thesis

Course name **Course ID**	**Master thesis** ED 1.10
Semester	**3**
Frequency	
Period	
Administrator	

Course instructor/s	Professors of the study program and professors of the faculties cooperating in the study program
Language	English
Classification of the course	Master program *Entrepreneurship and Digital Transformation* Compulsory module
Teaching format	Independent scientific writing
Workload	self-study: 750 h
Credits	**25** ECTS
Learning outcomes	Upon completion of the master thesis students will be able to deepen their knowledge in the selected field of study. They will also deepen their knowledge of scientific/academic writing. In their thesis, they will apply scientific methods to research problems, analyze data, and synthesize findings. They demonstrate problem-solving competencies and the capability of independent scientific writing.
Prerequisites	Acquisition of minimum 45 ECTS credit points; ED1.9 Master Thesis Seminar (recommended)
Use of module	Can be continued in other academic programs.
Course contents	Students specify the topic and research methodology of their master thesis together with the professor who also acts as supervisor of his/her project. The topic of the thesis must refer to the project work and include a scientific examination of relevant components/activities in the project. Students conduct a comprehensive analysis of existing literature and critically discuss it, develop research questions and hypotheses, select a methodology for collecting and analyzing data, discuss results, present conclusions, and include a complete list of references.
Grading basis	Master thesis
Literature	Literature depends on the selected topic. CRESWELL, J.W., POTH, C. N. (2017). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches.* Fourth Edition. Thousand Oaks: Sage Publications. ISBN 978-1506330204 STAKE, R.E. (1995). *The art of case study research*. Thousand Oaks: Sage Publications. ISBN 9780803957671