# **DTV - Deep Tech Ventures - MWD4008**

ECTS	3
Study language	English
Module type	Optional module (countable)
Lecturer(s)	Raff-Heinen Stefan
Module responsibility	Raff-Heinen Stefan
Short description of the module	Deep Tech describes a category of technology solutions rooted in atoms rather than bits - such as new materials, synthetic biology, fusion energy, and quantum computing - and grounded in cutting-edge research. Deep Tech ventures are startups dedicated to taking ideas from the lab bench to scaled global impact. This module aims to (a) develop an understanding of the characteristics of Deep Tech innovations and the startups that produce them, while also distinguishing them from digital ventures; furthermore, it seeks to (b) create an understanding of the activities, opportunities and challenges associated with the commercialization of these innovations from lab to market. In this way, the course provides an introduction to the world of Deep Tech ventures and helps to establish a fundamental understanding among the innovation leaders of the future.
Competencies upon completion	The course aims to train Deep Tech competencies, applied methodological skills as well as communication, presentation and self-management skills.
Content	The primary objective of this module is to establish a foundational understanding of Deep Tech innovations, exploring the distinctive characteristics of startups in this field, alongside the critical milestones and readiness levels in their journey from lab to market.
	Specifically, the module covers the essential requirements for advancing from scientific discovery to a viable business concept. This progression includes key stages such as market discovery, prototype development, industrialization, and scaling. Throughout, the content of the module addresses core activities and challenges

necessary to advance scientific discoveries to solving real-life problems.

# Teaching and learning methods

Virtual cycles and on campus sessions, theoretical input, case studies online coachings, expert/practitioner inputs.

encountered at each stage, with a continuous focus on the unique aspects specific to Deep Tech ventures. In the process, Students will learn about the interplay of critical processes within Deep Tech startups that are

# **DTV - Deep Tech Ventures - MWD4008**

#### Literature

#### Book:

 Griss, P. (2024): DeepTech Playbook: How to Master the Complexity of DeepTech Ventures. Bern: Stämpfli Verlag.

#### Research paper:

- Dahlander, L. & de Véricourt, F (2024). Do Lean Startup Methods Work for Deep Tech? Harvard Business Review (online).
- Raff, S., Murray, F., Murmann, M. (2024). Why You Should Tap Innovation at Deep-Tech Startups. MIT Sloan Management Review . 66 (1).
- de Véricourt, F., & Gurkan, H. (2024). Enhancing Deep-Tech Innovation: An Equilibrium Analysis of Joint Ventures. Available at SSRN 4838032.
- Ramge, T., & Laguna de la Vera, R. (2024). Radical Innovation Needs Old-School VC. MIT Sloan Management Review.
- Raff, S., Murray, F., Frølund, L., Murmann, M. (2024). What is a "Deep Tech venture" and Why Should Corporate Innovators Care? MIT Sloan reap faculty publication.
- Candelon, F., Küpper, D., Männig, M., Paschkewitz, J. & Patel, V. (2023). How Deep Tech Can Drive Sustainability and Profitability in Manufacturing. Harvard Business Review (online).
- Candelon, F., Patel, V., Männig, M., & Paschkewitz, J. (2023). The Incumbent's Deep Tech Strategy Playbook. MIT Sloan Management Review, 64 (3), 1-9.
- Raff, S., & Jovanovic, M. (2022). Commercializing Deep Tech: How to Navigate the Technology-first Approach When Markets are Unknown. *International Conference on Information Systems*.
- Siota, J., & Prats, M. J. (2022). The Three Internal Barriers to Deep-Tech Corporate Venturing. MIT Sloan Management Review, 63 (2), 1-3.
- Grimpe, C., Murmann, M., & Sofka, W. (2019). Organizational design choices of high-tech startups: How middle management drives innovation performance. Strategic Entrepreneurship Journal, 13 (3), 359-378.
- Murmann, M. (2017). The Startups Most Likely to Succeed Have Technical Founders Who Quickly Hire Businesspeople. Harvard Business Review (online).
- Christensen, C. M., Raynor, M.E., McDonald, R. (2015). What Is Disruptive Innovation? Harvard Business Review (online).

# Newspaper:

- Wie die Schweiz zur Brutstätte von Unicorns werden könnte (NZZ, 03.09.2024)
- Der Schweizer Innovationsschmiede fehlt der Biss (Bilanz, 19.02.2024)
- Why Switzerland Thinks It Can Be Europe's Tech Start-Up Capital (Forbes, 12.10.2023)

# Contact lessons Alternating between virtual learning cycles and on-campus workshops Attendance requirement All on-campus workshops in CW8, CW12, CW18 and CW21.

#### Competency assessment

In addition to the on-campus workshops, the semester is divided into learning cycles. Assignments are regularly completed during these learning cycles (graded assignments and non-graded). The final learning cycles and submission dates for assignments are published via Moodle before the start of the semester.

All assignments (graded and non-graded) must be completed and submitted on time in order to pass the module.

DTV consists of 100% individual assignments (graded) during the course (digital hand-in's).



# **DTV - Deep Tech Ventures - MWD4008**

# Mode of repetition

In case of an insufficient grade of 3.5, students may approach the lecturer to define the conditions (task and deadline) of the resubmission. In case of the re-submission a maximum grade of 4.0 can be achieved for a given assignment.

If the grade is lower than 3.5, the module can be repeated once in the next semester in which the module is offered.

# Degree programme, semester

MSc Digital Business Administration, 2024-2025, 2 FS, BB, Bern MSc Digital Business Administration, 2024-2025, 4 FS, BB, Bern

6
English
Elective module
Ruf Julian
Ruf Julian
Digitization is fundamentally a social endeavor, as it requires collaboration among diverse individuals, each with their unique motives, interests, and belief systems. It profoundly reshapes nearly every aspect of work and what people do, how they interact and collaborate, and how they are led. Given these complexities, it is not surprising that many digital transformation initiatives encounter significant challenges. Organizations striving to digitize their operations and business models while adopting more agile practices often face obstacles such as employee inertia, resistance to cultural change, and entrenched non-agile mindsets.
Successfully navigating these challenges requires more than technological know-how; it demands a deep understanding of the human side of transformation. People are at the core of any digital evolution, and fostering their engagement, adaptability, and well-being is crucial for sustainable success.
In this 6-ECTS module, students gain the knowledge and practical skills to address the human dimensions of digital transformation. The course emphasizes the importance of leadership that is not only strategic but also empathetic and empowering. Participants will engage in the "inner work" necessary to refine their own personalities, develop adaptive and effective communication styles, and cultivate a supportive, empowering team culture as future digital leaders. By focusing on personal development and team dynamics, students will be equipped to lead with authenticity and foster resilience, agility, and collaboration within their organizations.
None



# Competencies upon completion Subject: Students

- Acquire the ability to analyze organizational challenges and design leadership and development solutions tailored to digital contexts.
- Understand and apply key leadership theories and organizational development frameworks in the context of digital transformation.
- Gain experience in leveraging digital tools and technologies to enhance organizational processes.
- Learn to communicate effectively with senior managers about strategic leadership and organizational issues in the digital age.

#### Method: Students

- Will engage in self-study and reflective learning to deepen their understanding of leadership and organizational development.
- Will take responsibility for actively working through course material in iterative learning cycles, critically analyzing and reflecting on concepts.
- Are required to actively participate, prepare for sessions, and engage with tools and methods designed to simulate real-world leadership scenarios.
- Will collaborate in group activities to tackle live cases, providing constructive feedback and contributing to the collective learning process.
- Are encouraged to integrate existing knowledge with new insights, adapting their leadership approaches to contemporary organizational challenges.

#### Social: Students

- Understand the impact of technological, organizational, and social trends on leadership and team dynamics in digital environments.
- Experience and navigate the unpredictability of group work dynamics, including interactions with peers, instructors, and stakeholders from live case studies.
- Develop the ability to adopt multiple perspectives, fostering collaboration and building consensus in diverse teams.
- Learn to identify complex organizational challenges, propose viable solutions, and drive implementation within a business context.

# Self: Students

- Cultivate awareness of the opportunities and challenges posed by digitalization in leadership and organizational development.
- Gain practical tools and knowledge for leading effectively in future business environments.
- Develop critical thinking by assessing diverse viewpoints, questioning assumptions, and reflecting on personal biases during learning cycles and case studies.
- Enhance their ability to integrate theoretical insights with practical application, preparing for impactful roles in their careers.

#### Content

#### Focus:

This course addresses the transformation of organizations, individuals, and leaders into the digital age, emphasizing the human aspects of digital transformation and its broader implications.

- 1. The Human Side of Digital Transformation:
- Acknowledging that not everyone is naturally agile or easily adaptable, the course highlights the
  health-related risks of digitization, such as work intensification, burnout, and the erosion of work-life
  balance.
- Strategies to mitigate these risks while fostering an environment of well-being are explored.
- 2. Impact of New Organizational Models:
- Explore how digitally enabled organizational frameworks (e.g., semi-autonomous teams, lean management, agile network organizations, holocracy, and gig work) influence individual self-worth, sense of purpose, connectedness, autonomy, and psychological safety.
- Assess the implications of these changes for workforce dynamics and leadership.
- 3. Readiness for Digital Transformation:
- Evaluate the preparedness of individuals, teams, and organizations for digital transformation, focusing
  on areas like change management, upskilling, and fostering an agile mindset.
- Understand the role of leadership in guiding and supporting readiness initiatives.

# **Key Concepts and Models Covered:**

- Leadership Approaches: Exploring transformational, transactional, servant, situational, and digital leadership models to adapt to modern organizational needs.
- Meaningful Work: Understanding the relationship between meaningful work and outcomes like performance, absenteeism, motivation, and employee engagement.
- Positive Change Management: Employing frameworks to facilitate and sustain constructive organizational change and digital transformation.
- Organizational Design and Development: Analyzing and applying principles to structure organizations effectively in the digital era.

# Teaching and learning methods

The module employs a blend of theoretical instruction and practical application, including case studies, group projects, and interactive discussions. Students will engage with real-world scenarios to develop problem-solving skills pertinent to digital leadership and organizational development.

Strong focus on experience, creativity, discussion and reflection based pedagogy / involvement of practitioners who report on their experiences with digital transformation

Literature	Will be made available via Moodle
Workload	180 hours
Attendance requirement	All on-campus workshops in CW8, CW12, CW18 and CW21

# **Competency assessment**

In addition to the on-campus workshops, the semester is divided into learning cycles. Assignments are regularly completed during these learning cycles (graded assignments and non-graded). The final learning cycles and submission dates for assignments are published via Moodle before the start of the semester.

All assignments (graded and non-graded) must be completed and submitted on time in order to pass the module. The module coordinators reserve the right to design some workshop assignments as individual assignments. The final allocation will be announced at the beginning of the semester.

#### Aids for written examination

None

## Mode of repetition

If a student receives an insufficient grade of 3.5, they may approach the lecturer to discuss the conditions for resubmission, including the task and deadline. For a resubmitted assignment, the maximum achievable grade is 4.0.

If the grade is below 3.5, the module may be repeated once.

#### Follow-up modules

People and Collaboration - D03

#### Degree programme, semester

MSc Digital Business Administration, 2024-2025, 4 FS, BB, Bern MSc Digital Business Administration, 2025-2026, 4 FS, BB, Bern MSc Digital Business Administration, 2024-2025, 2 FS, BB, Bern



# DLC2 - Live Case Project 2 - MWD2005

DLOZ - LIVE Gase i Toject Z - MIVID2003		
ECTS	1	
Study language	English	
Module type	Optional module (countable)	
Lecturer(s)	Marti Olivier	
Module responsibility	Marti Olivier	
Short description of the module	Live Case Project is the central element of the Master Digital Business Administration Curriculum. Students apply their acquired knowledge and skills in developing solutions of a complex, real-world challenge of design digital business in start-ups or interapreneurship venture projects. The challenge of the live case project come from real businesses and organisations. Student work together with the representatives of the live case organisations and other experts. They need to manage this project in an appropriate way, use appropriate project management approach, tools and methods in this fast changing environment and high speed of start up in order to provide the agreed output/deliverables.  Live Case Project covering Scenario - Expand Digital Business.	
Competencies upon completion	Teambuilding Project management Agile project management Collaboration and co-creation Stakeholder management Solution Pitch	
Content	The content of the live case project is mainly covered by the hands on live case project sessions. Especially the project planning, project status reporting, pitchig, stakeholder management.	
Teaching and learning methods	Coaching session, status reports, feedbacks	
Literature	Literature specific to the Live Case Project will be provided in MS Teams.	
Workload	30 hours	
Contact lessons	On-campus workshops - Live Case Project Sessions: - Kick-off Live Case - Q&A Session with Live Case Partner - Final Presentations  Virtual Live Case Project Sessions (with Head of Live Case Project): - Status Reports - Pitches	
Attendance requirement	All live case sesssions during the on-campus workshops in CW8, CW12, CW18 and CW21.	

# DLC2 - Live Case Project 2 - MWD2005

# **Competency assessment**

In addition to the on-campus workshops, the semester is divided into learning cycles. Assignments are regularly completed during these learning cycles (graded assignments and non-graded). The final learning cycles and submission dates for assignments are published via Moodle before the start of the semester.

All assignments (graded and non-graded) must be completed and submitted on time in order to pass the module.

Active participation in all Live Case Project Sessions is required (pass/not passed).

#### Mode of repetition

If a student receives an insufficient grade of 3.5, they may approach the lecturer to discuss the conditions for resubmission, including the task and deadline. For a resubmitted assignment, the maximum achievable grade is 4.0.

If the grade is below 3.5, the module may be repeated once.

#### Comment

The formation of groups according to given specifications (e.g. group size and diversity) and the effective/efficient teamwork as well as a fair distribution of the workload is the responsibility of the individual students respectively their teams. New teams are formed for each live case or semester!

#### Degree programme, semester

MSc Digital Business Administration, 2024-2025, 2 FS, BB, Bern



# DD2 - Deep Dive Digital Transformation II - MWD3007

ECTS 3

Study language English

Module type Optional module (countable)

Lecturer(s) Ruf Julian

Module responsibility Ruf Julian

Short description of the module

Deep Dive Digital transformation elective modules provide the students the opportunity to deepen their knowledge and expertise within a specific field of digital transformation. The modules promote a transfer of students practical experience into the applied research and vice versa.

It is eligible for the students who have already gathered a significant experience and expertise through their practical experience, the modules provides such students with the possibility to materialize this know-how towards an add-on "Individual Expertise Profile" in the Master of Digital Business Administration.

The "Individual Expertise Profile" can be acquired in the field of digitalization of a specific industry or function.

**Entry requirements** 

A prerequisite to subscribe for DD2 is a successfully passed DD1 Deep Dive Digital Transformation 1 (DD1)

Competencies upon completion

Subject: Students

- deepen and reflect their knowledge and expertise in a given industry or function and transfer it into the applied research
- write a focus/white paper in the field of digital transformation of the given industry or function valuable for the practitioners
- present the gathered experience and knowledge to a target audience in the appropriate way

Methods: Students

- use the learned Methods of the research modules and apply those to their own framework
- can formulate a research question based on a gap between current and leading practices as well as academic research
- will be able to present and discuss their findings in a colloquium
- will be required to work on their own while being coached

Social: Students

- will be able to navigate different opinions and moderate a colloquium in a professional way
- are required to connect to the industry outside of BFH

Self: Students

- are required to present themselves self-confident in front of inustry experts
- will be needed to manage their work by themselves
- develop critical thinking through assesing different point of views

Content

Preparation of a public colloquium for an interested group of experts (practitioners, researchers, etc.) in a given field.

- Presentation of the white paper results (DD1): good presentation incl. visualisation
- Event organised by BFH Master, businesses/public to be invited
- Reflection of what competencies and personal development is required in "Strategy, Culture, Structure) to successfully master the digital transformation as indicated in the white paper, reflection of the skills "hands-on vs. visionary" (elective module Deep Dive Digital Transformation II)

Teaching and learning methods

Individual coaching sessions with DD2 supervisor Individual self learning phases



# DD2 - Deep Dive Digital Transformation II - MWD3007

Literature	Individual depending on the area of specialization TBD by DD2 supervisor
Workload	90 hours
Contact lessons	Individual Coaching Session with DD2 supervisor
Attendance requirement	Individual Coaching Session with DD2 supervisor
	Public colloquium
Competency assessment	Public colloquium preparation and execution (presentation of DD1study)
	Reflection Report
Mode of repetition	If a student receives an insufficient grade of 3.5, they may approach the lecturer to discuss the conditions for resubmission, including the task and deadline. For a resubmitted assignment, the maximum achievable grade is 4.0.
	If the grade is below 3.5, the module may be repeated once.
Comment	The elective module DD1 and DD2 are part of the portfolio needed for acquiring "Individual Expertise Profile" within Master of Digital Business Administration
Degree programme, semester	MSc Digital Business Administration, 2024-2025, 2 FS, BB, Bern MSc Digital Business Administration, 2024-2025, 4 FS, BB, Bern MSc Digital Business Administration, 2025-2026, 3 HS, BB, Bern MSc Digital Business Administration, 2025-2026, 4 FS, BB, Bern



# DO4 - International Integration - Study Trip - MWD4001

ECTS	3
Study language	English
Module type	Elective module
Lecturer(s)	Endrissat Nada, Ruf Julian
Module responsibility	Endrissat Nada, Ruf Julian
Short description of the module	The DO4 module provides insights into international business with the focus on digital transformation and promotes the intercultural competence via experience.

Competencies upon completion

Focus on self-organized work on project in all phases (preparation, study trip, reflection)

Subject: Students

- Reflect and deepen the competencies and knowledge acquired during the master program
- in an international context of the given destination
- on the basis of specific project with the local partners during a study trip

#### Method: Students

- Will take responsibility to work with the course material in the learning cycles and to understand, question and reflect on the courser material
- will be challenged to reflect on their existing knowledge and experience and to integrate new insights in their practice and thinking.

# Social: Students

- understand the influences and effects of technological, organizational and social trends for future work arrangements
- get to know the unpredictability in group work when group dynamics in the interactions with other students, lecturers and other actors in an international environment.
- are able to take on different point of views and establish common ground
- recognize difficult situations, develop an understanding for viable solutions, and drive them in the interantional business context.

# Self: Students

- develop an awareness of opportunities and challenges in the context of work and digitalization
- learn practical information and tools for their future business careers.
- develop internacultural competence through reflecting their study trip experience



# DO4 - International Integration - Study Trip - MWD4001

#### Content

#### Subject content:

- Intercultural Competences
- Digital Business and Digital Transforamtion in the interantional context

#### Methods:

- Agile project management
- Further according to the desctionation and DO4 international live case project

#### Teaching and learning methods

On-campus preparation day with deep dive into the intercultural aspects and the local history, culture and business of the country of destination.

Study Trip: Guided program of company visits and self-organized work on international live case project, along with cultural program and guest lectures.

Literature

Literature will be provided on Moodle depending on the destination.

Workload

90 hours

**Contact lessons** 

On-campus Intercultural Preparation & Project Kick-off Day, Friday, 28.02.2025

Study Trip: Tallinn 30.03.- 05.04.2025

Attendance requirement

On-campus Intercultural Preparation & Project Kick-off Day / Study Trip incl. all the visits, lectures and excursions on the study trip program.

# Competency assessment

All assignments (graded and non-graded) must be completed and submitted on time in order to pass the module. The module coordinators reserve the right to design some workshop assignments as individual assignments. The final allocation will be announced at the beginning of the semester.

DO4 consists of a project proposal, a status report presentation during study trip (Friday, 04.04.2025) and a final report.

100% group work as the main purpose is the team-based implementation of the knowledge gained on a international live case project.

## Mode of repetition

If a student receives an insufficient grade of 3.5, they may approach the lecturer to discuss the conditions for resubmission, including the task and deadline. For a resubmitted assignment, the maximum achievable grade is 4.0

If the grade is below 3.5, the module may be repeated once.

# Degree programme, semester

MSc Digital Business Administration, 2024-2025, 4 FS, BB, Bern MSc Digital Business Administration, 2025-2026, 4 FS, BB, Bern



# DTM - Digital Transformation - Management and Marketing - MWD2011

ECTS 6

Study language English

Module type Optional module (countable)

Lecturer(s) Küffer Nicole, Peskova Marie, Riedl Reinhard

Module responsibility Küffer Nicole, Peskova Marie, Riedl Reinhard

Short description of the module

International Collaboration Module:

Digital Transformation: Marketing and Management

The majority of the module will be held virtually as a cooperation between the following institutions:

Berner Fachhochschule, Switzerland Niederrhein University of Applied Sciences Germany, Tampere University of Applied Sciences, Finland Masaryk University, Brno, Czech Republic Arad University, Romania

Students will work in mixed interantional groups. The students will participate in a common, joint sessions virtually (see the synchronous virtual sessions dates and times below). Appart from these sessions students are flexible to work on the chosen topic. The students groups will further define and design their project, that will be delivered in the final workshop that is held on side. Students will also provide one of their fellow students teams with a review/opposition to their work.

The students will work on a predefined taks/projects in a mixed multinational teams and will be coached and suported by the lectureres from each University. The overarching theme of the module is **digital transformation: Marketing and management**.

**Entry requirements** 

General knowledge in Management and Marketing and digital transformation (e.g. DS1a)

#### Competencies upon completion

Content competence:

Students will understand and gain insights on

- the phenomena of digital transforamtion from the multinational prospective
- the differences in the stages and approached to digitalization in the four different countires
- the insights related to the topics of marketing and management, such as digital marketing, data-based marketing, digitalization and CSR management, digitalization and circularity. etc.
- the impact that digital transformation has on the various functions and industries in the respective countries of the participant (Germany, Finnland, Kosovo and Switzelrnad)

Social and Self- Competence:

- Cross-cultural competence, communicative competence
- interpersonal skills, working in virtual teams



# DTM - Digital Transformation - Management and Marketing - MWD2011

#### Content

The following areas will be covered in the virtual input sessions by the lecturers of all participation institutions:

- Digitalization
- Digital Marketing
- Data-based Marketing
- Digitalization and Circularity
- Data- based enterprise management - Digitalization and eco-efficiency.
- etc.

Students will work on their digital transformation topics (assigned to one of the lecturers/coaches) together with their international team.

## Teaching and learning methods

International virtual team work

Internation virtual colaborative sessions provided by all participation universities

Virtual session

Input sessions

Impuls inputs

Virtual workshops

Oppositions/reviews

# Literature

Literature will be provided during the course.

#### Workload

180 hours

# **Contact lessons**

- Kick-off meeting (Zoom): 2 April, 4 pm (CET).
- Interim seminar (Zoom): 16 April, 5 p.m. (CET) Final Seminar in Brno, Czechia: 2.6. (9am)-3.6 (5pm)

# Attendance requirement

Virtual Sessions:

Kick off session (Date in April TBD) 2 hours

Interim Seminar Status report (Date in May TBD) 2 hours

On Side/Hybrid Session: TBD Final workshop: 2 days



# DTM - Digital Transformation - Management and Marketing - MWD2011

# Competency assessment

# Group tasks

in mixed groups with fellow students from all partner universities. As the international and intercultural (virtual) collaboration is the main method of the module the proof of competence will be a group work.

Group work (to be confirmed in the first session):

- written report: 20%
- presentation: 20 %
- opposition/discussion 40 %
- reflection report on the use of Al tools: 20 %

## Mode of repetition

If a student receives an insufficient grade of 3.5, they may approach the lecturer to discuss the conditions for resubmission, including the task and deadline. For a resubmitted assignment, the maximum achievable grade is 4.0.

#### Degree programme, semester

MSc Digital Business Administration, 2024-2025, 4 FS, BB, Bern MSc Digital Business Administration, 2025-2026, 4 FS, BB, Bern MSc Digital Business Administration, 2024-2025, 2 FS, BB, Bern



ECTS 6

Study language English

Module type Elective module

Lecturer(s) Gomez Teijeiro Lucia, Hadji Misheva Branka, Krebs Michel

Module responsibility Krebs Michel

Short description of the module

Data analytics is a crucial tool for companies facing fast emerging and ever-changing business challenges.

Against this background, the aim of this course is to provide a comprehensive overview of approaches that support data-driven decision-making. With a special focus on advanced analytics, this entail s b asic techniques, methodologies, and practical skills required to draw and communicate meaningful insights from data.

The course takes a practical approach using the programming language R.

**Entry requirements** 

Mathematical and Statistical knowledge of a Bachelor Degree in Business Administration



#### Competencies upon completion

#### Subject: Students

- ability to work with data, to design data base management solutions
- understand and practice main data analytics methods
- experience with a programming language
- understand how to communicate with senior managers about data issues

#### Method: Students

- will focus on self-study and reflective learning.
- will take responsibility to work with the course material in the learning cycles and to understand, question and reflect on the courser material
- will be required to actively participate and prepare for class and get familiar with tools and methods
  used in distance learning and to tackle the live case.
- will be required to comment on and give feedback to other students as part of the distance learning cycles
- will be challenged to reflect on their existing knowledge and experience and to integrate new insights in their practice and thinking.

#### Social: Students

- understand the influences and effects of technological, organizational and social trends for future work arrangements
- get to know the unpredictability in group work when group dynamics in the interactions with other students, lecturers and representatives of the live case unfold.
- are able to take on different point of views and establish common ground
- recognize difficult situations, develop an understanding for viable solutions, and drive them in the business context.

#### Self: Students

- · develop an awareness of opportunities and challenges in the context of work and digitalization
- learn practical information and tools for their future business careers.
- develop critical thinking through assessing different point of views (including personal biases) in the learning cycles and learning activities in the case study

#### Content

Live Cases Anchoring

Characteristics of a data-driven organization and fields of application for advanced analytics

Basic programming with R

Various methods from the field of descriptive statistics as well as from machine learning

Principles of effective data visualization



Teaching and learning methods

Virtual cycles: videos

Structure of the videos Real problem to be solved Idea of the method

Explanation of the main features of the method, how the method works and what are the pitfalls.

Quiz questions during the video

Assignments with solution where the students apply the methods working on data, deriving analytic results and

providing an interpretation of the results

Live Cases: On Campus, Coaching Sessions

Literature

Instructional videos are self-contrained.

The material is self-contained.

Students need not to consider additional references.

Workload

180 hours

**Contact lessons** 

On-campus workshops

Attendance requirement

All on-campus workshops in CW8, CW12, CW18 and CW21

**Competency assessment** 

In addition to the on-campus workshops, the semester is divided into learning cycles. Assignments are regularly completed during these learning cycles (graded assignments and non-graded). The final learning cycles and submission dates for assignments are published via Moodle before the start of the semester.

All assignments (graded and non-graded) must be completed and submitted on time in order to pass the module.

DT2 is divided into

- 70% Individual assignments within virtual learning cycles and graded final exam.
- 30% Live Case Output (MVP Live Case)

In the case that the module is not passed, the module will appear as "not fullfield" on the Transcript of Records.

Aids for written examination

Open book, BFH-Calculator

For details to the aids allowed during written exams see "written examination regulations" on Moodle: https://moodle.bfh.ch/pluginfile.php/1805497/mod\_label/intro/written\_examination\_regulations\_AS2223.pdf

Degree programme, semester

Mode of repetition	If a student receives an insufficient grade of 3.5, they may approach the lecturer to discuss the conditions for resubmission, including the task and deadline. For a resubmitted assignment, the maximum achievable grade is 4.0.
	If the grade is below 3.5, the module may be repeated once.
Follow-up modules	DT3

MSc Digital Business Administration, 2024-2025, 2 FS, BB, Bern



# DS2 - Business Expansion - MWD2001

6

Study language English

Module type Elective module

Lecturer(s) Braun Aron, Hehn Jennifer, Liedtke Andreas, Van Heijingen Markus Petrus

Module responsibility Braun Aron, Hehn Jennifer, Liedtke Andreas, Van Heijingen Markus Petrus

Short description of the module

Students will gain both practical methods and strategic insights for expanding existing businesses through digital innovation. On the methodological side, they will focus on iterative processes and developing a strong sense of customer empathy to design and refine solutions that truly meet customer needs. On the strategic side, they will explore digital business strategies and innovation practices aimed at creating new products, services, and business models. This combined approach in methods and strategy will equip students to fully realize the potential of digital business model patterns.

#### Competencies upon completion

#### Subject:

- Students apply knowledge of micro-economics, management, and entrepreneurship to drive digital
  expansion with a customer-centered focus.
- Students explore strategic approaches to digital transformation, including innovative business models and the integration of customer insights.
- Students develop skills to design new offerings and expand business models, aligning them with customer needs and organizational potential.

#### Method:

- Learning is applied and iterative, with a focus on active engagement through case studies, virtual learning, and live interactions with industry.
- Students apply tools and methods for customer-centered innovation and digital expansion within their live cases.

# Social:

- Students understand the impact of technological and organizational trends on digital transformation and customer perception.
- Students learn to navigate group dynamics in live cases, gaining empathy and adaptability in collaborative settings.
- Students are equipped to switch perspectives and find solutions that resonate across businesses and cultural contexts.

#### Self:

 Students enhance their creative confidence through experiential learning, they refine critical thinking and problem-solving, applying iterative and customer-focused approaches.

#### Content

- Different approaches to consider "digital" in strategic management including refresh of "digital" definitions and innovation dimensions and processes
- Organizational potential for digital business expansion
- Exanding the business with greater experiences
- Exanding the business with new Offerings and Business Models

# Teaching and learning methods

- Virtual learning cycles (asynchronous)
- On-campus interactive blocks

#### Literature

Literature will be provided on Moodle.



## DS2 - Business Expansion - MWD2001

Workload	180 hours
Contact lessons	On-campus workshops
Attendance requirement	All on-campus workshops in CW8, CW12, CW18 and CW21.

#### **Competency assessment**

In addition to the on-campus workshops, the semester is divided into learning cycles. Assignments are regularly completed during these learning cycles (graded assignments and non-graded). The final learning cycles and submission dates for assignments are published via Moodle before the start of the semester.

All assignments (graded and non-graded) must be completed and submitted on time in order to pass the module.

DS2 consists of

70% assignments within virtual learning cycles

- Three assignments will be graded:
- Graded Assignment 1 Individual = 25%
- Graded Assignment 2 Group (12%) + Individual (13%) = 25%
- Graded Assignment 3 Group = 20%

30% group assignment: Live Case presentation & report

### Mode of repetition

In case of an insufficient grade of 3.5, students may approach the lecturer to define the conditions (task and deadline) of the resubmission. In case of the re-submission a maximum grade of 4.0 can be achieved for a given assignment.

If the grade is lower than 3.5, the module can be repeated once in the next semester in which the module is offered.

## Follow-up modules

DS3, DD1, DD2

#### Degree programme, semester

MSc Digital Business Administration, 2025-2026, 4 FS, BB, Bern MSc Digital Business Administration, 2024-2025, 4 FS, BB, Bern MSc Digital Business Administration, 2024-2025, 2 FS, BB, Bern



# DR4 - Master-Thesis - MWD4002

ECTS	21
Study language	English
Module type	Compulsory module
Lecturer(s)	Pruschak Gernot
Module responsibility	Pruschak Gernot
Short description of the module	Students write their Master Thesis in this Module. Students choose either the form of a scientific paper or a white paper for their thesis. Students are guided through the Master thesis process by the structured Moodle site and module responsible lecturer. Students get individual support and coaching by their Thesis supervisors and co-supervisors.
Content	The module contains one colloquium and a final presentation. Students plan the timeline of their thesis individually respecting the Master Thesis Requirements. Students are responsible to subscribe for their colloquium and final presentation and manage their timeline.  The content of the Master Thesis Project depends upon what each student chooses. However, the topic of the Master Thesis should relate to the general theme of Digital Business.
Teaching and learning methods	Coachings with supervisors and co-supervisors  Colloquium Presentation  Master Thesis Presentation
Literature	A factsheet on how to write the Master Thesis is provided in Moodle.
Workload	600 hours
Contact lessons	1 Colloquium 1 Final presentation
	Students make individual appointments with their Thesis supervisors and co-supervisors.
Attendance requirement	Attendance is required for the whole colloquium session (one full morning or one full afternoon).



# DR4 - Master-Thesis - MWD4002

Competency assessment

5% Colloquium Paper

55% Master Thesis

5% Data Sharing

5% Showroom

30% Final Presentation

Both, the Master Thesis as well as the Final Presentation have to be graded at at least 60% of the available points to achieve a passing grade for the module.

Mode of repetition

Students receiving an insufficient grade for the written part CANNOT participate in the final presentation.

In addition, for the repetition of the Master Thesis the general repetition mode applies: Master Thesis module re-enrollment by the students.

However, if either the thesis or the final presentation receives a 3.5, students are allowed to improve their submission or retake the presentation without new enrollment. Maximum grade after improvement is 4.0.

Degree programme, semester

MSc Digital Business Administration, 2024-2025, 4 FS, BB, Bern MSc Digital Business Administration, 2025-2026, 4 FS, BB, Bern



# DR2 - Scientific Project 1 - MWD2004

ECTS 6

Study language English

Module type Compulsory module

Lecturer(s) Dey Pascal, Endrissat Nada, Pruschak Gernot

Module responsibility Pruschak Gernot, Dey Pascal, Endrissat Nada

#### Short description of the module

The module Scientific Project 1 (DR2) continues the Scientific Research Journey by building on and deepening the topics introduced in Scientific Research Methods (DR 1).

- The module enables students to carry out scientific work independently by equipping them with a "scientific toolbox".
- Relevant steps of the research process will be examined in more detail in multiple workshops.
- In "zoom in" sessions, we look at various scientific methods and topics.
- Students apply what they have learned directly in the context of an overarching research question.
- Students work on individual as well as group tasks. Each workshop includes an individual preparation
  task, the opportunity to learn and practice the workshop content, and a group follow-up task.
- DR2 focuses in particular on the steps of research design and methods for qualitative and quantitative data collection. DR3 (fall semester 2025) will then focus on the steps of qualitative and quantitative data analysis, presentation of results as well as theory development, reflection and science communication.

# **Entry requirements**

Scientific Research Methods (DR1)

#### Competencies upon completion

# Professional and methodological competences:

Students can

- Define a relevant research problem and formulate a suitable research question
- Summarize relevant scientific literature on a subject area
- Create a research design
- Collect qualitative and quantitative data

# Social and personal skills:

#### Students can

- Work in a team and alone on a research problem
- Think and critically reflect about problems, scientific literature and data

# Content

- 1. Research problem definition and research question
- 2. Literature analysis and summary
- Research design
- 4. Qualitative data collection
- Quantitative data collection



Degree programme, semester

# DR2 - Scientific Project 1 - MWD2004

Teaching and learning methods	<ul> <li>Individual preparation tasks (individual assignments)</li> <li>Knowledge transfer and application in exercises in in-presence workshops</li> <li>Independent application, implementation and development in follo-up taks (group assignments)</li> </ul>
Literature	Topic-specific literature will be made available via Moodle
Workload	180 hours
Contact lessons	On-campus workshops, virtual coaching sessions with workshop leaders upon request
Attendance requirement	All on-campus workshops in CW8, CW12, CW18 and CW21
Competency assessment	In addition to the on-campus workshops, the semester is divided into learning cycles. Assignments are regularly completed during these learning cycles (graded assignments and non-graded). The final learning cycles and submission dates for assignments are published via Moodle before the start of the semester.  All assignments (graded and non-graded) must be completed and submitted on time in order to pass the module.  DR2 is divided into a group assignment (60%) and an individual exam (40%).
Mode of repetition	If a student receives an insufficient grade of 3.5, they may approach the lecturer to discuss the conditions for resubmission, including the task and deadline. For a resubmitted assignment, the maximum achievable grade is 4.0.
	If the grade is below 3.5, the module may be repeated once in the next semester when it is offered. Passing DR2 is a prerequisite for participating in DR3.
Follow-up modules	DR3 DR4: Master Thesis

Valid: 01.02.25 - Print date: 21.11.24

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# DCR - Corporate Digital Responsibility - MWD4005

ECTS	3
Study language	English
Module type	Optional module (countable)
Lecturer(s)	Obwegeser Nikolaus, Peskova Marie
Module responsibility	Obwegeser Nikolaus, Peskova Marie

#### Short description of the module

Corporate Digital responsibility (CDR) defines the values, norms and principles that guide organizations and individuals in the design, development, implementation, and use of digital technologies. With the ever-expanding digitalization of society, the need for an ethical discourse on how technology is embedded in human activity and the intended and unintended consequences of such a process becomes increasingly pressing.

Far from being abstract, ethical issues of digitalization are already impacting everyday lives in private and professional contexts. Negative examples that illustrate the need for digital responsibility are well-known, and often go beyond what can be captured within a legal framework. In this module, we develop the foundations of how to identify, assess and manage the ethical dilemmas arising when using digital technologies.

#### Competencies upon completion

Upon completion of this module, students will be

- able to identify and reflect upon common dilemma related to the use of digital technologies in organizations
- capable to systematically assess digital innovation projects with regard to ethical concerns
- knowledgeable about tools and frameworks to implement responsible design practices for digital products and services

#### Content

- 1. Computer ethics, technology dilemmas, law vs. ethics
- 2. Generative nature of digital technologies, intended and unintended consequences
- 3. Responsible design practices, tools and frameworks
- 4. Integration of responsible design with existing processes and methods

# Teaching and learning methods

Lecture, workshop, individual and group work, discussions, guest lecture(s)/excursion



# DCR - Corporate Digital Responsibility - MWD4005

#### Literature

#### Mandatory readings:

Moor, J. H. (1985). What is computer ethics?. Metaphilosophy, 16(4), 266-275 https://web.cs.ucdavis.edu/~rogaway/classes/188/spring06/papers/moor.html

Computer Ethics: Basic Concepts and Historical Overview https://web.cs.ucdavis.edu/~rogaway/classes/188/spring06/papers/ standfordencyclopedia-computerethics.pdf

Wade, M. (2020). Corporate responsibility in the digital era. MIT Sloan Management Review, 28 https://sloanreview.mit.edu/article/corporate-responsibility-in-the-digital-era/

Lobschat, L., Mueller, B., Eggers, F., Brandimarte, L., Diefenbach, S., Kroschke, M., & Wirtz, J. (2021). Corporate digital responsibility. Journal of Business Research, 122, 875-888

https://www.sciencedirect.com/science/article/pii/S0148296319305946

Further material:

https://www.wired.com/story/technology-design-marginalized-communities/ https://anchor.fm/rob-price4/episodes/Episode-6---A-discussion-with-Michael-Wade-epfbts/a-a4esq74

#### Workload

#### 90 hours

#### **Contact lessons**

2x Input session -online

1x Final Presentation Session - online Coaching sessions

4 Virtual Learning Cycles - asynchronous

#### Attendance requirement

All on-campus workshops in CW8, CW12, CW18 and CW21

2x Input session online 1x Final Presentation session online Dates TBD at the beginning of the semester

## **Competency assessment**

In addition to the on-campus workshops, the semester is divided into learning cycles. Assignments are regularly completed during these learning cycles (graded assignments and non-graded). The final learning cycles and submission dates for assignments are published via Moodle before the start of the semester.

All assignments (graded and non-graded) must be completed and submitted on time in order to pass the module.

#### DCR consists of

- 4 Virtual Learning Cycles Assignemnts submitted (Fullfilled/not Fullfilled)
- Group work graded: Digital Responsibility Project 50%, Presentation of Digital Responsibility Project 50%

# Mode of repetition

If a student receives an insufficient grade of 3.5, they may approach the lecturer to discuss the conditions for resubmission, including the task and deadline. For a resubmitted assignment, the maximum achievable grade is 4.0.

If the grade is below 3.5, the module may be repeated once.



# DCR - Corporate Digital Responsibility - MWD4005

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# DD1 - Deep Dive Digital Transformation I - MWD2007

ECTS	3
Study language	English
Module type	Optional module (countable)
Lecturer(s)	Ruf Julian
Module responsibility	Ruf Julian
Short description of the module	Deep Dive Digital transformation elective module provide the students the opportunity to deepen their knowledge

Deep Dive Digital transformation elective module provide the students the opportunity to deepen their knowledge and expertise and transfer their practical experience into the applied research.

It is designed for the students who have already gathered a significant experience and expertise through their practical experience and gives them the possibility to materialize this know-how towards an add-on "Individual Expertise Profile" in the Master of Digital Business Administration.

The "Individual Expertise Profile" can be acquired in the field of digitalization of a specific industry or function.

#### **Entry requirements**

This elective module is open to students that fullfill the following eligibility criteria:

- have at least 3 years of a relevant practical expertise in a given industry or function (i.e. Banking, Finance/efinance, Health Sector/eHealth, Marketing/Digital Marketing, etc.)
- can provide at least 3 relevant references from practitioners, experts in the field to proof their expertise (i.e. industry experts, relevant co-workers, managers, etc.)
- and are willing to put an extra effort into transferring and deepening their practical expertise and experience into their academic projects and work (DR2, DR3 and Masterthesis) and Deep Dive Digital Transformation elective module.

## How to apply?

Send an application letter to the head of Master Digital BA. The Application letter should contain the following:

- Expression of your motivation to deepen the expertise in the industry/function or a technology in the chosen field of expertise
- Proof of practical experience and expertise, i.e. at least 3 years of practical experience in the field of expertise (the industry/function or a technology
- Minimum of 3 references, i.e. experts in the in the chosen field of expertise (to confirm your experience and expertise)
- Include a first research question which identifies a gap between current practice and leading practices regarding the digital Transformation in the given field and outlook to expected development.
- Include a recommended Supervisor (e.g. Lecturer in the related field)



# DD1 - Deep Dive Digital Transformation I - MWD2007

#### Competencies upon completion

Subject: Students

- deepen and reflect their knowledge and expertise in a given industry or function and transfer it into the applied research
- write a focus/white paper in the field of digital transformation of the given industry or function valuable for the practitioners
- present the gathered experience and knowledge to a target audience in the appropriate way

#### Methods: Students

- use the learned Methods of the research modules and apply those to their own framework
- can formulate a research question based on a gap between current and leading practices as well as academic research
- will be able to present and discuss their findings in a colloquium
- will be required to work on their own while being coached

#### Social: Students

- · will be able to navigate different opinions and moderate a colloquium in a professional way
- are required to connect to the industry outside of BFH

#### Self: Students

- are required to present themselves self-confident in front of inustry experts
- will be needed to manage their work by themselves
- develop critical thinking through assesing different point of views

#### Content

- Transformation of the individual expertise (e.g. industry, function, method, technology) into applied research (project, white paper)
- DD1: Focus Paper/White Paper:
- Gap analysis between current practice and leading practices regarding the digital Transformation in the given field and outlook to expected development
- Form: paper
- elective module Deep Dive Digital Transformation I
- DD2: Public colloquium presentation (evtl. Evening Event in cooperation with a partner):
- Presentation: good presentation incl. visualisation
- Event organised by BFH Master, businesses/public to be invited
- elective module Deep Dive Digital Transformation II (ideally end of 3rd semester)
- Reflection of what competencies and personal development is required in "Strategy, Culture, Structure) to successfully master the digital transformation as indicated in the white paper, reflection of the skills "hands-on vs. visionary" (elective module Deep Dive Digital Transformation II)

# Teaching and learning methods

Individual coaching sessions with DD1 supervisor Individual applied reserach paper/focus/white paper

#### Literature

Individual depending on the area of specialization TBD by DD1 supervisor

# Workload

90 hours

#### **Contact lessons**

Individual coaching sessions with DD1 supervisor



# DD1 - Deep Dive Digital Transformation I - MWD2007

Attendance requirement	Individual coaching sessions with DD1 supervisor
Competency assessment	Focus Paper/White Paper 100%
Aids for written examination	None
Mode of repetition	If a student receives an insufficient grade of 3.5, they may approach the lecturer to discuss the conditions for resubmission, including the task and deadline. For a resubmitted assignment, the maximum achievable grade is 4.0.
	If the grade is below 3.5, the module may be repeated once.
Follow-up modules	Deep Dive Digital Transformation II DD2
Comment	The elective module DD1 and DD2 are part of the portfolio needed for acquiring "Individual Expertise Profile" within Master of Digital Business Administration
Degree programme, semester	MSc Digital Business Administration, 2024-2025, 2 FS, BB, Bern MSc Digital Business Administration, 2025-2026, 4 FS, BB, Bern MSc Digital Business Administration, 2025-2026, 3 HS, BB, Bern MSc Digital Business Administration, 2024-2025, 4 FS, BB, Bern