

Module Handbook

**Master Digital Leadership in Information Management
Version of examination regulation 20262**

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Module Name	Number
Research Project 1: Problem Understanding	
Module Coordinator	
Andy Weeger	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	15
Contact Hours per Week	6
Recommended Semester	1
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Research Project
Contact Study (in hours)	90
Self-Study (in hours)	285
Practical Training if applicable (in hours)	75
Total Workload (in hours)	450
Frequency	Winter Semester
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - systematically investigate practical challenges in IT management conducting explorative research (e.g., semi-structured interviews, document analysis) and theoretically framing the problem through integration of multiple conceptual lenses. - critically evaluate scientific literature with regard to methodological rigor, theoretical contribution, and contextual validity, and synthesize competing perspectives into a coherent assessment of the state of research that identifies unresolved tensions and theoretical gaps. Methodological Competence: Students are able to ... - iteratively develop a precise, theoretically grounded research question by synthesizing insights from practice and literature, justify its scientific contribution, and argue for its relevance to both academia and practice. - design and execute a systematic literature review by developing justified search strategies, establishing transparent inclusion/exclusion criteria, and applying rigorous coding and synthesis techniques to generate novel insights from existing knowledge. - strategically adapt research communication to different epistemic communities by translating findings into scientifically rigorous arguments for academic audiences while maintaining conceptual precision in action-oriented recommendations for practitioners. (2) Personal Competencies Self-Competence:

Students are able to ...

- navigate ambiguity and uncertainty in problem definition by employing structured sensemaking strategies, tolerate conceptual tensions during iterative problem refinement, and make defensible decisions despite incomplete information.
- critically reflect on their evolving understanding of the problem, recognize when additional expertise is needed, and proactively orchestrate support from supervisors, domain experts, and peer networks to address specific knowledge gaps.

Social Competence:

Students are able to ...

- elicit and synthesize diverse stakeholder perspectives through structured inquiry, identify underlying assumptions and conflicting rationalities, and integrate these insights into multi-perspective problem framings that acknowledge legitimate tensions.
- engage in collaborative knowledge construction through peer review and team discourse, critically incorporate feedback into research design, and defend research choices through evidence-based argumentation while remaining open to alternative interpretations.

Prerequisites and Co-requisites

Participation in Domain Fundamentals 1

Teaching and Learning Content

The module enables students to transform a broad practical challenge into a focused, scientifically grounded research question and to systematically review existing knowledge through a rigorous literature synthesis.

Core curriculum components:

- Challenge presentation and contextual analysis: Understanding organizational context, stakeholder landscape, and practical constraints
- Explorative problem investigation: Qualitative methods for problem exploration (interviews, observations, document analysis) and theoretical contextualization
- Philosophy of science foundations: Epistemological positions, research paradigms, and their implications for research design
- Domain-specific theoretical frameworks: Key theories and their application to problem framing
- Research question development: Criteria for research quality (relevance, rigor, originality), iterative refinement of research questions, and gap identification
- Systematic literature review methodology: Search strategy design, database selection, protocol development, inclusion/exclusion criteria, quality assessment, data extraction, coding schemes, and synthesis techniques
- Academic writing and argumentation: Structure and conventions of SLR papers, argumentation strategies, and academic voice
- Knowledge translation: Communicating research insights to practitioners, developing actionable recommendations, and navigating the rigor-relevance tension

Additional content is provided on-demand based on specific challenges and student needs (pull-principle).

Teaching Methods

Project-based learning, collaborative peer assessment, group investigation, mentored practice

Assessment (examination and coursework; details see course catalog)

Portfolio examination. Components can be found in the currently valid course catalog.

References and Other Learning Resources

Recker, J. (2021). Scientific research in information systems: A beginner's guide (2nd ed.). Springer.

Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. MIS Quarterly, 26(2), xiii–xxiii.

Templier, M., & Paré, G. (2018). Transparency in literature reviews: An assessment of reporting practices across review types and genres in top IS journals. European Journal of Information Systems, 27(5), 503–550.

Paré, G., Trudel, M.-C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. Information & Management, 52(2), 183–199.

Alvesson, M., & Sandberg, J. (2011). Generating research questions through problematization. *Academy of Management Review*, 36(2), 247–271.

Module Name	Number
Domain Fundamentals 1	
Module Coordinator	
Andy Weeger	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	5
Contact Hours per Week	2
Recommended Semester	1
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Seminar-style Teaching
Contact Study (in hours)	30
Self-Study (in hours)	120
Practical Training if applicable (in hours)	-
Total Workload (in hours)	150
Frequency	Winter Term
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - critically evaluate domain-specific theories and frameworks with regard to their underlying assumptions, scope conditions, and practical limitations. - systematically compare competing standards, frameworks, and best practices and assess their fit for specific organizational contexts based on explicit evaluation criteria. - identify and analyze emerging trends and contradictions in current research and practice discourse and derive implications for problem framing. Methodological Competence: Students are able to ... - select, adapt, and justify domain-specific analytical methods based on problem characteristics and contextual constraints. - synthesize domain knowledge from multiple sources (research, practice, regulation) to develop a comprehensive, multi-perspective problem analysis in Research Project 1. - evaluate the strengths and limitations of different analytical approaches and argue for methodological choices in the context of ambiguous problem situations. (2) Personal Competencies Self-Competence: Students are able to ... - strategically navigate unfamiliar subject areas by identifying key concepts, evaluating source credibility,

and building structured knowledge. - Iteratively integrate domain knowledge with literature review insights (RP1) to identify gaps, formulate research questions, and construct theoretically grounded problem framings. Social Competence: Students are able to ... - facilitate expert discourse in teams, synthesize divergent perspectives, and negotiate shared problem framings despite conflicting stakeholder interests. - translate complex domain-specific knowledge across different stakeholder groups (technical experts, management, external partners) while maintaining conceptual rigor.
Prerequisites and Co-requisites
None
Teaching and Learning Content
The module provides the conceptual foundation for the problem analysis in Research Project 1 (RP1) and covers following topics in the domain of the challenge: - Domain-specific theories and frameworks (e.g., AI governance, cybersecurity frameworks, data governance, digital platform economics) including their epistemological foundations and empirical validation. - Current research and practice discourses and state-of-the-art in the respective domain with particular focus on emerging paradigm shifts. - Relevant standards, regulations, and best practices including critical analysis of their design rationale, implementation challenges, and contextual appropriateness. - Methodological approaches for domain-specific problem analysis, including their assumptions, strengths, and boundary conditions. - Stakeholder perspectives and governance structures.
Teaching Methods
Inquiry-based learning, facilitated group discussion, case studies, contextualized learning (industry integration)
Assessment (examination and coursework; details see course catalog)
Oral Examination
References and Other Learning Resources
Galliers, R. D., & Currie, W. L. (Eds.). (2011). <i>The Oxford Handbook of Management Information Systems: Critical Perspectives and New Directions</i> . Oxford University Press.
Challenge-specific literature will be announced in the course catalog.
Current research articles and industry reports on the respective domain.
Relevant standards and frameworks

Module Name	Number
IT-Management 1: Analysis & Evaluation	
Module Coordinator	
Arne Buchwald	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	5
Contact Hours per Week	2
Recommended Semester	1
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Seminar-style Teaching
Contact Study (in hours)	30
Self-Study (in hours)	120
Practical Training if applicable (in hours)	-
Total Workload (in hours)	150
Frequency	Winter Term
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - critically analyze regulatory requirements for IT organizations, assess their strategic and operational implications for IT management approaches, and develop strategies that balance legal obligations with organizational objectives. - evaluate and adapt established IT management concepts to the specificities of the European and German economic and legal context, translate these concepts across cultural and linguistic boundaries, and justify adaptations based on contextual requirements. Methodological Competence: Students are able to ... - systematically assess existing IT management frameworks by applying multi-criteria evaluation approaches, identify structural strengths, weaknesses, and gaps in relation to organizational strategy and maturity, and develop justified context-specific recommendations. - synthesize insights from multiple analytical perspectives (architecture assessment, compliance audits, performance benchmarking) to construct a holistic understanding of IT organizational effectiveness and identify leverage points for strategic intervention. (2) Personal Competencies Self-Competence: Students are able to ... - engage in critical self-reflection by systematically challenging their own analytical assumptions and

interpretations, actively seek disconfirming evidence, consider alternative framings of IT management challenges, and revise conclusions when evidence warrants. Social Competence: Students are able to ... - strategically communicate IT management analyses and recommendations to diverse stakeholder groups (C-level executives, IT teams, compliance officers, external auditors) by adapting technical depth, framing, and emphasis to stakeholder knowledge, interests, and decision-making needs while maintaining analytical rigor.
Prerequisites and Co-requisites
None
Teaching and Learning Content
The module develops analytical and evaluative competencies for understanding, assessing, and improving IT governance and management structures in complex organizational contexts. Content is updated to reflect current technological, regulatory, and market developments. Core thematic areas: - Comparative analysis and application of IT-management frameworks (COBIT, ITIL, ISO/IEC 38500, TOGAF, Zachman, etc.), framework selection and integration strategies, maturity assessment, legacy landscape analysis and modernization approaches. - European regulatory landscape (GDPR, NIS2, DORA, AI Act) and European/German legal specifics, industry-specific regulations, compliance-by-design approaches, regulatory risk and gap analysis. - Performance measurement frameworks, IT cost structures and portfolio management, benchmarking methodologies, IT operating model assessment (centralized/federated/hybrid), organizational readiness and capability maturity.
Teaching Methods
Dialogic teaching, case-based instruction, structured peer-to-peer collaboration
Assessment (examination and coursework; details see course catalog)
Written Exam or Oral Examination or Presentation
References and Other Learning Resources
Weill, P., & Ross, J. W. (2004). <i>IT governance: How top performers manage IT decision rights for superior results</i> . Harvard Business Press.
Ross, J. W., Weill, P., & Robertson, D. (2006). <i>Enterprise architecture as strategy: Creating a foundation for business execution</i> . Harvard business press.
Current publications on IT governance and enterprise architecture will be announced in the first session.

Module Name	Number
Leadership 1: Personal Effectiveness & Communication	
Module Coordinator	
Antje Wild	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	5
Contact Hours per Week	2
Recommended Semester	1
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Seminar-style Teaching
Contact Study (in hours)	30
Self-Study (in hours)	120
Practical Training if applicable (in hours)	-
Total Workload (in hours)	150
Frequency	Winter Term
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - critically evaluate communication models, facilitation approaches, and feedback frameworks with regard to their underlying assumptions and contextual appropriateness, select and adapt methods based on group dynamics, power structures, and desired outcomes, and justify their choices in light of situational constraints. Methodological Competence: Students are able to ... - strategically design and facilitate workshops, meetings, and collaborative processes to navigate complexity and divergent perspectives, employ appropriate techniques to achieve substantive outcomes (alignment, decision-making, problem-solving, innovation), and adapt facilitation strategies in response to emerging group dynamics while maintaining process integrity. (2) Personal Competencies Self-Competence: Students are able to ... - systematically assess their own working methods, cognitive biases, and stress responses, develop evidence-based strategies for personal productivity, resilience, and adaptive capacity, and intentionally practice techniques for constructive engagement with ambiguity and organizational change. Social Competence: Students are able to ...

- translate complex technical and conceptual content across diverse stakeholder groups (technical experts, senior leadership, end users) by strategically adapting depth, framing, and language while preserving conceptual rigor, and construct persuasive narratives that build shared understanding and enable informed decision-making. - foster constructive feedback cultures by modeling vulnerability and openness, facilitate difficult feedback conversations with empathy and directness, navigate interpersonal and organizational conflicts by diagnosing underlying interests, and employ appropriate conflict resolution strategies that preserve relationships while addressing substantive issues.
Prerequisites and Co-requisites
None.
Teaching and Learning Content
The module develops foundational communication, facilitation, and interpersonal competencies essential for leading collaborative work and managing stakeholder relationships in complex organizational contexts. Core thematic areas: - Communication theory and practice such as communication models (Shannon-Weaver, transactional models), active listening and inquiry techniques, framing and narrative construction, communication across hierarchies and cultures, written and oral communication strategies for different contexts. - Facilitation and meeting design such as facilitation frameworks (Liberating Structures, Design Thinking methods), workshop design and flow, techniques for divergent and convergent thinking, managing group dynamics and power imbalances, virtual and hybrid facilitation, dealing with difficult participants. - Feedback and conflict management such as feedback models (SBI, nonviolent communication), creating psychological safety for feedback, facilitating peer feedback processes, conflict diagnosis frameworks, interest-based negotiation, mediation techniques, addressing microaggressions and bias. - Personal effectiveness such as time management and prioritization frameworks, cognitive load management, stress and resilience strategies, metacognitive practices for self-awareness, growth mindset and learning from failure, strategies for navigating organizational change.
Teaching Methods
Social constructivist learning, active learning, formative assessment, metacognitive practice
Assessment (examination and coursework; details see course catalog)
Presentation or oral examination
References and Other Learning Resources
Topic-related research literature such as
Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. <i>American Psychologist</i> , 54(7), 493–503.
Ashford, S. J. (1986). Feedback-seeking in individual adaptation: A resource perspective. <i>Academy of Management Journal</i> , 29(3), 465–487.
Nunes, J. C., & Dreze, X. (2006). The endowed progress effect: How artificial advancement increases effort. <i>Journal of Consumer Research</i> , 32(4), 504–512.
Tetlock, P. E. (1985). Accountability: A social check on the fundamental attribution error. <i>Social Psychology Quarterly</i> , 227–236.

Module Name	Number
Research Project 2: Solution Design	
Module Coordinator	
Andy Weeger	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	15
Contact Hours per Week	6
Recommended Semester	2
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Research Project
Contact Study (in hours)	90
Self-Study (in hours)	285
Practical Training if applicable (in hours)	75
Total Workload (in hours)	450
Frequency	Summer Term
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - systematically translate research gaps and problem statements into explicit, theoretically grounded design requirements and apply design science research methodology to iteratively develop and evaluate artifacts that address identified needs. - abstract generalizable design principles from the evaluation of artifacts, theoretically explaining their effectiveness, and specifying boundary conditions for their applicability. Methodological Competence: Students are able to ... - design, develop, and refine prototypes through multiple build-evaluate cycles, systematically gather and analyze stakeholder feedback using appropriate evaluation methods, and synthesize insights into justified design improvements that balance competing requirements. - theoretically justify design decisions by explicitly linking artifact features to kernel theories and design requirements, document the design rationale in a transparent and reproducible manner, and conduct rigorous formative evaluations that generate evidence for design effectiveness. - strategically communicate design contributions by constructing dual narratives: scientifically positioning the artifact as a contribution to the knowledge base (utility, novelty, design knowledge) and translating design insights into actionable implementation guidance for organizational contexts. (2) Personal Competencies Self-Competence:

Students are able to ...

- proactively identify and critically assess ethical, ecological, and social implications throughout the design process, integrate value-sensitive design considerations into design requirements and evaluation criteria, and justify trade-offs between functionality, responsibility, and stakeholder interests.

Social Competence:

Students are able to ...

- strategically design and facilitate formats to elicit latent needs, negotiate conflicting requirements, and build shared understanding of challenges across diverse stakeholder groups.
- orchestrate collaborative design processes that integrate expertise from multiple domains, navigate divergent opinions through evidence-based argumentation, and defend design choices by articulating their theoretical foundation and empirical validation to both academic and practitioner audiences.

Prerequisites and Co-requisites

Research Project 1; Participation in Domain Fundamentals 2

Teaching and Learning Content

The module enables students to systematically develop an artifact that addresses the research gap identified in RP1, rigorously evaluate its utility and effectiveness, and derive generalizable design principles that contribute to the scientific knowledge base.

Core curriculum components:

- Design Science Research methodology: DSR frameworks (Hevner et al., Gregor & Hevner), research contribution types, positioning of DSR projects, rigor-relevance balance
- Theoretical foundation of design: Kernel theories, justificatory knowledge, design requirements specification, meta-requirements and meta-design
- Design knowledge articulation: Design principles, design patterns, technological rules, and their epistemic status
- Hypothesis development and testing: Formulating testable design propositions, linking features to outcomes, evaluation planning
- Iterative design and prototyping: Build-evaluate cycles, agile design methods, minimum viable artifacts, progressive refinement strategies
- Artifact evaluation methods: Quantitative and qualitative evaluation approaches, experimental designs, naturalistic evaluation, multi-method triangulation, validity considerations
- Abstraction and generalization: Pattern recognition across design instances, theoretical explanation of design effectiveness, boundary condition specification
- DSR publication strategy: Structure and argumentation of DSR papers, positioning novelty and utility, responding to reviews, revision strategies
- Science communication and knowledge translation: Communicating with different audiences, visualization of complex designs, storytelling for impact
- Ethics and responsibility in design: Value-sensitive design, anticipatory ethics, stakeholder inclusion, dual-use considerations, sustainability by design

Additional content is provided on-demand based on specific design challenges and methodological needs (pull-principle).

Teaching Methods

Project-based learning, collaborative peer assessment, group investigation, mentored practice

Assessment (examination and coursework; details see course catalog)

Portfolio examination. Components can be found in the currently valid course catalog.

References and Other Learning Resources

Recker, J. (2021). Scientific research in information systems: A beginner's guide (2nd ed.). Springer.

Hevner, A. R., March, S. T., Park, J., & Ram, S. (2004). Design science in information systems research. *MIS Quarterly*, 28(1), 75–105.

Peppers, K., Tuunanen, T., Rothenberger, M. A., & Chatterjee, S. (2007). A design science research methodology for information systems research. *Journal of Management Information Systems*, 24(3), 45–77.

Gregor, S., & Hevner, A. R. (2013). Positioning and presenting design science research for maximum impact. *MIS Quarterly*, 37(2), 337–355.

Gregor, S., & Jones, D. (2007). The anatomy of a design theory. *Journal of the Association for Information Systems*, 8(5), 312–335.

Module Name	Number
Domain Fundamentals 2	
Module Coordinator	
Andy Weeger	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	5
Contact Hours per Week	2
Recommended Semester	2
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Seminar-style Teaching
Contact Study (in hours)	30
Self-Study (in hours)	120
Practical Training if applicable (in hours)	-
Total Workload (in hours)	150
Frequency	Summer Term
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - critically analyze advanced concepts and methods of the challenge domain by evaluating their theoretical foundations, empirical evidence, and contextual applicability. - select, adapt, and justify domain-specific design approaches based on problem requirements, stakeholder constraints, and evaluation of alternative design trajectories. Methodological Competence: Students are able to ... - critically compare competing domain-specific methods and tools with regard to their assumptions, capabilities, and limitations and develop justified recommendations for their application. - integrate specialized domain knowledge with design science principles to systematically develop and refine artifacts in Research Project 2 that address identified design requirements. (2) Personal Competencies Self-Competence: Students are able to ... - strategically acquire specialized knowledge in unfamiliar domains by identifying authoritative sources, evaluating evidence quality, and constructing coherent mental models. - orchestrate the bidirectional knowledge transfer between scientific rigor and practical relevance by translating theoretical insights into design decisions and validating design choices against theoretical

frameworks.
Social Competence: Students are able to ... - mediate between divergent expert perspectives in design discussions, synthesize conflicting requirements, and facilitate consensus-building around artifact specifications. - adapt the communication of complex design rationales to diverse stakeholder audiences while preserving conceptual precision.
Prerequisites and Co-requisites
None
Teaching and Learning Content
The module provides the conceptual foundation for the problem analysis in Research Project 2 (RP2) and covers following topics in the domain of the challenge: - Domain-specific analysis and modeling methods (e.g., threat modeling, AI system design, process mining) including their epistemological assumptions, validation approaches, and boundary conditions. - Technological foundations and architectures (e.g., machine learning pipelines, security architectures, data architectures) with emphasis on design principles, trade-offs, and adaptation patterns. - Evaluation and assessment frameworks for the respective domain including multi-criteria decision approaches, stakeholder-specific quality dimensions, and validation strategies. - Design patterns and anti-patterns from state-of-the-art implementations including critical analysis of their contextual success factors.
Teaching Methods
Inquiry-based learning, facilitated group discussion, case studies, contextualized learning (industry integration)
Assessment (examination and coursework; details see course catalog)
Oral Examination
References and Other Learning Resources
Galliers, R. D., & Currie, W. L. (Eds.). (2011). <i>The Oxford Handbook of Management Information Systems: Critical Perspectives and New Directions</i> . Oxford University Press.
Challenge-specific literature will be announced in the course catalog.
Current research articles and industry reports on the respective domain.
Relevant standards and frameworks

Module Name	Number
IT-Management 2: Decision & Risk	
Module Coordinator	
N.N.	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	5
Contact Hours per Week	2
Recommended Semester	2
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Seminar-style Teaching
Contact Study (in hours)	30
Self-Study (in hours)	120
Practical Training if applicable (in hours)	-
Total Workload (in hours)	150
Frequency	Summer Term
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - structure complex IT decisions (e.g., technology selection, sourcing strategies, resource allocation) using multi-criteria frameworks, systematically evaluate trade-offs between strategic alignment, economic value, technical feasibility, and operational risk, and construct evidence-based justifications that acknowledge uncertainty and competing stakeholder interests. - proactively identify and critically assess ethical, societal, and sustainability implications throughout the IT decision lifecycle, integrate value-sensitive considerations into decision criteria and governance mechanisms, and develop recommendations that balance technological capability with organizational responsibility. Methodological Competence: Students are able to ... - systematically analyze risks associated with technological developments and IT investments using structured risk assessment frameworks, evaluate likelihood and impact across multiple dimensions (strategic, operational, financial, reputational), develop risk mitigation and contingency strategies, and justify risk acceptance decisions within portfolio context. (2) Personal Competencies Self-Competence: Students are able to ... - make defensible decisions under conditions of uncertainty and incomplete information by applying appropriate decision heuristics, explicitly articulating the assumptions underlying their analysis,

critically examining potential biases in their risk assessments, and remaining open to revising conclusions when new evidence emerges.
Social Competence: Students are able to ... - strategically develop decision proposals tailored to diverse stakeholder perspectives (IT leadership, C-suite, finance/controllers, business units), anticipate and address conflicting priorities and concerns, and navigate decision-making processes through evidence-based argumentation that builds consensus while maintaining analytical integrity.
Prerequisites and Co-requisites
None
Teaching and Learning Content
The module develops decision-making competencies for complex IT investments and strategic technology choices in contexts characterized by uncertainty, competing objectives, and diverse stakeholder interests. Content reflects current trends in digital transformation, emerging technologies, and evolving governance expectations. Core thematic areas: - Decision theories and models for IT management - IT sourcing strategies (make-or-buy, cloud, outsourcing) - IT risk management and risk assessment methods - Business case development and investment appraisal - Technology evaluation and selection processes - Privacy, ethics, and social responsibility in IT decisions - Decision communication and stakeholder management
Teaching Methods
Dialogic teaching, case-based instruction, structured peer-to-peer collaboration
Assessment (examination and coursework; details see course catalog)
Written Exam or Oral Examination or Presentation
References and Other Learning Resources
ISACA (2017). <i>COBIT for Risk</i> .
Willcocks, L. P., & Lacity, M. C. (Eds.). (2016). <i>Advanced outsourcing practice: Rethinking ito, bpo and cloud services</i> . Springer.
Bessant, J., & Tidd, J. (2013). <i>Managing innovation: integrating technological, market and organizational change</i> . Wiley.
Current publications will be announced in the first session.

Module Name	Number
Leadership 2: Leading & Engaging Stakeholders	
Module Coordinator	
Andy Weeger	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	5
Contact Hours per Week	2
Recommended Semester	2
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Seminar-style Teaching
Contact Study (in hours)	30
Self-Study (in hours)	120
Practical Training if applicable (in hours)	-
Total Workload (in hours)	150
Frequency	Summer Term
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - critically evaluate leadership theories and styles (e.g., trait-based, behavioral, contingency, transformational, servant leadership) with regard to their empirical foundations and contextual validity, analyze leadership situations by identifying relevant contingency factors (task complexity, team maturity, organizational culture), make and justify leadership decisions that integrate effectiveness criteria with sustainability principles and ethical considerations. Methodological Competence: Students are able to ... - systematically map stakeholder ecosystems using structured analysis frameworks (power-interest matrices, salience models), diagnose stakeholder positions, interests, and influence dynamics, develop differentiated engagement strategies tailored to stakeholder characteristics, and proactively manage stakeholder relationships to build coalitions, mitigate resistance, and create shared value. (2) Personal Competencies Self-Competence: Students are able to ... - critically examine their own leadership identity, assumptions, and behavioral patterns through structured reflection and feedback integration, identify gaps between espoused and enacted leadership values, develop targeted strategies for leadership growth based on self-awareness and developmental goals, and adaptively refine their leadership approach in response to context and feedback.

Social Competence: Students are able to ... - engage effectively in leadership and communication processes within different corporate contexts (including German), navigate cultural and linguistic nuances, and progressively develop capability to perform complex leadership task in English-language context and basic leadership tasks in German-language contexts.
Prerequisites and Co-requisites
None
Teaching and Learning Content
The module develops evidence-based leadership capabilities and systematic stakeholder management competencies essential for influencing organizational outcomes in complex, multi-stakeholder environments. Core thematic areas: - Leadership theory and practice such as evolution of leadership thought, empirical evidence for leadership effectiveness, situational leadership and adaptive approaches, leadership in ambiguous and rapidly changing contexts, sustainable and ethical leadership frameworks. - Stakeholder analysis and engagement: stakeholder identification and mapping techniques, stakeholder network analysis, interest and influence diagnosis, differentiated engagement strategies (inform, consult, involve, collaborate, empower), managing conflicting stakeholder demands, coalition building and political navigation. - Team leadership and dynamics such as team development models (Tuckman, Wheelan), psychological safety and high-performing teams, motivation theories and application (self-determination, expectancy-value), diversity and inclusion in teams, leading virtual and distributed teams, conflict dynamics and intervention. - Leadership in context such as cross-cultural leadership competencies, leadership across hierarchies and functions, adaptive leadership for digital transformation.
Teaching Methods
Social constructivist learning, active learning, formative assessment, metacognitive practice
Assessment (examination and coursework; details see course catalog)
Presentation or oral examination
References and Other Learning Resources
Kotter, J. P. (2017). What leaders really do. In <i>Leadership perspectives</i> (pp. 7–15). Routledge.
As well as scientific articles such as
Goleman, D. (1998). What makes a leader? <i>Harvard Business Review</i> , 76(6), 93–103.
Judge, T. A., Piccolo, R. F., & Kosalka, T. (2009). The bright and dark sides of leader traits: A review and theoretical extension of the leader trait paradigm. <i>The Leadership Quarterly</i> , 20(6), 855–875.
Denison, D. R., Hooijberg, R., & Quinn, R. E. (1995). Paradox and performance: Toward a theory of behavioral complexity in managerial leadership. <i>Organization Science</i> , 6(5), 524–540.

Module Name	Number
IT-Management 3: Design & Transformation	
Module Coordinator	
Andy Weeger	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	5
Contact Hours per Week	2
Recommended Semester	3
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Seminar-style Teaching
Contact Study (in hours)	30
Self-Study (in hours)	120
Practical Training if applicable (in hours)	-
Total Workload (in hours)	150
Frequency	Winter Term
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - critically evaluate emerging technologies—particularly AI-based systems—by systematically assessing their strategic potential, operational risks, and societal implications using technology assessment frameworks, analyze organizational readiness and adoption barriers, and develop justified strategic recommendations that balance innovation opportunity with risk exposure and ethical responsibility. - design governance frameworks for the development and deployment of intelligent systems that integrate quality assurance mechanisms, ethical principles (fairness, transparency, accountability), and regulatory compliance requirements (e.g., EU AI Act), and establish oversight processes that enable responsible innovation while managing technical and organizational complexity. Methodological Competence: Students are able to ... - strategically plan and orchestrate the introduction and operation of digital and AI-based information systems by developing comprehensive transformation roadmaps, anticipate technical, organizational, and cultural challenges, design change interventions that address resistance and capability gaps, and align technology implementation with organizational strategy and stakeholder readiness. (2) Personal Competencies Self-Competence: Students are able to ... - navigate the uncertainty and rapid evolution of technological landscapes by employing structured

sensemaking approaches, maintain strategic perspective despite incomplete information, critically examine their own assumptions about technology potential and risks, and articulate and defend a coherent ethical position on contested issues in AI and digital transformation. Social Competence: Students are able to ... - strategically communicate transformation initiatives to diverse stakeholder groups (executives, employees, customers, regulators) by constructing narratives that address specific concerns and build shared understanding, facilitate difficult conversations about change impacts, and lead interdisciplinary teams through ambiguity by building psychological safety, managing conflicts, and fostering collaborative problem-solving.
Prerequisites and Co-requisites
None
Teaching and Learning Content
The module develops strategic and operational competencies for assessing, governing, and implementing emerging technologies—with emphasis on AI and intelligent systems—while managing the organizational transformation required for successful adoption. Core thematic areas: - AI strategy/governance and responsible innovation - Technology implementation and operations (e.g., AI engineering and MLOps) - Cloud transformation and modern IT architectures - Digital operating models and platform business - IT innovation management and technology radar - IT-driven change management - Regulatory requirements for AI systems (e.g., AI Act)
Teaching Methods
Seminar-style teaching, case studies, group exercises
Assessment (examination and coursework; details see course catalog)
Written Exam or Oral Examination or Presentation
References and Other Learning Resources
Urbach N., & Feulner D. (2026). <i>Managing Artificial Intelligence: How Organizations Succeed with AI</i> . Springer Nature Switzerland.
Iansiti, M., & Lakhani, K. R. (2020). <i>Competing in the age of AI: Strategy and leadership when algorithms and networks run the world</i> . Harvard Business Press.
Rogers, D. L. (2016). <i>The digital transformation playbook: Rethink your business for the digital age</i> . Columbia University Press.
European Parliament and Council of the European Union. (2024). <i>Regulation (EU) 2024/1689 laying down harmonised rules on artificial intelligence (Artificial Intelligence Act)</i> . Official Journal of the European Union, L 1689.
Current publications on AI strategy, MLOps, and IT transformation.

Module Name	Number
Leadership 3: Strategy & Transformation	
Module Coordinator	
Andy Weeger	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	5
Contact Hours per Week	2
Recommended Semester	3
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Seminar-style Teaching
Contact Study (in hours)	30
Self-Study (in hours)	120
Practical Training if applicable (in hours)	-
Total Workload (in hours)	150
Frequency	Winter Term
Language of Instruction	English
Maximum Number of Participants	30

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - critically evaluate strategy concepts and frameworks with regard to their assumptions, empirical support, and boundary conditions, assess their appropriateness for specific transformation contexts, and adapt strategic approaches to organizational realities and environmental turbulence. Methodological Competence: Students are able to ... - systematically frame strategic challenges by identifying core tensions and leverage points, evaluate strategic alternatives under uncertainty and incomplete information, make explicit the trade-offs between competing objectives, and anticipate long-term consequences through scenario analysis and systems thinking. - diagnose organizational change dynamics by analyzing formal and informal structures, power relationships, and cultural patterns, anticipate sources and patterns of resistance, design interventions that address cognitive, emotional, and political dimensions of change, and develop strategies for institutionalizing new practices beyond initial implementation. Self-Competence: Students are able to ... - strategically navigate complex decision situations characterized by conflicting stakeholder goals, contradictory evidence, and time pressure, maintain clarity of purpose while remaining cognitively flexible, make defensible commitments despite uncertainty, and orchestrate diverse perspectives and resources toward viable solutions that create strategic options.

Social Competence: Students are able to ... - craft and communicate compelling strategic visions that connect organizational purpose with stakeholder aspirations, build coalitions across hierarchical and functional boundaries by addressing diverse interests and concerns, interpret resistance as valuable feedback rather than obstruction, and employ influence strategies that foster genuine commitment rather than mere compliance.
Prerequisites and Co-requisites
None
Teaching and Learning Content
The module develops strategic thinking and change leadership capabilities for designing and leading complex organizational transformations in dynamic, uncertain environments. Core thematic areas: - Strategic thinking and analysis such as evolution of strategy thought (e.g., positioning, resource-based view, dynamic capabilities, blue ocean), strategic analysis frameworks (e.g., industry analysis, resource audit, capability assessment), environmental scanning and weak signal detection, strategic issue framing and problem structuring. - Strategy development under uncertainty, particularly scenario planning and futures thinking, real options reasoning, balancing exploration and exploitation, strategic experimentation and learning, evidence-based strategy development, cognitive biases in strategic decision-making. - Transformation design and leadership, particularly organizational change theories (e.g., planned change, emergent change, institutional theory), transformation archetypes (e.g., reorientation, restructuring, renewal), multi-level change interventions, resistance diagnosis and engagement, culture change and institutional work, sustaining momentum and preventing relapse. - Strategic communication and influence such as vision crafting and narrative construction, sensegiving and sensemaking in transformation, coalition building and political navigation, communicating across diverse stakeholder groups, managing symbolic and substantive aspects of change. - Complexity and resilience, particularly systems thinking, managing paradoxes and trade-offs, organizational resilience and adaptive capacity, antifragility principles, strategic agility and organizational ambidexterity.
Teaching Methods
Dialogic teaching, case-based instruction, structured peer-to-peer collaboration
Assessment (examination and coursework; details see course catalog)
Presentation or oral examination
References and Other Learning Resources
David, F. R., & David, F. R. (2016). <i>Strategic management: A competitive advantage approach, concepts and cases, global edition</i> . Pearson Education.
Freeman, R. E. (2010). <i>Strategic management: A stakeholder approach</i> . Cambridge University Press.
Mintzberg, H. (2014). <i>The strategy process: Concepts, contexts, cases</i> . Pearson education.
Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. <i>Strategic Management Journal</i> , 18(7), 509–533.
Mintzberg, H. (1978). Patterns in strategy formation. <i>Management Science</i> , 24(9), 934–948.

Module Name	Number
Master's Thesis	
Module Coordinator	
Andy Weeger	
Degree Program	
M.Sc. Digital Leadership in Information Management	

ECTS	20
Contact Hours per Week	-
Recommended Semester	3
Module Duration	1 Semester
Module Type	Compulsory Module
Type of Course	Master's Thesis
Contact Study (in hours)	-
Self-Study (in hours)	600
Practical Training if applicable (in hours)	-
Total Workload (in hours)	600
Frequency	Every Semester
Language of Instruction	English
Maximum Number of Participants	-

Learning Outcomes
(1) Professional and Methodological Competencies Professional Competence: Students are able to ... - independently conceptualize and justify a comprehensive empirical research design that addresses a relevant phenomenon in organizational practice, make defensible methodological choices under constraints, and anticipate and mitigate threats to validity. - develop or adapt data collection instruments grounded in theoretical constructs, systematically collect and analyze empirical data using appropriate analytical techniques, and interpret findings in light of existing theory and empirical evidence. - critically evaluate research results with regard to internal and external validity, reliability, and generalizability, explicitly articulate methodological limitations and their implications, and assess the robustness of conclusions under alternative interpretations. - assess the theoretical and practical contribution of findings by positioning them within existing knowledge, evaluate their transferability across contexts by identifying scope conditions, and develop evidence-based recommendations that acknowledge implementation barriers and contextual dependencies. Methodological Competence: Students are able to ... - independently design and execute a sophisticated empirical investigation using quantitative and/or qualitative methods, justify methodological choices based on research objectives and epistemological positions, and adapt research protocols in response to field realities while maintaining rigor. - construct a coherent scientific narrative that meets publication standards of scholarly conferences, position the contribution within relevant literature streams, argue for novelty and significance, and respond constructively to anticipated critiques.

- strategically translate research insights into actionable guidance for organizational decision-makers by distilling complex findings into executive summaries and management presentations that preserve nuance while enabling informed action.

(2) Personal Competencies

Self-Competence:

Students are able to ...

- autonomously orchestrate all phases of a substantial research project (conceptualization, execution, analysis, dissemination), make strategic decisions about priorities and trade-offs, and demonstrate ownership of the complete research process.
- critically reflect on their development as researchers by documenting methodological challenges, decision points, and learning moments, articulate how their thinking evolved throughout the process, and identify areas for continued growth.
- maintain resilience when confronting unexpected findings, methodological obstacles, or stakeholder challenges, reframe setbacks as learning opportunities, and adaptively adjust research strategies without compromising scientific integrity.

Social Competence:

Students are able to ...

- strategically build and maintain collaborative relationships with organizational partners and research participants by demonstrating credibility, managing expectations, and negotiating mutually beneficial arrangements that enable deep field access while respecting organizational constraints.
- navigate ethical complexities in field research, balance competing interests of stakeholders, and communicate transparently about research processes, interim findings, and implications in ways that build trust and sustain engagement.

Prerequisites and Co-requisites

Research Project 1 and Research Project 2

Teaching and Learning Content

The module enables students to independently design, execute, and disseminate a substantial empirical research project that generates both theoretical insights and practical value. The thesis demonstrates mastery of the research process and readiness for independent scholarly work or evidence-based professional practice.

Core components of the thesis:

- Problem identification and theoretical motivation: Identifying a relevant phenomenon, establishing its theoretical and practical significance, positioning within scholarly discourse
- Literature synthesis and theoretical framework: Comprehensive review of relevant streams, identification of theoretical gaps or contradictions, development of conceptual framework or research model
- Theory development or extension: Formulation of research questions, hypotheses, or propositions grounded in theory; articulation of expected theoretical contribution
- Research design and methodology: Justification of methodological approach (quantitative/qualitative/mixed), selection and adaptation of methods, operationalization of constructs, sampling strategy, validity considerations
- Data collection: Development and pilot-testing of instruments, field access negotiation, ethical protocols, systematic data gathering, quality assurance
- Data analysis: Application of appropriate analytical techniques (statistical modeling, qualitative coding, etc.), iterative refinement, validation procedures, handling of unexpected patterns
- Interpretation and theoretical positioning: Relating findings to theoretical framework, explaining unexpected results, discussing alternative interpretations, articulating theoretical contribution (confirmation, extension, contradiction, synthesis)
- Critical evaluation: Assessment of methodological limitations, threats to validity, boundary conditions, generalizability claims, future research directions
- Practice translation: Derivation of evidence-based recommendations, contextualization for organizational implementation, acknowledgment of adoption barriers
- Executive communication: Development of executive summary tailored to partner organization, distillation of key insights and actionable recommendations
- Scholarly communication: Preparation of conference-quality paper following academic conventions,

construction of compelling research narrative, anticipation and preemption of reviewer concerns - Thesis defense: Articulation and justification of research choices, demonstration of deep understanding, engagement with critical questions Supervision model: Individual coaching focused on developing independent research capabilities, strategic feedback at key decision points, scaffolded autonomy.
Teaching Methods
Project-based learning, scaffolded instruction, group investigation
Assessment (examination and coursework; details see course catalog)
Master's thesis, presentation with oral examination
References and Other Learning Resources
Topic-related current research literature.
Methodology literature according to the chosen research design.