

Module Catalog

MBA Executive Master of Business Administration (MBA)

TUM School of Management

Technische Universität München

www.tum.de/

www.mgt.tum.de

Module Catalog: General Information and Notes to the Reader

What is the module catalog?

One of the central components of the Bologna Process consists in the modularization of university curricula, that is, the transition of universities away from earlier seminar/lecture systems to a modular system in which thematically-related courses are bundled together into blocks, or modules.

This module catalog contains descriptions of all modules offered in the course of study.

Serving the goal of transparency in higher education, it provides students, potential students and other internal and external parties with information on the content of individual modules, the goals of academic qualification targeted in each module, as well as their qualitative and quantitative requirements.

Notes to the reader:

Updated Information

An updated module catalog reflecting the current status of module contents and requirements is published every semester. The date on which the module catalog was generated in TUMonline is printed in the footer.

Non-binding Information

Module descriptions serve to increase transparency and improve student orientation with respect to course offerings. They are not legally-binding. Individual modifications of described contents may occur in praxis.

Legally-binding information on all questions concerning the study program and examinations can be found in the subject-specific academic and examination regulations (FPSO) of individual programs, as well as in the general academic and examination regulations of TUM (APSO).

Elective modules

Please note that generally not all elective modules offered within the study program are listed in the module catalog.

Index of module handbook descriptions (SPO tree)

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Master of Business Administration (MBA)

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Auslandsaufenthalt | Auslandsaufenthalt

Module Description

WI201064: International Management & Intercultural Cooperation | International Management & Intercultural Cooperation

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: summer semester
Credits:* 10	Total Hours: 300	Self-study Hours: 180	Contact Hours: 120

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Individual project work (pass/fail/"Studienleistung") - Students will have to hand in an individual project work where they review and discuss how they would have to adapt their leadership style when managing in China/the US or managing Chinese/US employees regarding a concrete situation.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Individual feedback: Analyzing cultural preferences in the work context by means of culture dimensions
- Management and leadership styles in various countries
- How to do business in China/the US?
- Management and leadership in Asia and North America
- Intercultural communication: Why communication matters
- Intercultural competence: Dealing with different cultures
- Reflection: Adapting the personal leadership style to another country

Intended Learning Outcomes:

After participation in this module, the students are able to understand the social and economical dimensions of international management. The participants are able to evaluate the chances

and risks of international management in selected regions and therefore derive opportunities for their own company. They will be able to evaluate management and communication methods in international management and to apply them to their individual context and personal leadership style.

Teaching and Learning Methods:

While learning about management and leadership styles on site in various countries and intercultural communication during lectures with highly international backgrounds, students will discuss their own experiences during workshops in small teams. International case studies will be used for a few specific countries. Students will present their own experiences abroad or with international colleagues and discuss their experiences with expert speakers drawn from companies in the global marketplace. Students will visit different internationally active companies to get insides into managing multi-national organizations.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Claudia Peus

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Master's Thesis | Master's Thesis

Module Description

WI900259: Master's Thesis | Master's Thesis

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: winter/summer semester
Credits:* 30	Total Hours: 750	Self-study Hours: 730	Contact Hours: 20

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Individual written assignment - Students will have to hand in a written thesis in which they work on a real-life project in their organization. They have to analyze the key issues of the project and apply the learnings of a detailed module or different modules of the Executive MBA into this project. The project should be done full-time. Alternatively the students can write the master thesis at a Chair of the Technical University of Munich to support a research project at TUM.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

Successfully passing of 35 ECTS

Content:

free of choice

Intended Learning Outcomes:

After participating in this module students are able to apply the learnings of the different modules in a real-world project. They are able to understand the interdependences inside this project and how to deal with them.

Teaching and Learning Methods:

Participants are prepared with webinars to get the knowledge to write the thesis within the predetermined standards and regulations. Students join a topic finding and identification webinar to enhance the topic finding process. Furthermore, students discuss their first and pre-final results with their individual advisors to get further feedback during the process.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Required Modules | Pflichtmodule

Module Description

WI201052: Strategy & Organization | Strategy & Organization

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: summer semester
Credits:* 5	Total Hours: 150	Self-study Hours: 95	Contact Hours: 55

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Written project work in groups (80%) to be completed during the course - Individual written assignment (20%, approx. 15 ppt slides) that is to be submitted after the module (the examiner will announce the scope and processing time of the examination in due time). Students will be provided with a concrete situation of an organization that faces strategic challenges. Students have to show that they are able to discuss, evaluate and use strategic tools and concepts. Students will have to prove that they can apply the learned theories to analyze a strategy. They will also have to demonstrate that they are able to define strategic goals as well as an implementation plan.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Trends and Influences on Organizations: Why do organizations exist? Which problems do they solve?
- Core concepts regarding strategy formulation, implementation and execution: Strategic Analysis, Tools & Concepts
- Overview and discussion of toolsets to generate new business, reach new audiences and attract new customers
- Meeting strategic challenges like Mergers & Acquisitions: How to support the strategical development of an organization?
- Leading Strategy Implementation to meet the challenges of the future
- Strategic leadership: the role of leadership behavior in organizational success

- Knowledge Management & Corporate Organization: Understanding the requirements for and design options of Knowledge Management on the information logistics level

Intended Learning Outcomes:

After participating in this module, students are able to apply the basic concepts, tools and methods of strategic management. They are capable of analyzing and evaluating different business strategies and strategic options and applying them to situations in real business life. Furthermore, they are able to understand the strategic relevance of Knowledge Management and to use the basic concepts of (IT-based) knowledge sharing within an organization.

Teaching and Learning Methods:

Lectures are used to create the theoretical background for the students. In workshops and seminars they discuss in small teams the implementation of the learnings into their daily business. Case studies and Best practice examples will be used to apply the concepts and business strategies into the real world and enable students to develop and evaluate strategic options. The results will be discussed within the group in order to maximize the learning outcome, improve their communication skills and encourage further discussions.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Examples:

Hambrick, D.C. & Fredrickson, J.W. (2005). Are you sure you have a strategy? Academy of Management Executive, Vol. 19, No. 4

Ferrar, J. & Green, D. (2021). Excellence in people analytics: How to use workforce data to create business value.

Bray, D. (2021): NFT and Cryptoart: The Complete Guide to Successfully Invest in, Create and Sell Non-Fungible Tokens in the Digital Art Market

Responsible for Module:

Prof. Dr. Thomas Hutzschenreuter

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201053: Organizational Change & Communication | Organizational Change & Communication

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: summer semester
Credits:* 5	Total Hours: 125	Self-study Hours: 60	Contact Hours: 65

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Written project work in groups (the examiner will announce the scope and processing time of the examination in due time). - Students will have to hand in a written assignment that shows that they are able to choose an adequate change project that can be analyzed based on the learned theories. Students will have to demonstrate that they are able to select and apply analytical categories as well as to interpret their findings using categories from the theoretical approaches presented in the course, including social, behavioural and communication theories to evaluate the project and create recommendations for improving the processes.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Basics of Change Management: Varieties of change, the phase models of change, architecture and design of change processes
- Leading Change - Leadership Theories and Change Management
- Micropolitics and power in change processes: theory and practice
- Changing organizational cultures
- Communication deficits in change processes: empirical findings, theoretical basics and examples
- Examples of successful change communication
- Synopsis: experience-based principles for successfully communicating change
- New developments in Change Management: Agile change management and ambidexterity

Intended Learning Outcomes:

After participating in this module, students will understand organizational change and its impact from a social and behavioural science perspective. Students will understand the influence of organizational culture, acceptance and resistance as well as the critical success factors of change management in organizations. They will be enabled to evaluate systems and to think about alternatives. Furthermore they will be able to evaluate communication strategies in change projects and to apply communication theories to change situations.

Teaching and Learning Methods:

In order to prepare the lectures students will be provided with pre-reading material and, if necessary, small tasks that should be prepared in advance. In lectures, the students will learn the theories of change management and change communication. In workshops, the content will be implemented into the real world, using case studies to better understand and discuss the challenges of change management. In small teams, students will then discuss their personal experiences of change cases within their organizations. In 1-to-1 sessions students will work on their individual project.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Rainer Trinczek

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201054: Finance & Accounting | Finance & Accounting

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: summer semester
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Individual written project work that has to be submitted after the module - Students will have to hand in an individual written assignment. Students will have to apply theories like cost of capital and cash flow calculations to evaluate the value created by the organization. Students will also have to show that they are able to evaluate risks and make a recommendation for the organization taking these into account.

Additionally, students will be provided with a concrete case of an organization. They will work in groups to analyze the financial success of the organization. During class they will present the results of their findings and will have to show their communication abilities.

Grading is primarily based on the written elaboration. For the classroom case elaboration a bonus can be granted based on the performance in this group work.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Financial Statements & Analysis: Analyzing the organization with different methods and KPIs
- Financial Position and Performance based on the International Financial Reporting Standards (IFRS)
- Financial Planning: Different methods of budgeting
- Corporate Finance & Valuation: Finance and evaluate the organization value with different methods
- Investment options: loans, stocks, bonds etc.
- Evaluating financial risks and dealing with them appropriately

Intended Learning Outcomes:

After participating in this module students are able to understand the fundamental concepts of financial management, value creation and corporate finance and are able to apply them to different organizations. Students can define financial goals and evaluate adequate systems to monitor and ensure that targets are achieved.

Teaching and Learning Methods:

Corporate financial theories, practical case studies as well as research efforts and outcomes will be used to familiarize the students with many aspects of the financial field. During lectures, the basics of finance and accounting are explained to the students. In workshops, participants get the chance to work on financial statements, perform analysis and assess risks to deepen their understanding of financial theories. In small teams they will work on practical cases dealing with financial figures and performance indicators.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Christoph Kaserer

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201055: Innovation, Entrepreneurship & Digital Transformation | Innovation, Entrepreneurship & Digital Transformation

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: winter semester
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Written project work in groups (75%), group presentation (video) (25%) (the examiner will announce the scope and processing time of the examination in due time) - Students have to develop their own business idea in groups and present and discuss their results. They will have to show that they are able to select an adequate business idea reflecting (technological) trends and to develop a pitch deck that meets the relevant requirements (including financial planning). Students have to show that they understand how innovative ideas can be supported and brought into creation. In addition, students will have to demonstrate that they are able to present their idea to possible stakeholders by handing in a video of their presentation.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Definition of innovation & specifics of innovation management
- Innovation and industry evolution
- User innovation and Open Source Innovation
- Innovation culture: Using the appropriate leadership tools to create an innovative culture
- Concepts and examples how to create and establish a culture of entre- or intrapreneurship
- The effect of digital innovations on business behavior
- Digital transformation and the radical change of business models and processes
- Creating and establishing business ideas: Writing a business plan

Intended Learning Outcomes:

After participating in this module students will understand the topic of innovation management, entre- and intrapreneurship as well as trends through the digital transformation and their implications for organizations and markets. They are able to understand how innovations can be supported and fostered through leadership as well as to apply the appropriate leadership tools to create an innovative culture. They are able to analyze upcoming trends and to evaluate those regarding potentials and risks for the specific context of an organization.

Teaching and Learning Methods:

During lectures, theories of innovation management, entrepreneurship and digital-innovative business models will be shown and explained to the students. In workshops, participants will discuss the trends, tools and management systems as well as their implications for organizations. In small groups they will work on case studies and develop a business idea to write a business plan.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Holger Patzelt

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201056: Stakeholder Management | Stakeholder Management

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: winter semester
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Individual scientific paper - Students have to hand in a scientific paper where they show that they are able to give an overview of the relevant theories of stakeholder management. They will demonstrate that they can choose an appropriate business situation reflecting a critical situation in stakeholder management and that they can evaluate which theories are relevant in this context. Furthermore they show that they can apply the theories to make suggestions on how to react in this situation based on empirical scientific findings.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Stakeholder Management and legal frameworks: Considering principles of private law, the law of contract as well as principles of company law in the EU and worldwide
- Dealing with customers: Planning Process of Strategic Marketing, Product Management and Communication Management
- Communicating with stakeholders: Establishing and breaking down the strategy of Integrated Communication into concrete instructions and guidelines
- Stakeholders in Marketing: Bringing together different views, frameworks and ethical decisions
- Convincing stakeholders with ethical behavior: The Need for Ethics in a Globalized World
- Making decisions in critical situations: Business ethics and sustainability

Intended Learning Outcomes:

After participating in this module, students are able to understand how organizations deal with different stakeholders, like customers, shareholders, the general public or legal entities. Therefore

they are able to understand how markets work and the way stakeholders act with regard to legal and ethical regulations and apply this knowledge to their own organization.

Teaching and Learning Methods:

Students will learn about different theories regarding stakeholder management (including legal requirements, marketing theories and ethical issues as well as their interactions and interrelation) in lectures. Students will reflect on decision making in critical situations in discussions with the lecturer and their fellow students. In workshops they will discuss and evaluate tools and methods of stakeholder management and apply them to different business contexts using the case method that they afterwards will present to the class and lecturer.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Frank-Martin Belz

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201057: Leadership & Cooperation | Leadership & Cooperation

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: winter semester
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Individual scientific paper (approx. 2000 words) - Students will have to hand in an individual scientific paper in which they show that they are able to describe and reflect on their own leadership style based on the "Full Range of Leadership Model". Students will describe scientific approaches to leadership and reflect their experiences in leader-follower relationships and show that they are able to find improvements for their behavior in critical leadership situations.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Leading in the digital age: changing workplaces, changing leaders
- Value-based leadership theories and deep-dive into specific requirements when leading individuals and teams
- The role of leadership and cooperation: How leaders can (and must) ensure cooperation and coordination in networks and their own organizations
- Introduction to strategic human resource management
- Leading virtual teams: temporal structures, task characteristics, cultural context and tool issues of Virtual teams

Intended Learning Outcomes:

After participating in this module, the students are able to understand Leadership and Management concepts in the digital age and are able to apply them responsibly to their daily business life. Students will recognize the importance of digitalisation, and will know about new developments in technical & natural sciences and their impact on society, the business world and personal

leadership behaviour. The students will be capable of adapting innovative methods and tools to develop a value-based leadership culture in their own context and of analyzing their own leadership behavior as well as leadership cultures in several organizations. The students will be able to apply methods to improve cooperation in complex networks and throughout different cultures.

Teaching and Learning Methods:

Different leadership and cooperation theories will be taught in lectures. In workshops (supported by the lecturer), small teams will work on case studies from the business world and present the results to the group. Group discussions with the lecturer will be used to understand and analyze different leadership approaches. In addition, time for individual reflection will be provided where students can focus on their individual leadership behaviour and their learnings to further develop it.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Examples:

Peus, C. (2012). Giving Wings to your Leadership Style. IESE Insight, 13, 20-27.

Peus, C. & Hauser, A. (2021). Leading in the digital age. Journal of Financial Transformation

Ancona, D., Malone, T. W., Orlikowski, W. J., & Senge, P. M. (2007). In praise of the incomplete leader. Harvard Business Review, 85(2), 92–100.

SOYER, E & HOGARTH R. (2020) The Myth of Experience: Why we learn the wrong lessons and ways to correct them. Hachette – Public Affairs.

Responsible for Module:

Prof. Dr. Claudia Peus

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201058: Personal Development | Personal Development

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: winter semester
Credits:* 5	Total Hours: 125	Self-study Hours: 75	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Active participation within the module (pass/fail/"Studienleistung") - Students will have to discuss actively to show that they are able to reflect on themselves, their behavior within a group as well as their demeanor and communication skills. Students will have to take part in a mentoring program and to demonstrate their developed skills in presentations to the group.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Self Management & Self Experience
- Mentoring & Career Development
- Networking and Communication Skills
- Presentation Skills and Self confidence

Intended Learning Outcomes:

After participating in this module, the students are able to reflect on their own habits and behavior and develop their appearance as well as their personal leadership style.

Teaching and Learning Methods:

Workshops will be held on various topics such as presentation skills considering different audiences. Leadership skills and communication will be practiced in small groups performing physical exercises. In 1-on-1 sessions, the personal development of the participants will be discussed, also in the form of mentoring. Various presentations will be held to improve skills or get

ideas for their career development. During the sessions students will be provided with reflection tasks in order to follow-up on their learnings after the sessions.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Claudia Peus

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201059: Leadership Development | Leadership Development

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: summer semester
Credits:* 5	Total Hours: 125	Self-study Hours: 75	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Active participation within the module (pass/fail/"Studienleistung") - Students will have to discuss actively to show that they are able to describe and reflect their own leadership style. Students will reflect their own experiences in leader-follower relationships. Furthermore the students are able to apply the results of the analysis of their leadership behaviour based on a leadership profile back in their job.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Leadership style: Developing transformational leadership
- Leadership Profile: development process of responsible leadership in the context of internationally oriented organizations and companies
- Personal development plan: Implementation in practice and follow-up processes
- Continuous feedback: Working in learning partnerships

Intended Learning Outcomes:

After participating in this module, the students are able to reflect on their own habits and behavior and develop their demeanor as well as their personal leadership style. Students will also be able to give and receive feedback regarding leadership style and leadership behaviour.

Teaching and Learning Methods:

Throughout the semester, by using survey methods, a personal leadership profile will be provided and discussed with the individual student in 1-to-1 sessions. Furthermore a personal action

plan will be created. Students will define development goals and further discuss them with a learning partner. In between, they will try to work on their leadership style and give and receive feedback on their attempts. They will be supported by a Digital Leadership Coach the helps them to continuously reflect their leadership behaviour.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Claudia Peus

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Elective Modules | Wahlmodule

Module Description

WI201060: Financial & Risk Management | Financial & Risk Management

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: summer semester
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Online exam (60 minutes);

students have to show that they are able to analyze the financial and risk situation of a firm and thus to assess an investment in a firm or to manage the risks of a firm. They prove that they know the most important concepts in this area, can apply them to real world cases and can develop solutions for financial and risk management challenges.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

Successful completion of the mandatory module "Finance and Accounting"

Content:

- Capital Markets: access to capital market to raise equity, financial communication strategy and investor relations
- Financial Accounting and Corporate Governance: corporate governance mechanisms, capital market regulations, and corporate controls
- Value Based Management: The basics of shareholder value and value-based management
- New Venture Finance: Financing of start-ups, Venture Capital, high-risk-investments, evaluation of different investment forms
- Risk Management: current research findings on selected financial issues, the implementation of concrete strategies, current challenges in risk-management

Intended Learning Outcomes:

After participating in this module students are able to apply methods and tools of advanced Performance Management and Financial as well as Management Accounting. Students are capable of understanding the principles of financial markets and of evaluating different forms of investment. They will be able to apply basic methods of risk management to different situations as well as understand, monitor and control financial processes within organizations.

Teaching and Learning Methods:

Various financial theories, practical case studies as well as research efforts and outcomes will be used to familiarize the students with different aspects of advanced topics in the financial field. A part of these theories and cases will have to be prepared in advance of the course and a part will be discussed within the module. During lectures, theories and methods are explained to the students to refer to their preparation and the on site learning in the course. In workshops during the module, participants get the chance to work on different cases and discuss best practice examples as well as failures. In small teams they will work on practical cases and create strategies for improvement and decision making.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Christoph Kaserer

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201061: Business Development & Innovation Management | Business Development & Innovation Management

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: summer semester
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Written project work in groups - Students have to write a project work in groups. Therefore students will be confronted with an entrepreneurial situation and have to show that they are able to apply the learned theories regarding Business Development. Students will have to show that they are capable of analyzing an entrepreneurial situation and to create suggestions for the development of business ideas all the way to market maturity.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

Successful completion of the mandatory module "Innovation, Entrepreneurship & Digital Transformation"

Content:

- Management of Technology and Innovation: How to use new technologies, how value from innovation may be created, bringing ideas to the market
- Intellectual Property Law & Transfer Agreements: relevance and shape of IP transactions for technology companies, possible use and problems of Technology Transfer Agreements
- International Entrepreneurship: Going global? International business model adaptation & growth issues
- Business Development: Experiences from start-ups and business founders
- Entrepreneurial Behavior & Entrepreneurial Teams: What entrepreneurial behavior means, how entrepreneurs deal with uncertainty, management of entrepreneurial teams

Intended Learning Outcomes:

After participating in this module, students will understand how new technologies can be used and how innovation processes should be managed to create value. Furthermore, students will be aware of the legal frameworks regarding the protection of innovative ideas. The students will be enabled to evaluate the chances and risks of entrepreneurial thinking in a global environment and to use the appropriate tools and methods to lead entrepreneurial teams and to solve conflicts in critical situations.

Teaching and Learning Methods:

During lectures, advanced theories and tools of innovation management, entrepreneurship and business model development will be shown and explained to the students. In workshops, participants will discuss the chances and challenges of innovations, their launch to the market as well as internationalization strategies in an entrepreneurial context. Students will have the chance to experience entrepreneurial challenges in interactive role plays. Students will work on case studies in groups to share best practice examples, learn from failure and develop strategies for leadership in innovative environments and present their results in front of the class and lecturer.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Nicola Breugst

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201062: Leadership & Strategic Management | Leadership & Strategic Management

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: summer semester
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Written project work - Students will have to hand in an individual scientific paper where they show that they are able to transfer the scientific approaches and concepts into a real life situation. Students will have to show that they are able to describe an appropriate situation regarding a challenge in the field of leadership or strategic decision making and that they are capable of creating suggestions for possible solutions for this situation.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

Successful completion of the mandatory modules "Strategy & Organization" and "Leadership and Cooperation"

Content:

- Leadership & Communication: effective leadership behaviors, delegation and participation, charisma and transformational leadership, legitimation and development of leadership
- Leadership by motivation: situational leadership and theories of motivation, the compensatory model of work motivation
- Challenges as a leader: What we can learn from others
- Leading Organizations & Strategic Decision Making: power and influence tactics, managerial judgement and decision making in organizations on a theoretical and a practical level
- Selection and assessment of leaders: evaluation and assessment processes of leaders
- Incentives and Performance Management: goal setting, incentive effects and performance measurement

Intended Learning Outcomes:

After participating in this module students will be aware of different approaches to leadership, value-based leadership theories and strategic management tools. Students will be able to evaluate different leadership styles of the digital age and apply them to different contexts as well as analyze their own behavior. They will understand the key success factors of selection processes, assessment methods as well as performance management systems and be able to apply those processes and systems to real life situations.

Teaching and Learning Methods:

In lectures, professors will set up the theoretical background regarding leadership theories, strategic management, decision making and performance management. In workshops and seminars students will discuss in small teams the implementation of the knowledge to their daily work environment. By sharing their experiences and receiving input from practitioners, students will be encouraged to adapt the learned knowledge to develop responsible & value-based leadership in their own context and of analyzing their own leadership behavior as well as leadership cultures in the digital age.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Claudia Peus

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201063: Operations & Supply Chain Management | Operations & Supply Chain Management

Version of module description: Gültig ab winterterm 2022/23

Module Level: Master	Language: English	Duration: one semester	Frequency: summer semester
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

50% group video presentation on Supply Chain Management - Students will be provided with a concrete situation regarding operations and supply chain management and will have to demonstrate that they are able to analyze the situation as well as to apply the learned theories to this special context in an adequate way.

25% written group assignment on Operations Management - Students will be provided with a specific problem on operations management and have to demonstrate their ability to choose a applicable operating policy while considering different given frameworks.

25% individual assignment on Logistic and Inventory Management - Students will be provided with a specific case and have to evaluate and discuss the operations and supply chain challenges faced by the company presented in the case.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

Content:

- Supply Chain Management: Introduction to Supply Chain Management & Supply Chain Drivers, Network Design and Transport, Supply Chain Performance
- Operations Management: Operations Principles (Push, KABAN, CONWIP), Design of Flow Lines, Little's Law, Queuing in Operations
- Procurement: Procurement Strategy, Global Sourcing, Supplier Selection and Qualification, Cost Reduction, Contract Negotiation
- Sustainable Supply Chain Management: Transparency in Supply Chains and Sourcing, Inventory and Waste Management

- Logistics & Inventory Management: Foundations, Inventory Control and Parameter setting, Supply Chain Coordination, Design for Logistics

Intended Learning Outcomes:

After participating in this module, students will understand the basics operation & supply chain management and to apply them to different contexts and organizational structure. Students will be able to evaluate strategic and organizational risks and the relationship between social, ecological and economic aspects within supply chains. Students will be able to understand the importance of cooperation within a company as well as with other entities, like customers or suppliers and to learn how to optimize such processes. Students will understand the operations principles relating to push and pull processes and apply them in flow line design.

Teaching and Learning Methods:

During lectures, theories and principles of operations management, supply chain management as well as logistics and inventory management will be explained to the students. Practitioners will share their experiences and students will discuss the learning effects they can transfer to other contexts. In workshops, participants will work on case studies to evaluate operations and supply chain processes and to create optimization strategies also with hands-on use of Operations and Supply Chain Management software.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Martin Grunow

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201074: Certified Private Equity Analyst | Certified Private Equity Analyst

Version of module description: Gültig ab summerterm 2016

Module Level: Master	Language: German	Duration: two semesters	Frequency: winter semester
Credits:* 10	Total Hours: 300	Self-study Hours: 180	Contact Hours: 120

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Participants work in the written exam of 1,5 hours on a real case relating to the transaction of a company by a private equity corporation. Participants will have to apply theories like Discounted cash flow calculations to evaluate the value created by the company in question. Participants will also have to show that they are able to accomplish due diligence examinations in the transaction, to analyze terms and conditions, to apply established controlling instruments, to analyze exit strategies and to evaluate the economic risks and benefits of the transaction.

Repeat Examination:

End of Semester

(Recommended) Prerequisites:

None

Content:

- Fundamentals of corporate acquisitions and sales
- Corporate valuation
- Due diligence
- Fund and transaction structuring
- Deal documentation
- Corporate governance
- Equity controlling
- Exit strategies and fundraising
- Successful development of management-audits
- Conducting negotiations

Intended Learning Outcomes:

By attending the module, participants are able to execute all relevant steps of an investment participation by a private equity/venture capital corporation. This concerns the total investment process and transactions from the first investment offers to the final vending of the portfolio company. Participants will have the ability to rate corporations by the common valuation methods as Discounted Cash-flow-method and multiple-method. Furthermore they are able to undertake due diligence examinations of an investment, to analyze terms and conditions, to apply established controlling instruments, to analyze exit strategies and altogether to evaluate the economic risks and benefits of an investment.

Teaching and Learning Methods:

Lectures of the involved professors and practical experts form the basis of group discussions. Working on case studies ensures learning outcomes. Participants share their experiences by working in subgroups that are separated in the different professional backgrounds (private equity vs. venture capital). Readings and case preparations ensure preparation and follow-up.

Media:

media mix

Reading List:

changing on the basis of the latest research results

Responsible for Module:

Prof. Dr. Christoph Kaserer (christoph.kaserer@tum.de)

Courses (Type of course, Weekly hours per semester), Instructor:

- Grundlagen des Unternehmenskaufs/-verkaufs
- Fonds- und Transaktionsstrukturierung
- Beteiligungsbetreuung und Corporate Governance
- Exitverfahren und Fundraising
- Auswahl und Beurteilung von Management-Teams sowie Verhandlungsführung

Prof. Dr. Reiner Braun

Prof. Dr. Dirk Honold (TH Nürnberg)

Prof. Dr. Gunther Friedl

Prof. Dr. Christoph Kaserer

Lisa Ritzenhöfer

Praktiker

For further information in this module, please click campus.tum.de or [here](#).

Module Description

WI201095: Certified Blockchain & Distributed Ledger Technology Manager | Certified Blockchain & Distributed Ledger Technology Manager

Version of module description: Gültig ab winterterm 2021/22

Module Level: Master	Language: English	Duration: one semester	Frequency:
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

In the last section of the course the Participants will concern themselves with a case study about Blockchain and DLT. Participants will have to apply their knowledge about the different lectures within Blockchain and DLT. The case studies close with final presentations, where the participants show their results of the case studies.

Repeat Examination:

(Recommended) Prerequisites:

Graduate degree in business studies or similar qualification, several years of relevant professional experience.

Content:

- Relevance of Blockchain-Technology
- Technology of Public Blockchain
- Blockchain-Based Systems Engineering
- Smart contracts, Tokens and Coins
- Smart contracts Hands-on Tutorials
- Use cases of Blockchain Technology
- Legislation, Regulation, Organization
- Strategic and organizational Changes through Blockchain
- Insights & Case Study

Intended Learning Outcomes:

In this program on one of the most promising but also contentious technologies, the students learn how to implement and manage Blockchain and DLT, and how to unlock its potential for the enterprise. This Certificate Program covers the technical, business, social and legal aspects of blockchain-based solutions in a balanced and unbiased way.

Teaching and Learning Methods:

Lectures given by professors and experts form the basis for group discussions. Case studies and group exercises as well as interactive exchange with participants and lecturers create a workshop atmosphere with a high practical relevance. Reading articles and case studies ensures appropriate preparation and follow-up.

Media:**Reading List:****Responsible for Module:**

Ernstberger, Jürgen; Prof. Dr. rer. pol. habil.

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de

Module Description

WI201096: Building Information Modeling Professional (BIM) | Building Information Modeling Professional (BIM)

Version of module description: Gültig ab winterterm 2021/22

Module Level: Master	Language: German	Duration: one semester	Frequency:
Credits:* 5	Total Hours: 150	Self-study Hours: 66	Contact Hours: 84

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Participants work in the written exam 40 minutes on the basics of the BIM method. Participants will have to apply their knowledge about the different steps within the BIM processes like information requirements to the contracting authority, BIM run-off plan structures, application cases of visualization within the planning process, setting of a Information Delivery Manual, different kinds of classification systems and the challenges of BIM modeling in interdisciplinary teams. For the presentation, participants present a concrete BIM application case from their professional context.

Repeat Examination:

(Recommended) Prerequisites:

First university degree (or similar) and several years of relevant professional experience.

Content:

- the BIM-method in science
- the BIM-method in the industrial practice
- plan by stages for digital planning and constructing
- BIM life cycle and reference process after plan by stages
- BIM models: geometry and model structure
- data management in the life cycle of the building
- data exchange
- process modeling
- open BIM
- change management
- BIM contract models and legal basics

Intended Learning Outcomes:

Participants will be able to apply state-of-the-art methods for successful project management with BIM in the areas of technology, processes, people and guidelines. Participants will be able to define BIM, know and apply BIM terminology, understand the need for new and collaborative forms of collaboration, and explain the benefits and challenges of BIM for clients and operators of Buildings.

Teaching and Learning Methods:

Lectures given by professors and practical experts form the basis for group discussions. Case studies and group exercises as well as interactive exchange with participants and lecturers create a workshop atmosphere with a high practical relevance. The results can be used directly in the projects of their professional activity. Reading articles and case studies ensures appropriate preparation and follow-up.

Media:**Reading List:****Responsible for Module:**

Borrmann, André; Prof. Dr.-Ing.

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de

Module Description

MGT201098: Sustainable Management & Technology | Sustainable Management & Technology

Transformation towards Sustainability

Version of module description: Gültig ab winterterm 2021/22

Module Level: Master	Language: German	Duration: one semester	Frequency:
Credits:* 5	Total Hours: 150	Self-study Hours: 100	Contact Hours: 50

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

For the case study, a topic from your own company context should be selected that deals with management and sustainability. This could be, for example, from the area of procurement and deal with the requirements of the new supply chain law. Another example would be how the company itself can decarbonize. However, we are not limited in our choice of topics. If no topic arises from our own context, we can also provide a topic.

In the first attendance slot, a session is planned for this, to prepare this and to clarify the open questions. In the end, a concrete recommendation for action should be derived from this, which will then be presented in the form of a 20-30min final presentation.

Repeat Examination:

(Recommended) Prerequisites:

Participants should be able to demonstrate several years of professional experience (leadership experience desired), an interest in sustainability and building a network, and the courage to make changes.

Content:

Sustainable supply chains; Sustainable behavior change; Defossilization; Political governance of bioeconomy and sustainability; Circular economy; Consumer options for reducing plastic packaging; Societal support for sustainable climate policy: What can we learn from behavioral economics?; Renewable raw materials - When is it worth using them as materials?; (Bio-)gas and electromobility: What benefits how much for the climate?; Sustainable and digital transformation.

Intended Learning Outcomes:

Participants acquire the ability to support the transformation of their organizations into sustainable entities. They learn to assess which trends and technologies have the potential to prevail on the market in the future, are enabled to strengthen economic, social and ecological sustainability and to recognize new business areas and technologies in good time. In addition, methodological knowledge is imparted, e.g. in life cycle assessment, circular economy, bioeconomy and design of sustainable supply chains.

Teaching and Learning Methods:

Lectures by professors and experts from the field form the basis for the group discussions. Case studies and group exercises as well as the interactive exchange with participants and lecturers create a workshop atmosphere with high practical relevance. The results can be directly incorporated into their professional projects. Reading articles and case studies ensures adequate preparation and follow-up.

Media:**Reading List:****Responsible for Module:**

Prof. Dr. Alexander Hübner

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de

Module Description

MGT201092: Quantum Computing - An introductory course | Quantum Computing - An introductory course

Version of module description: Gültig ab summerterm 2023

Module Level:	Language: English	Duration:	Frequency:
Credits:* 5	Total Hours: 150	Self-study Hours: 115	Contact Hours: 35

Number of credits may vary according to degree program. Please see Transcript of Records.

Description of Examination Method:

Project work + presentation

Repeat Examination:

(Recommended) Prerequisites:

Participants should have basic knowledge of linear algebra and a programming language, although no expert knowledge is required. Self-paced refresher courses on linear algebra and Python are offered additionally; if needed.

Content:

The certificate program "Quantum Computing" introduces the phenomena and mathematical description of quantum science and their application to the realm of quantum computing to professionals.

Participants will gain a basic understanding of quantum mechanical effects and notions and apply these in hands-on single-photon experiments, with references to quantum computing being made from the outset.

Afterward, the program will address different layers of quantum computing applications, such as:

- concepts, potentials, and limitations of quantum algorithms;
- realizations of quantum computers: hardware, errors, and their correction;
- hardware benchmarks and resource analysis
- advanced concepts like quantum simulations and NISQ applications.

Intended Learning Outcomes:

After the course, participants can:

- define and explain the basic concepts in quantum science;
- interpret and design (simple) quantum circuits;
- distinguish between algorithms with exponential or non-exponential speedup and apply a rough criterion to identify the possible speedup;
- explain why the realization of error-corrected quantum computers poses extraordinary engineering difficulty;
- give examples for the typical present and near-term applications in the area of quantum computing and quantum simulation;
- transfer general concepts of quantum computing to exemplary applications (e.g., further algorithms, NISQ applications, or benchmarking)

Teaching and Learning Methods:

Day 1 (on campus): The fundamental building blocks of quantum physics are conveyed based on short input sessions and hands-on experiments to test and deepen the understanding. Additionally, participants are briefly introduced to a tool to design and run their quantum circuits. This tool is used throughout the program and helps the participants to easily and quickly implement theoretical ideas in quantum circuits.

Online sessions: Various topics in quantum computing are presented in lectures, accompanied by self-study homework exercises (to deepen the subject and to refresh the necessary mathematics). These include mathematical exercises, programming exercises as well as reading assignments. Short quizzes test the degree of understanding at the beginning of the online sessions. For two of the online sessions, participants prepare short presentations (5-10 min) from a list of topics, serving two purposes: (i) allowing for an interest-based specialization and (ii) offering training for the final project presentation (regarding a clear and accurate presentation, suitable for the audience).

Last Day (on campus): The content of the course is briefly reviewed, based on a short presentation paired with a quiz in groups. Afterward, participants present a summary of their project and discuss the results with the audience.

Media:**Reading List:****Responsible for Module:**

Holleitner, Alexander; Prof. Dr. rer. nat.

Courses (Type of course, Weekly hours per semester), Instructor:

For further information in this module, please click campus.tum.de or [here](#).

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