

Blockchain Technology and Digital Assets

Course instructors

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Application procedure

Goal and target audience

Doctoral candidates

Mandatory requirements

We do not require certain prerequisites. However, the doctoral candidates will benefit more from the seminar if they have a basic understanding of blockchain technology, the emerging digital assets ecosystem, and the scientific method (i.e., econometrics).

Application process

There is a limit of 20 participants maximum for this course. Please use the official application procedure for the TUM SoM Doctoral Summer School.

The application starts on May 2, 2023, 12:00 noon. The deadline for application is June 30, 2023, end of day. Registration works on a first come, first served basis. Registration is only possible for doctoral candidates of TUM School of Management.

Please find the link for registration here: <https://www.mgt.tum.de/faculty-research/doctoral-program/course-program>

Course aims

Upon completion of the module, participants will be able to:

- describe the effects of current digital assets and business model developments for existing;
- exhibit a comprehensive overview on current research topics in the field of Digital Assets;
- identify chances and opportunities of these developments (also with regard to financial markets, entrepreneurship, strategic management, and organization theory);
- conduct an independent literature analysis at the highest possible, international level;
- analyze and evaluate references in a systematic manner;
- combine topics in Digital Assets with theories/methods/models of traditional finance, entrepreneurship, strategic management, and organization theory in an independent manner;

- derive answers to posed research questions in a systematic and structured manner;
- create/draft a scientific report independently

Course objectives

- Corporate Governance and Blockchains
- Blockchain Economics
- Smart contracts
- Decentralization
- ICOs
- Token valuation
- Risk factors
- Stablecoins
- Security Tokens
- MEV
- DeFi
- DEX
- NFTs
- Investing
- Cybercrime
- Web3
- DAOs

Preliminary schedule

The course takes place in the first week of the **TUM SoM Doctoral Summer School** from September 18 to September 21, 2023.

Please refer to the schedule for the Summer School for further details on the course schedule.

The schedule for the Summer School can be found in the digital flyer on the Summer School:

<https://www.mgt.tum.de/faculty-research/doctoral-program/course-program>

Course procedures

Types of instruction comprise an initial lecture (overview course) as well as the corresponding main seminar;

Methods of teaching include a group work and the formal presentation of obtained results; the learning methods of the doctoral candidates primarily comprise the following activities:

- independent literature research (usage of scientific articles published in international top journals);
- Collaborative writing of a scientific report;
- Exercise of a deductive, logic and consistent argumentation to specifically address and answer the posed research questions;
- Preparation and execution of a final presentation;
- Ability to answer advanced thematic issues

The chosen types of instruction / methods of teaching are considered adequate to foster/extend the doctoral candidates' ability to conduct independent academic work and to

elaborate thematically complex contents on their own.

Assessment

The examination comprises a 30-minute presentation of a scientific publication that each doctoral candidate will receive before the seminar, and a Q&A following the presentation. Additional to the presentation, candidates are required to submit a written report of 3-5 pages (i.e., 1000-1500 words), which puts the presented study into its broader research context ("related literature") and identifies potential avenues for further work ("agenda for future research").

In doing so, the candidates are required to prove that they have dealt with the given topic in a comprehensive manner, that their selection and evaluation of literature is adequate and that they have in-depth analyzed the topic while simultaneously putting into a higher context of scientific research. Also, it can be assessed whether the candidates are able to answer further questions in a correct and comprehensive manner.

The written assignment will be weighted 1/2 and the formal presentation will make 1/2 of the final grade. Each participant will be assessed separately.

References

A separate reading list for each topic will be provided in the introductory lecture.

Workload

3 ECTS