



Registration

- The participation in this seminar is **free of charge**, as the seminar costs will be covered by the Institute of Business Economics and Industrial Sociology as well as the Faculty of Mechanical Engineering and Economic Sciences of TU Graz.
- Registration is open from **now until October 18th 2022**.
- The number of on-site participants is limited to the max. of **12 persons**. The „first registration - first serve“ principle will be applied, as long as the participants fit into the target group.
- Registration is managed by Amila Omazic, BSc. MSc. E-mail: [amila.omazic\(at\)tugraz.at](mailto:amila.omazic(at)tugraz.at)

Venue

The seminar will take place in a hybrid form. Include information whether you would like to participate online or on site.

Graz University of Technology
BWL Seminar Room (NT02100)
Kopernikusgasse 24, 2nd Floor
8010 Graz, Austria

Organisation

Graz University of Technology
Working Group “Industrial Marketing, Purchasing and Supply Management“ of the Institute of Business Economics and Industrial Sociology

For any questions regarding the seminar please do not hesitate to contact

Prof. Dr. Bernd M. Zunk
E-Mail: [bernd.zunk\(at\)tugraz.at](mailto:bernd.zunk(at)tugraz.at)

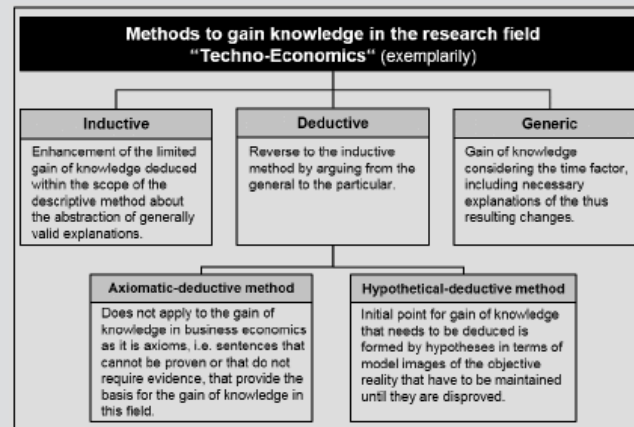


Inter-University Research Seminar

Techno-Economic Research Methods

Methods are considered crucial to every scientific discipline as they **ensure rationality and verifiability of scientific findings**.

At a glance, the following figure illustrates a selection of the **key methods** within Business Economics (and, thus, of Techno-Economics and Management Science). Of course, both abstract methods and models used to reproduce complex economic realities in a simplified way are indispensable in Business Economics/ Techno Economics/ Management Science.



This might give you a short impression of why this research seminar could be useful for your future research and teaching career.



Advanced Statistical Modeling

Date: 18.11.2022

Goal of this Seminar

The participants of the seminar “Advanced Statistical Modeling in Techno-Economics and Management Science” will learn the basics of **applied statistical modeling**. Furthermore, the participants will get an **overview of suitable empirical research methods** and appropriate **research software**.

They will be able to formulate basic statistical models by themselves. Using **examples**, students will be able to analyze models (e.g., in terms of validity, reliability, and model fit) and interpret the data obtained (e.g., for the testing of the proposed hypotheses).

Target Group

This seminar is designed for **IEM scholars** as well as **Master students, PhD students, early-stage researchers or experienced faculty** who are planning to apply the presented knowledge in their social science research projects and teaching.

Schedule

Friday, November 18th, 2022

Session 1 (8:30am to 10:00am)

- Introduction: Advanced Statistical Modeling

Session 2 (10:15am to 11:45am)

- Correlation Analysis, Regression Analysis and Group Comparison Tests

Session 3 (1:00pm to 2:30pm)

- Structural Equation Modeling (SEM)

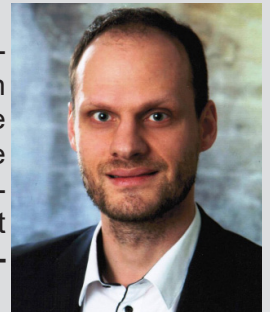
Session 4 (2:45am to 3:30am)

- SEM Exercises and Case Studies

Lecturer

Manuel Woschank

received a Ph.D. in Management Sciences with summa cum laude from the University of Latvia and the Habilitation in Industrial Engineering and Management from the **Montanuniversitaet Leoben**. He is



currently Deputy Head of the Chair of Industrial Logistics at the Montanuniversitaet Leoben and an Adjunct Associate Professor at the Faculty of Business, Management, and Economics at the University of Latvia. His **research interests** include the areas of logistics systems engineering, production planning and control, smart logistics/logistics 4.0 concepts and technologies, circular economy and the decarbonization of logistics systems, behavioral decision-making, and engineering education.

Teaching Experience

Manuel Woschank’s teaching experience includes basic courses as well as advanced courses in the field of **industrial logistics** at Montanuniversitaet Leoben. Externally, he teaches courses on advanced research methods at the University of Latvia and courses on strategic management, purchasing, and logistics at other universities and colleges.