Master Seminar, JLU Gießen SS 2026

TOPIC:

Applying (Gen) AI to transform Business Decisions

Lecturer:
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In an era where data is king, and (Generative) Artificial Intelligence is revolutionizing every aspect of life, our seminar aims to immerse you in the world of (Gen) AI and machine learning as central technologies for shaping the future of business. Our focus is on equipping you with the knowledge and skills to be part of this transformative play, enabling you to make impactful, data-driven decisions in businesses and society. The seminar emphasizes business and economic forecasting as a critical component of digital transformation, additionally.

As a participant, you will:

- **Practical training sessions using Gen AI (LLMs) and R/Python** will kickstart the seminar, providing you with the tools to harness the power of data analytics. While empirical work in your seminar paper is encouraged, it's not mandatory. We aim to guide and train you to confidently undertake such tasks.
- Dive deep into the world of **AI driven business and forecasting**, understanding its importance as the foundation for data-driven decision-making.
- **Engage with applications**, such as financial forecasting, business cycle forecasting, financial stress indices, customer churn prediction, and credit scoring.
- Develop **skills in presenting data and analytics** for effective management communication.

This seminar is not just about learning to become a data scientist; it's about gaining digital competence crucial for your future career.

Join us in this journey to not just predict the future but to actively create it with the power of (Gen) AI and data.

1. Organizational information

Important Dates:

- Kick-off – **14. April 2026, 09:00 – 10:30.** Topic Presentation & Allocation
  Location:**Licher Straße 68, Room 020**
- Hands on Session: tbd
  Location: On-site campus
- Outline Presentation: **26. May 2026 - 9:00 – 12:00.**
  Location: remote
- Presentation of students' work **– 09.07.2026 / 10.07.2026, exact time to be announced**
  Location: On-site campus
- Final deadline for seminar paper submission **– 31.07.2026**

Venue can be found in StudIP!

Organization & Grading:

- Topics see following pages, topics will be allocated to the students during the kick-off session.
- Students will be graded based on:
  - a written seminar paper (70%)
  - an oral presentation of the written paper (30%)
    - in form presentation of the seminar paper (exemplary structure: 1) Introduction & Motivation, 2) Theoretical Background, 3) Methodology (incl. Use of LLMs), 4) Results, 5) Discussion, 6) Conclusion & Outlook)
    - the design and explanation of 3 Single Choice (SC) questions for the presented work (30%). Please prepare slides for an explanation of the answers. Based on the SC question, we will have a SC Quiz.

Guide for written work:

- Language: English
- There are word or LaTex templates available. (Please find them here)
- It is recommended to use a citation manager, such as Mendeley, Citavi, Zotero, etc.
- The paper should have at least 10, but no more than 15 pages.
- Please note that you should hand in your preliminary paper one week before the presentation and will be shared with the other participants.
- Revising the paper after the presentation is allowed and encouraged. However, it must be handed in at the day of the final deadline.
- When handing in your work, include a pdf-Version of the written paper and the AI tools, Python, R, xlsx (…) files (if applicable).
- Application of AI tool in your written work is explicitly allowed, but you must follow the following guidelines:
  - AI tools must always be cited, just like other aids and sources
  - The products of AI tools are not scientific sources. It remains the responsibility of the author to check the relevance, truthfulness or accuracy of the products.
  - Student work and examinations must continue to be independent achievements of the students.

    - In order to be able to cite correctly and securely, please always save the chat history (questions/entries, prompts and answers) outside of the AI application.
    - A directory can be created
- Please note the provision of ”KI? Aber sicher! JLU kiChat für alle Mitglieder der JLU geöffnet” **https://ki-chat.uni-giessen.de/interface**
- You should hand in your paper via Mail to Frauke Schleer-van Gellecom (see contact details below).

Guide for the presentation of the written paper:

- For your presentation, you have 15 – 20 min. The MC part can last from 10 to 15 minutes. The discussion may take 5 to 10 mins.
- A template will be provided to insert the Single Choice questions.
- The presentation must held in English
- Before the presentation date, please send your slides to Frauke Schleer-van Gellecom.
- Please bring your on own notebook to present your slides.

Contact details:

- For questions, please refer to Frauke Schleer-van Gellecom (frauke.schleer@wirtschaft.uni-giessen.de)