„Accounting and Auditing in the Age of Artificial Intelligence“
Research Seminar Bachelor | Winter Semester 2025/26

eligible for “Spezialfragen der Unternehmensrechnung & Wirtschaftsprüfung” or
“Anwendungsorientierte Fragen der Unternehmensrechnung & Wirtschaftsprüfung”

Artificial intelligence (AI) is rapidly reshaping the landscape of accounting and auditing, making it essential for firms and future professionals to understand the opportunities and challenges it brings. This seminar invites students to explore these developments by conducting their own research on a selected topic within the broader theme. Through the preparation of a written seminar paper and an accompanying presentation, students will critically engage with current developments of AI in accounting and auditing. The aim of the seminar is to prepare students for the successful completion of a bachelor's thesis, both in terms of formal requirements and methodological approaches in the field of accounting. By the end of the course, students should have acquired knowledge of selected methods of accounting research.

A) Registration

Binding registration for the seminar takes place prior to the introductory session. If more students register than the maximum number of participants allowed by the chair (24 participants), places will be allocated based on students’ academic progress. In the case of over-enrollment, admission to the seminar will be determined by lottery.

For successful completion of the seminar, prior completion of the module "Grundlagen externer Unternehmensrechnung" is recommended. For topics involving empirical research, it is also recommended to have completed the module *"Einführung in die Statistik"*. As the seminar is intended to prepare students for the successful writing of a thesis, all participants are strongly encouraged to attend the literature research and citation courses offered by the university's economics library. An overview of the available courses can be found here.

B) Topic allocation

The individual topics are outlined in this document (see Section F). When registering, participants may indicate their preferred topics in order of priority. However, there is no guarantee that everyone will receive a topic from their preferred list. If more students choose a particular topic than there are available spots, topics will be assigned by lottery. The topic allocation will be communicated before the introductory session.

C) Course Work

Participants in the seminar are required to write a seminar paper of no more than 12 pages (plus any necessary appendices, such as a references) on their assigned topic. The paper must meet academic standards in both content and form. Relevant guidelines are available on the department's website. The paper must be written in English.

In addition to submitting the written paper, participants must prepare for an oral presentation of approximately 20 minutes also in English. The accompanying presentation slides must be submitted in advance as a PDF file (see schedule). Following the presentation, there will be a discussion session of about 15 minutes during which students are expected to defend their work in response to critical questions.

The topics assigned within the research seminar will be grouped into thematically related blocks for the presentation sessions. After the presentations within each topic block, a general discussion will take place, focusing on key issues related to the field as well as the individual contributions made in the seminar papers.

Attendance at all in-person seminar sessions is mandatory. Participants are responsible for managing any potential scheduling conflicts with other lectures on their own.

D) Grading

The grading is based not only on the written seminar paper, but also on the oral presentation and the individual contributions made during the discussion sessions on both one's own topic and those of others.

The grade is composed as follows:

- Written seminar paper: 60%
- Presentation and defense: 25%
- General participation in discussions: 15%

E) Course Dates and Overall Timeline

by Friday, October 10, 2025 by 6pm	Submit the application form, including topic preferences, via email to facts-dupw@wiwiss.fu-berlin.de. The application form is available on the chair's website.
By October 15, 2025	Notification of seminar participants including assigned topic via email
By October 21, 2025 By 6pm	If students do not wish to accept the registration, a written declaration of withdrawal must be submitted to stephan.kuester@fu-berlin.de. Otherwise, the thesis will be graded as 'fail' if not submitted. The declaration is considered submitted once you have received confirmation by email.
October 24, 2025 9 am – 6pm	**Introductory Session (in-person session)** • Setting the stage: relevance of AI in Accounting & Auditing • Guidance on writing an academic paper • Guidance on giving a presentation • Overview of topics • Organizational matters
November 20, 2025 & November 21, 2025 9 am – 6pm	**Feedback Sessions (in-person sessions)** In addition to the opportunity to ask questions and receive feedback throughout the entire writing period, students are required to attend one mandatory in-person session for individual guidance on: • the structure of their paper • the chosen methodology • the next steps in their research process
By January 5, 2026	**Submission of Seminar Paper**

By 6pm	Please send your thesis as both a Word and PDF document by email to facts-dupw@wiwiss.fu-berlin.de. Any literature used (if available as a PDF) as well as any data analyses must also be attached. In addition, a simple printed copy must be submitted to the chair. Your seminar paper is considered submitted once you have received confirmation by email.
By January 14, 2026 By 6pm	**Submission of Presentation Slides** Submit your presentation slides as a PDF file via email to facts-dupw@wiwiss.fu-berlin.de. Your submission is considered complete once you receive a confirmation email.
January 16, 2026 & January 17, 2026 9am to 6pm	**Presentation Dates (in-person sessions)** Presentation of the course work by the participants. The detailed schedule will be provided to participants in advance.

F) Topic overview

If you have any questions regarding the individual topics, please contact stephan.kuester@fu-berlin.de.

Note: The literature listed below is intended only as an initial introduction to the topic and does not replace a thorough literature search.

STRUCTURED LITERATURE REVIEWS

(1) The impact of Artificial Intelligence on Financial Accounting: A structured literature review

Students choosing this topic will conduct a structured literature review to synthesize existing academic research on how AI is transforming the field of accounting. The paper should identify key themes, empirical evidence, and research gaps in the area of financial accounting, offering a critical overview of AI's current and potential future impact on accounting practices.

Illustrative literature:

Ding, K., Lev, B., Peng, X., Sun, T., & Vasarhelyi, M. A. (2020). Machine learning improves accounting estimates: Evidence from insurance payments. *Review of Accounting Studies*, 25(3), 1098–1134. https://doi.org/10.1007/s11142-020-09546-9

Estep, C., Griffith, E. E., & MacKenzie, N. L. (2024). How do financial executives respond to the use of artificial intelligence in financial reporting and auditing? *Review of Accounting Studies*, 29(3), 2798–2831. https://doi.org/10.1007/s11142-023-09771-y

(2) The impact of Artificial Intelligence on Auditing: A structured literature review

This seminar paper involves a structured literature review of academic studies on the use and implications of AI in auditing. Students are expected to analyze how AI technologies influence audit processes, auditor judgment, risk assessment, and audit quality, and to identify emerging trends and gaps in the current research landscape.

Illustrative literature:

Fedyk, A., Hodson, J., Khimich, N., & Fedyk, T. (2022). Is artificial intelligence improving the audit process? *Review of Accounting Studies*, 27(3), 938–985. https://doi.org/10.1007/s11142-022-09697-x

Samiolo, R., Spence, C., & Toh, D. (2024). Auditor judgment in the fourth industrial revolution. *Contemporary Accounting Research*, 498–528. https://doi.org/10.1111/1911-3846.12901

(3) Artificial Intelligence Methods for Empirical Research in Accounting & Auditing

In this seminar paper, students will conduct a structured literature review to explore how AI methods are applied in empirical research within accounting and auditing. The goal is to categorize the types of AI techniques used assess their research purposes and contexts, and highlight methodological trends and opportunities for future studies.

Illustrative literature:

Bao, Y., Ke, B., Li, B., Yu, Y. J., & Zhang, J. (2020). Detecting Accounting Fraud in Publicly Traded U.S. Firms Using a Machine Learning Approach. *Journal of Accounting Research*, 58(1), 199–235. https://doi.org/10.1111/1475-679X.12292

Huang, A. H., Wang, H., & Yang, Y. (2022). FinBERT: A Large Language Model for Extracting Information from Financial Text. *Contemporary Accounting Research*, 1911-3846.12832. https://doi.org/10.1111/1911-3846.12832

EMPIRICAL RESEARCH

(4) Is AI considered a risk or opportunity? A descriptive analysis of listed entities in Germany

This empirical archival paper investigates whether and how listed entities in Germany perceive AI as a risk or an opportunity. Using publicly available risk disclosures within the annual reports, students are expected to conduct a descriptive analysis that identifies patterns in AI-related risk and opportunity framing across industries, firm sizes, or over time.

Illustrative literature:

Demary, Vera; Goecke, Henry (2019) : Künstliche Intelligenz: Deutsche Unternehmen zwischen Risiko und Chance, IW-Trends - Vierteljahresschrift zur empirischen Wirtschaftsforschung, ISSN 1864-810X, Institut der deutschen Wirtschaft (IW), Köln, Vol. 46, Iss. 4, pp. 3-18, https://doi.org/10.2373/1864-810X.19-04-01

Linsley, P. M., & Shrives, P. J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *The British Accounting Review*, 38(4), 387–404. https://doi.org/10.1016/j.bar.2006.05.002

(5) <u>The usage of AI and analytics in financial statements audits: A descriptive analysis of critical audit matters</u>

This empirical archival paper explores how AI and analytics are referenced in the context of financial statement audits by analyzing Critical Audit Matters (CAMs) disclosed in auditors' reports. Students are expected to conduct a descriptive analysis using Python to identify the extent, nature, and patterns of AI- or analytics-related content, providing insights into how technological tools are integrated into audit risk assessments and audit procedures.

Illustrative literature:

Minutti-Meza, M. (2021). The art of conversation: The expanded audit report. *Accounting and Business Research*, 51(5), 548–581. https://doi.org/10.1080/00014788.2021.1932264

Cao, M., Chychyla, R., & Stewart, T. (2015). Big Data Analytics in Financial Statement Audits. *Accounting Horizons*, 29(2), 423–429. https://doi.org/10.2308/acch-51068

(6) <u>The implementation of AI in audit firms. An analysis of audit firms' transparency reports and websites</u>

This empirical archival paper examines how audit firms communicate the implementation of AI through their transparency reports and official websites. Students are expected to systematically analyze and compare disclosures across firms to identify

trends, focus areas, and differences in how AI adoption is framed in relation to audit quality, innovation, and strategic priorities.

Illustrative literature:

Deumes, R., Schelleman, C., Vander Bauwhede, H., & Vanstraelen, A. (2012). Audit Firm Governance: Do Transparency Reports Reveal Audit Quality? *AUDITING: A Journal of Practice & Theory*, 31(4), 193–214. https://doi.org/10.2308/ajpt-10301

Fedyk, A., Hodson, J., Khimich, N., & Fedyk, T. (2022). Is artificial intelligence improving the audit process? *Review of Accounting Studies*, 27(3), 938–985. https://doi.org/10.1007/s11142-022-09697-x

(7) What determines cybersecurity breaches? An empirical analysis

This empirical archival paper investigates the determinants of cybersecurity breaches using a publicly available breach databases and firm-level data. Students are expected to identify and analyze potential risk factors—such as firm size, industry, or governance characteristics, that may be associated with the likelihood of a breach, and to provide empirical evidence on patterns and predictors of cybersecurity incidents.

Illustrative literature:

Cram, W. A., Wang, T., & Yuan, J. (2023). Cybersecurity Research in Accounting Information Systems: A Review and Framework. *Journal of Emerging Technologies in Accounting*, 20(1), 15–38. https://doi.org/10.2308/JETA-2020-081

Chen, C.-Y., Goh, B. W., Lee, J., & Li, N. (2025). The Effect of Cybersecurity Breaches on Analysts' Earnings Forecasts. *European Accounting Review*, 1–27. https://doi.org/10.1080/09638180.2025.2476760

(8) Are companies using AI to write their reports? An analysis of CEO statement letters

This empirical archival paper analyzes whether companies are using AI tools, such as large language models, to draft CEO statement letters in annual reports. Using tools like decopy.ai, students are expected to examine linguistic patterns and stylistic similarities to AI-generated text, aiming to identify potential indicators of AI-assisted writing and

assess how prevalent this practice is across firms or industries. *Note: The use of decopy.ai requires a registration.*

Illustrative literature:

Yan, B., Aerts, W., & Thewissen, J. (2019). The informativeness of impression management − financial analysts and rhetorical style of CEO letters. *Pacific Accounting Review*, 31(3), 462–496. https://doi.org/10.1108/PAR-09-2017-0063

Irons, C. (2024). The Influence of AI-Like Text on Responses to Disclosure: Evidence from AI Detection Models. *Working Paper*. https://doi.org/10.2139/ssrn.4931744

CONCEPTIONAL RESEARCH

(9) Where Can AI Support the Financial Reporting Process? A Conceptual Mapping

This conceptual paper provides a structured overview of how and where AI can support the financial reporting process. Students are expected to map key stages of the reporting process—such as data collection, recognition and measurement, consolidation, estimation, and disclosure preparation—and conceptually analyze how AI can add value in each area. The paper should also discuss limitations, governance challenges, and implications for human oversight.

Illustrative literature:

Busulwa, R., & Evans, N. (2021). Digital transformation in accounting. Routledge.

Chen, Y., Huang, X., & Cao, J. (2024). A Framework for Applying Machine Learning and Natural Language Processing Methods to Accounting Recognition. *Accounting Horizons*, 1–11. https://doi.org/10.2308/HORIZONS-2023-093

(10) The role of standard setters and regulators for AI in accounting & auditing

This conceptual paper explores how standard setters and regulators influence the integration of AI into accounting & auditing practices. Students are expected to analyze current regulatory approaches, discuss challenges related to audit and financial reporting quality, accountability, and develop a well-argued view on the appropriate regulatory framework to ensure trustworthy AI adoption in accounting & auditing.

Illustrative literature:

Eulerich, M., Summers, S. L., & Wood, D. A. (2025). Artificial Intelligence, Audit Risk, and Regulatory Uncertainty: A Refined Analytical Model of Auditor and Client Decisions Under PCAOB Scrutiny. *Working Paper*. https://doi.org/10.2139/ssrn.5245259

Leitner-Hanetseder, S., & Lehner, O. M. (2023). AI-powered information and Big Data: Current regulations and ways forward in IFRS reporting. *Journal of Applied Accounting Research*, 24(2), 282–298. https://doi.org/10.1108/JAAR-01-2022-0022

(11) How does AI shape the profession of financial accounting?

In this conceptual paper, students will examine how AI is transforming the profession of financial accounting. The paper should explore changes in required skillsets, professional roles, and responsibilities, and develop a theoretical perspective on how AI may redefine the identity and value proposition of financial accountants in the future.

Illustrative literature:

Busulwa, R., & Evans, N. (2021). Digital transformation in accounting. Routledge.

Becker, M., & Schölzel, S. (2025). Warranty Provisions: Machine-Learning Versus Human Estimates. *European Accounting Review*, 1–30. https://doi.org/10.1080/09638180.2024.2444521

(12) How does AI shape the profession of auditing?

This conceptual paper investigates how AI is reshaping the auditing profession. Students are expected to explore shifts in auditors' roles, required competencies, and professional judgment, and to develop a conceptual perspective that captures the evolving identity and responsibilities of auditors in an increasingly AI-driven environment.

Illustrative literature:

Samiolo, R., Spence, C., & Toh, D. (2024). Auditor judgment in the fourth industrial revolution. *Contemporary Accounting Research*, 498–528. https://doi.org/10.1111/1911-3846.12901

Kokina, J., Blanchette, S., Davenport, T. H., & Pachamanova, D. (2025). Challenges and opportunities for artificial intelligence in auditing: Evidence from the field. *International Journal of Accounting Information Systems*, 56, 100734. https://doi.org/10.1016/j.accinf.2025.100734

(13) Application fields for generative AI in accounting and auditing research: A conceptional analysis using ChatGPT

In this conceptual paper, students will analyze potential application fields for generative AI—particularly large language models like ChatGPT—in accounting and auditing research. The paper should explore how such tools can support data generation, and enables the investigation of new research questions. Students should also reflect critically on the methodological implications, limitations, and ethical considerations.

Illustrative literature:

De Kok, T. (2025). ChatGPT for Textual Analysis? How to Use Generative LLMs in Accounting Research. *Management Science*, mnsc.2023.03253. https://doi.org/10.1287/mnsc.2023.03253

Eulerich, M., Sanatizadeh, A., Vakilzadeh, H., & Wood, D. A. (2024). Is it all hype? ChatGPT's performance and disruptive potential in the accounting and auditing industries. *Review of Accounting Studies*. https://doi.org/10.1007/s11142-024-09833-9