

Educating AI for Finance and Accounting Majors in Vietnam

Anh Thu Nghiem^{*a}, Thu Giang Nguyen^a, Gia Linh Pham^a

^a Foreign Trade University, Vietnam

Abstract

Globally, Artificial Intelligence (AI) is transforming finance and accounting education, and Vietnam is similarly prioritizing the integration of AI into finance and accounting curricula as part of its national digital transformation agenda. This study employs a desk research methodology, reviewing secondary data on curricula and program documents to assess how AI is integrated into finance and accounting education across Vietnam's public universities, foreign-invested universities, and private training centers. The results indicate that public universities lead with systematic AI integration through expanded curricula and dedicated fintech programs; private training centers emphasize practical AI tools and short-term courses aligned with immediate industry needs; while foreign-invested universities show a more limited degree of interdisciplinary integration between AI and finance-accounting. The study concludes that closer collaboration between universities and training providers is needed to balance robust academic foundations with hands-on skills, aligning educational outcomes with evolving labor market demands.

Keywords: Artificial Intelligence; Finance and Accounting Education; Vietnam; Curriculum Integration

1. GLOBAL AND NATIONAL CONTEXT OF AI IN FINANCE AND ACCOUNTING EDUCATION

Globally, Artificial Intelligence (AI) has become a key driver across various domains, ranging from finance and logistics to business strategy. In the digital age, AI is no longer limited to computer science; rather, it has emerged as a transformative force in industries such as finance, marketing, logistics, and strategic management. From financial data analysis and supply chain optimization to personalized customer experiences, AI has become an indispensable component of business operations and a central source of competitive advantage. According to McKinsey's *State of AI* report in 2024, "nearly all employees (94 percent) and C-suite leaders (99 percent) indicate some level of familiarity with generative AI tools" (Mayer et al., 2025). The adoption of AI in capital markets is likely to expand significantly in the near future, potentially reshaping market structures through the greater reliance on algorithmic trading and the introduction of novel investment strategies (IMF, 2024). In response to these global shifts, leading universities such as MIT, Stanford, Oxford, and Wharton have rapidly integrated AI into economics curricula, and in some cases, have even established specialized programs in AI and economics. This trend reflects a broader movement toward embedding technology into the study of economics on a global scale.

In Vietnam, AI has also been identified as a strategic pillar for national development, with the objective of positioning the country as a regional hub for AI innovation by 2030. The government has introduced key initiatives such as the *National Strategy on Research, Development, and Application of Artificial Intelligence to 2030*, which seeks to make Vietnam a center for AI innovation and deployment in Southeast Asia (Vietnam Government Portal, 2021). In parallel, universities have begun integrating AI into economics-related curricula, particularly in fields such as Finance and Accounting. Prominent institutions, including NEU, FTU, and RMIT, have incorporated courses on data, AI, and analytics into economics programs, with some universities even establishing AI as a separate major for specialized training. Moreover, private education providers have launched short-term courses on AI in finance and accounting to meet the urgent demands of the labor market. These efforts constitute an important foundation for aligning education with digital transformation and the demand for new workforce skills.

* Corresponding author. Tel.: +84 906 289 935
E-mail: nghiemanhthu@ftu.edu.vn

Nevertheless, several challenges remain. A shortage of faculty with interdisciplinary expertise in AI and economics, uneven program quality, and curricula that often remain at an introductory level with limited practical application have constrained progress (Nhan Dan, 2024). AI-related programs are more widely offered in general business and economics tracks, while in specialized areas such as finance and accounting they remain nascent, lacking national standards and sufficient academic credibility. Consequently, a widening gap persists between the demand for AI-skilled labor and the current capacity of educational institutions to deliver.

Against this backdrop, the present study aims to examine and assess the current state of AI integration in economics-related training programs in Vietnam, with a particular focus on curriculum content, implementation approaches, and institutional strategies. Furthermore, it seeks to analyze the mismatch between academic training and labor market needs, and from this analysis, propose strategic orientations for developing AI-integrated programs that enhance the competitiveness of economics graduates in the digital era.

From a theoretical perspective, this study draws on the framework of technological pedagogical content knowledge and the AI competency framework for educators and learners, which highlight the interdependence between subject knowledge, technology integration, and pedagogical adaptation. Within finance and accounting education, these frameworks suggest that effective AI integration requires not only the introduction of new technologies but also the redesign of curricula, teaching methods, and assessment models to foster critical thinking, data literacy, and ethical awareness. This theoretical lens provides a foundation for interpreting how different institutions in Vietnam adapt their programs to align with global digital transformation trends.

To explore these dynamics in the Vietnamese context, this study relies on desk research using secondary data. Sources include university websites, curricula, syllabi, official reports, and media publications from leading institutions in Vietnam such as FTU, NEU, the Banking Academy, RMIT Vietnam, and selected private training centers. This approach allows for a systematic overview of how AI has been introduced into economics-related programs, particularly in finance and accounting. The desk research method was adopted to enable a comprehensive comparative analysis across institutional types. Data were systematically collected from over 30 official curriculum documents, program descriptions, and syllabus from 2023–2025, ensuring coverage of both undergraduate and postgraduate levels. Triangulation was achieved through cross-verification of institutional reports, official websites, and media publications. This approach ensures the validity and reliability of findings while maintaining flexibility in capturing the evolving nature of AI education in Vietnam.

The analysis follows a curriculum review framework built around seven dimensions: level of training (undergraduate, graduate, or certificate), presence of AI-related courses, methods of integration (stand-alone courses, embedded modules, or projects), technological tools introduced, teaching methodologies, expected learning outcomes, and assessment formats. Using these criteria, program structures were coded and compared to highlight both common practices and divergences across institutions.

By adopting this qualitative approach, the study offers an in-depth understanding of the ways AI is currently embedded in economics, finance, and accounting education in Vietnam, and it identifies areas where programs may be better aligned with labor market requirements.

2. AI EDUCATION IN FINANCE AND ACCOUNTING IN VIETNAM

2.1. Public universities in Vietnam

Public universities in Vietnam have introduced AI adoption in finance and accounting majors. So far, most AI applications in public universities are limited to undergraduate programs. At the master's level, foreign-invested institutions have launched additional AI-related programs, but these remain focused on information technology rather than finance and accounting.

In terms of curriculum design, faced with the rapid development of AI, Vietnamese public universities have responded by expanding majors, introducing new courses, and adding AI-related content into finance and accounting programs. Among them were the Foreign Trade University (FTU), the National Economics University (NEU) and Banking Academy (BA). At FTU, a Computer Science major was introduced, with AI-related subjects such as Digital Economics, Data Analytics in Economics and Business, or Time Series Models for Economics and Business. Besides, FTU incorporated Data Management Systems, Programming for Data Analysis and Scientific Computing, and Artificial Intelligence in the Era of Digital Transformation into its Banking and Finance high quality bachelor's program. Meanwhile, NEU has a stronger expansion when adding six new majors related to AI in 2024, of which two are extremely popular today such as Data Science and Artificial Intelligence. In these two majors, the university has Financial Analysis. However, the remaining subjects mainly focus on technology, instead of finance-accounting. In terms of finance programs, Financial Technology is a separate major instead of

a subject like FTU. Here students will learn subjects such as financial software applications, Basic Fintech and Big Data Implementation and Analytics (compulsory). Similarly, The Banking Academy (Ba) Created a Financial Technology major in 2023.

In addition to the bachelor's program, universities also focused on the postgraduate program with the renovation of each year. Foreign Trade University (FTU) in 2024 revised and supplemented the curriculum. Specifically, for the master's program for finance, the university has subjects such as Digital Financial Services, Software Application for Banking and Finance and Applied Machine Learning in Financial Analysis (optional). Similar to the PhD program, the school has implemented Research Issues in Fintech (optional). Another example is a Banking Academy (BA)'s master's program. For finance, the school has subject financial technology (compulsory).

Beyond formal degree programs, universities have also expanded their offerings to external learners through supplementary, short courses, enabling students from other institutions who are passionate about finance and AI to register. An example is the short course Fintech, AI, and Blockchain for Economics and Finance Students from Foreign Trade University (FTU). Besides, the HaNoi University of science and technology (HUST) - the top university in technology in Vietnam has opened the Institute of Digital Technology and Economy. In 2025, the Institute provided a short-term training program for Financial technology (Fintech) with two modules, namely Tech4Fin: Technology for finance and Fin4Tech: Finance applied in technology. These initiatives illustrate a shift from treating AI as an optional add-on toward embedding it more systematically into finance-accounting training, although the depth of integration still varies across institutions.

The integration of AI into economics, finance, and accounting education at Vietnamese public universities is evolving from a basic level—where AI appears only as supplementary or standalone courses—towards more advanced formats, such as dedicated majors and specialized fintech programs. Nevertheless, the direct connection between AI and core finance-accounting training remains limited, with most initiatives concentrated in fintech rather than covering the broader spectrum of AI applications in accounting and finance.

2.2. Foreign-invested universities in Vietnam

In Vietnam, international universities have not yet integrated technology into finance and accounting as extensively as public universities. Specifically, at Swinburne Vietnam, while there are many disciplines of technology such as artificial intelligence or data science, subjects have not been linked and applied directly to the field of finance-accounting. Vin University (Vinuni) currently does not have its own financial and accounting training, and in the data science program, students can choose the roadmap combined with finance, but there is no specific interdisciplinary subject between technology and finance-accounting. British University Vietnam (BUV) offers many individual programs on finance and finance-accounting, but there is no linkage to technology industries, and it has not shown the integrated subjects. Meanwhile, The Royal Melbourne Institute of Technology Vietnam (RMIT Vietnam) has a certain connection between technology and finance, especially through Blockchain-based buffet subjects such as blockchain in business, finance and cryptocurrency, blockchain economy, blockchain application and smart contract. However, these subjects are still in favor of economic and technological blocks and have not been expanded to the field of accounting, and most of them are optional instead of compulsory.

Currently, postgraduate programs at international universities in Vietnam have not yet clearly shown a combination of technology and finance-accounting. Specifically, Swinburne Vietnam currently has no training industry for postgraduate level. BUV has implemented a number of postgraduate programs but not in the field of technology-finance-accounting. RMIT has a Master of Artificial Intelligence Program, but the modules in this industry are not directly applied to Finance-Accounting. Similarly, at Vinuni, students can study a master's degree in computer science, but this program is still separate and has no cohesion with financial or accounting. This shows that the orientation of interdisciplinary training at the postgraduate level at international schools is still limited.

International schools in Vietnam have not really had interdisciplinary subjects in technology-finance-accounting. The schools mainly teach each individual subject instead of creating mutual links.

2.3. Private Training Centers in Vietnam

Beside universities, the rapid growth of private training centers offering applied AI for finance and accounting reflects the urgent demand for new skills in the labor market. Courses are directed at very specific learner groups: final-year students, students intending to work outside their major, early-career employees, and professionals seeking to improve short-term work efficiency. Therefore, there are no entrance standards or requirements. While

courses such as *AI Applications in Accounting* (Vung Tau IT Center) and *AI for Accounting in the New Era* (Da Nang IT Center) focus primarily on accounting, other offerings - such as *AI in Finance, Accounting, and Internal Control* (RealCoach), *AI Applications for Accounting, Auditing, and Finance* (Sao Viet IT Center), and *AI in Practice for Finance and Accounting* (TACA) - provide broader coverage, integrating both finance and accounting. In the course of this research, the authors found relatively few centers that specialize exclusively in AI applications for either finance alone. Typically lasting between three and six months, these courses are designed with flexible formats and schedules to accommodate learners' professional and personal commitments, in contrast to university programs that follow rigid semester-based structures. However, the compressed duration raises important questions about instructional depth and learning outcomes, particularly regarding whether participants can fully absorb and apply complex AI concepts within such a short period. These findings indicate that while private training centers play a critical role in rapidly reskilling the workforce, quality assurance mechanisms are essential to ensure long-term competency.

In terms of program design, most training centers adopt a “tools-first” approach, prioritizing practical software proficiency over theoretical depth. Core workflows typically center on generative AI platforms such as ChatGPT, Claude, or Gemini for drafting content and quick analysis, combined with Excel and business intelligence (BI) tools like Power BI to enhance visualization and reporting. Programs at institutions such as Vŭng Tàu IT Center and Da Nang IT Center emphasize the integration of AI with Excel and BI platforms to improve workplace efficiency, occasionally introducing specialized tools for task-specific needs—for example, Amazon Forecast for revenue, cash flow, and budgeting projections; UiPath and Automation Anywhere for accounting and auditing automation; and Scikit-learn or Prophet for building financial machine learning models. Notably, ChatGPT appears to be a staple component across nearly all curricula, underscoring its role as an entry-level AI tool in finance and accounting workflows. Only a minority of programs delve into more advanced AI applications, such as TACA's training on leveraging AI Assistants within BCanvas to detect anomalies or extract legislative text, demonstrating a higher level of technical complexity.

Their learning objectives are framed in “job-to-be-done” terms: drafting documents with GenAI, automating reports with Excel/Power BI, simulating internal control processes, detecting transaction anomalies, etc. The content relates directly to the scope of work of a finance–accounting professional, with optimal application to daily tasks. Therefore, unlike bachelor's programs that aim for long-term competencies (foundational knowledge, systemic thinking, research), private courses optimize for immediate operational results. Regarding teaching methods, training centers prioritize learning by doing or on-the-job training, including short lectures, tool manipulation, and guided exercises. This model demonstrates high utility, especially for working professionals with limited time. However, compressing course duration with dense content often results in rote learning of procedures rather than deep understanding. Assessment typically focuses on outputs (reports, dashboards, prompt logs) rather than cognitive skills (generalization, risk assessment, experimental design, error validation). Consequently, learners may excel at pre-modeled tasks but struggle when faced with novel problems, model selection, or ethical–legal considerations of automation in finance–accounting.

In terms of labor market signaling, short-term certificates from training centers carry the value of “skill signals” at the task level and reduce barriers to adoption in small and medium-sized enterprises (SMEs). These courses have made significant contributions to operational readiness: standardizing some processes, scaling good practices, and creating a “translation layer” between business personnel and technology departments. However, for positions requiring system design, data governance, algorithm auditing, or AI risk management (governance, compliance), short-term courses remain insufficient. At the ecosystem level, the growth of training centers creates a fast feedback loop from practice into training (demand, use cases, implementation challenges), but also generates quality discrepancies among providers, with a lack of quality assurance frameworks and standardized learning outcomes that are mutually comparable and recognizable.

2.4. A comparison between public universities and foreign-invested universities and training centers in Vietnam

In Vietnam, public universities, foreign-invested universities, and private training centers play complementary but distinct roles in integrating AI into finance and accounting education. Public universities such as FTU, NEU, and the Banking Academy have been more systematic in their approach, introducing fintech majors, expanding curricula, and embedding AI-related subjects directly into finance programs at both undergraduate and postgraduate levels. Foreign-invested universities, including RMIT, VinUni, Swinburne, and BUV, on the other hand, tend to separate technology and finance, offering strong programs in AI, data science, or blockchain but with limited direct application to finance–accounting, and interdisciplinary integration remains modest. Meanwhile, private training centers such as TACA, RealCoach, and Vŭng Tàu IT Center emphasize short-term,

practice-oriented courses that focus on immediate workplace applications of AI tools like ChatGPT, Power BI, and automation platforms. While universities—both public and international—provide long-term academic foundations, research capacity, and prestigious degrees, training centers offer flexibility, fast adaptation to industry needs, and hands-on skills, though often at the expense of theoretical depth and recognition. Overall, public universities are leading in systematically embedding AI into finance–accounting education, international universities lag behind in interdisciplinary integration, and private centers fill the gap by rapidly reskilling the workforce with applied, tool-based training.

3. CONCLUSION

This desk research highlights that AI integration into Finance and Accounting education in Vietnam is advancing but remains uneven across different types of institutions. Public universities have taken the most systematic steps, introducing new majors, revising curricula, and embedding AI and fintech into both undergraduate and postgraduate programs. These initiatives demonstrate progress toward interdisciplinary education, though the connection between AI and core accounting training is still limited and concentrated primarily within fintech. Foreign-invested universities, despite their strengths in technology and international standards, have shown a weaker level of integration, with AI and finance largely taught in parallel rather than through unified curricula. Private training centers, meanwhile, are filling critical gaps by offering short, flexible, practice-oriented courses that directly address labor market needs through hands-on training with AI tools. However, their focus on immediate application often comes at the expense of theoretical depth and long-term competency, and the lack of standardized quality assurance raises questions about learning outcomes.

Beyond Vietnam, the integration of AI into finance and accounting education is a global movement shaped by international collaboration and knowledge transfer. For instance, partnerships between Asian universities and institutions like MIT, Oxford, and Wharton have fostered joint programs, exchange curricula, and shared research on AI applications in business education. Vietnam's universities can leverage such collaborations not only to benchmark curriculum standards but also to co-develop regional AI education hubs in Southeast Asia. This perspective highlights that Vietnam's AI education transformation is not an isolated effort but part of a broader global reconfiguration of finance and accounting education in the digital age.

Overall, the findings suggest that universities and private training centers play complementary roles in shaping AI-ready graduates. Universities ensure academic credibility, research capacity, and long-term analytical foundations, while training centers provide agility, industry responsiveness, and practical skill development. For Vietnam to fully leverage AI in finance and accounting, closer collaboration between these systems is needed to align curricula with labor market demands, balance theory with practice, and equip graduates with both credibility and adaptability in the digital economy

REFERENCE

- "Government of Vietnam. (2021, March 17). *National strategy on research, development and application of artificial intelligence until 2030* [Decision of the Prime Minister]. Vietnam Government Portal (VGP).
- ALPHA Management Institute. (2025, March 13). *Public Training* <https://realcoach.edu.vn/dao-tao/dao-tao-public/>
- British University Vietnam. (n.d.) *Bachelor of finance and accounting program*
- British University Vietnam. (n.d.) *Bachelor program*.
- British University Vietnam. (n.d.) *Postgraduate program* <https://www.buv.edu.vn/chuong-trinh-sau-dai-hoc/>
- British University Vietnam. (n.d.). *Bachelor of accounting and finance program*
- British University Vietnam. (n.d.). *Bachelor of finance program*
- Ctech Academy. (2024). *Discover the future of finance with financial technology (fintech) course in vietnam*.
- Faculty of Information Technology - School of Technology. (2025). *Artificial Intelligence - EP16* [Syllabus]. National Economics University.
- Faculty of Information Technology - School of Technology. (2025). *Information Security - 7480202* [Syllabus]. National Economics University.
- Faculty of Information Technology - School of Technology. (2025). *Software Engineering - EP17* [Syllabus]. National Economics University
- Faculty of Management Information Systems - School of Technology.(2025). *Information System - 7480104* [Syllabus] National Economics University.
- Faculty of Management Information Systems - School of Technology. *Information System - 7480104* [Syllabus]. National Economics University.
- Falculty of finance. (2024). *Master's degree training program description in Finance - Banking in 2024* [Syllabus]. Banking Academy.

- Foreign Trade University. (2023). *AIDE300 – AI in the Era of Digital Transformation* [Syllabus]. Foreign Trade University.
- Foreign Trade University. (2023). *Fintech, AI and Blockchain courses for economic and financial students*.
- Foreign Trade University. (2023). *High quality bank and international finance program (applied from K62 onwards)*.
- Foreign Trade University. (2023). *PhD training program in Finance - Banking in 2023*.
- Foreign Trade University. (2023). *TCH404 - Financial Technology (Fintech)* [Syllabus]. Foreign Trade University.
- Foreign Trade University. (2024). *Master's degree program of finance - banking in the research orientation in 2024*
- Foreign Trade University. (2024). *Master's degree training program in Finance - Banking according to the application orientation in 2024*.
- Foreign Trade University. (2025). *Computer and data science training program in economics and business*.
- Graduate School. (2024). *Master's degree training program description in Finance - Banking in 2024* [Syllabus]. Banking Academy
- Institute of Banking and Finance. (2025). *Financial Technology - EP09* [Syllabus]. National Economics University
- Institute of Technology and Digital Economy. (n.d.). *BKFintech*.
- International Monetary Fund. (2024, October). *Global financial stability report: Steadying the course: Uncertainty, artificial intelligence, and financial stability*. Washington, DC: International Monetary Fund.
- Mayer, H., Yee, L., Chui, M., & Roberts, R. (2025, January 28). *Superagency in the workplace: Empowering people to unlock AI's full potential*. McKinsey & Company
- National Economics University. (2024, January 30). *National Economics University plans to open 5 new majors related to technology*.
- Nhan Dan. (2024). *Artificial intelligence human resource shortage*.
- Oxford, U. of. (n.d.). *Generative AI for Finance: Use Cases, Applications and Regulation (online)*. Oxford Lifelong Learning, University of Oxford.
- RMIT Vietnam University. (n.d). *Bachelor of Accounting*.
- RMIT Vietnam University. (n.d). *Bachelor of Information Technology*
- RMIT Vietnam University. (n.d). *Bachelor's program*
- Singla, A., Sukharevsky, A., Yee, L., Chui, M., & Hall, B. (2024, May 30). *The state of AI in early 2024: Gen AI adoption spikes and starts to generate value*. McKinsey & Company
- Swinburne University of Technology. (n.d.). *Artificial Intelligence*
- Swinburne University of Technology. (n.d.). *Data Science*
- Swinburne University of Technology. (n.d.). *Finance*
- TACA Academy. (n.d.). *Practical AI course in finance - accounting*
- TopDev Event. (n.d). *RMIT University launches Master of Artificial Intelligence (AI) & Master of Cyber Security*
- Viet Sao. (2025). *Modern Accounting: AI Course for Accountants That Will Turn You From “Data Entry Clerk” to “Financial Data Architect*
- Viet Sao. (n.d.). *AI Application Course - Artificial Intelligence for Accounting, Auditing and Finance*
- Vinuniversity. (n.d). *Bachelor of data science program*.
- Vinuniversity. (n.d). *Program overview*
- Vinuniversity. (n.d). *Welcome to vinuni graduate admissions!*.
- Vung Tau Information Technology. (2025, May 10). *Course Using AI in Accounting – Automating Financial Processes with Artificial Intelligence*
- Wharton Executive Education. (n.d.). *AI for business*. Wharton University of Pennsylvania.