MGMT 675: Generative AI for Finance

FMA 2025

Kerry Back Jones Graduate School of Business Rice University October 24, 2025

Overview

- Half-semester MBA course at end of 1st year
- Course comes after:
 - Core finance (semester)
 - Excel-based Applied Finance (half-semester)
- Finance topics mostly repeated from prior courses
- Ideas apply to courses of different lengths, at different points in the curriculum, and for different student groups

Learning Objectives

- 1. Working with Al
 - 1.1 Collaborate with AI that uses Python to conduct financial analysis
 - 1.2 Refine prompts to make effective use of AI
- 2. Corporate implementations of AI: system prompts, retrieval-augmented generation (RAG), and agents
- 3. Build with AI
 - 3.1 Custom chatbots, apps, and Al-enabled apps for financial analysis
 - 3.2 Al agents (chatbots with tools)

CNBC on JPMorgan, 9/30/2025

Derek Waldron, , Chief Analytics Officer:

- (What we're working towards is that) every employee will have their own personalized AI assistant; every process is powered by AI agents, and every client experience has an AI concierge.
- You'll still have people at the top who are managing and have relationships with clients, but many, many of the processes underneath are now being done by Al systems.

Workers would shift from being creators of reports ... or "makers" ... to "checkers" or managers of AI agents doing that work.

Yeyati, Brookings, 2025

- As AI models begin to handle underwriting, compliance, and asset allocation, the traditional architecture of financial work is undergoing a fundamental shift.
- As job descriptions evolve, so does the definition of financial talent. Excel is no longer a differentiator. Python is fast becoming the new Excel.
- But technical skills alone will not cut it. The most in demand profiles today are those that speak both Al and finance.

Website: genai4finance.kerryback.com

- Course description aimed at instructors
- Link to blog: short posts about teaching various topics on Al and finance
- Link to 2025 course syllabus & slides
- Link to 2026 course syllabus (slides coming soon)
- Link to these slides
- Link to slides for upcoming talk on Integrating Al into Finance Teaching
- Link to Jupyter notebooks (and soon slides) for teaching Python to MBAs