

FALL
2025

DATA SCIENCES + OPERATIONS

DSO 599

LARGE LANGUAGE MODELS FOR BUSINESS

Section(s): 16351

2nd Half of the Semester
Tue and Thu | 12:30pm – 1:50 pm

INSTRUCTOR: Waverly Wei

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Units: 1.5

Office: BRI 401D

WHY TAKE THIS COURSE?



Large language models (LLMs) are revolutionizing how businesses operate. Graduate students who master these technologies gain a competitive edge in today's job market. In this course, you will learn LLM fundamentals and apply them to real-world business scenarios. By the end of the course, you will not only understand how LLMs work but also be equipped with the tools to develop effective business solutions leveraging LLMs.

COURSE OBJECTIVES



- Gain foundational knowledge of the architecture of large language models
- Apply large language models to real-world business applications
- Explore entrepreneurial opportunities and navigate challenges driven by large language models

KEY CONCEPTS



- Transformers
- Pre-training and Fine-tuning
- In-context Learning
- Large Language Model Evaluation
- Prediction-powered Inference
- Online Platform Sentiment Analysis
- Customize LLMs for Investment Decision-Making

Course Description



Since the launch of ChatGPT in 2022, large language models (LLMs) have rapidly transformed industries. This course provides you a comprehensive introduction to LLMs, focusing on real-world business application. Think of this course as a hands-on guide that equips you with both foundational knowledge and practical skills of implementing LLMs.

You will explore key concepts behind LLMs, stay up to date with recent advancements, and learn the challenges and opportunities that come with deploying these models in business contexts. To bridge the gap between technical concepts and real-world business applications, each topic will be coupled with a business case study – allowing you to use LLMs in action. By the end, you will have both the understanding and the hands-on skills to use LLMs in business contexts.



[SCHEDULE OF CLASSES](#)