

Applications of AI & ML in Business

Course Summary

Course Summary

Companies today are incorporating new technologies, particularly those in the area of Artificial Intelligence (AI) to build competitive differentiation. Leading companies are already using, in various functional areas of business, several AI technologies and frameworks including Machine Learning (ML), Natural Language Processing (NLP), and Generative AI, along with a growing list of new and evolving AI technologies.

Learning Outcomes

Assessment Overview

Teaching Methods

Therefore, to be successful in their fast-evolving roles, today's business managers need to become experts in understanding how to apply a variety of AI techniques and models to different functional areas of business.

Teaching/Contact Hours

This course, Applications of Artificial Intelligence (AI) and Machine Learning (ML) in Business, is designed to provide students with a deeper understanding of:

Suggested Independent Study Hours

- the AI & ML technologies, frameworks, and platforms that are currently available
- the fundamental concepts and mathematical models underlying these AI technologies
- how to actually apply AI & ML techniques to various business scenarios, and,
- how to identify which particular AI or ML technology or solution to apply to a particular business problem

Course Preparation and Reading

Learning Outcomes

Streams

On successful completion of this course, student will be able to:

- understand the core set of AI technologies, frameworks, & mathematical models, that are available and in use today in various functional areas of business including Accounting & Finance, Marketing & Sales, Customer Experience, Manufacturing, IT Operations, & Business Management
- comprehend how companies really leveraging AI & ML for competitive advantage
- discern various emerging trends and directions in the application of AI & ML to business, and
- apply, to a wide variety of functional business areas, the various AI techniques learned in class, including various types of deep learning, text analytics, natural language processing, transformers, generative AI, and reinforcement learning

and, in doing so, develop a deeper understanding of what it takes to be a successful business manager today - particularly in a high tech company.

Though we will dive deep into various AI and ML concepts and applications, this course does not require students to do any programming.

Assessment Overview

Assessment will be constituted of individual assignments, one group assignment, and in-class participation.

The individual assignments are designed to test the students' understanding of concepts, frameworks and techniques. Students will need to work through individual practical exercises.

The group project enables teams to demonstrate their understanding of the class concepts, as well as their ability to apply these concepts in a real world business setting.

In-class participation is vital to the course and will form a significant part of the assessment.

Teaching Methods

- Lecture(s)
- Project(s)
- Group Discussions
- In-Class Presentations

Due to the interactive nature of this course, none of the sessions will be recorded. However, a significant portion of the instructor's in-class presentation will be made available to the students after class.

Attendance:

- All students should attend all sessions in-person
- Attendance for Sessions 1 and 10 is mandatory
- There is a formal requirement for students to attend a minimum of 9 out of 10 sessions in-person to pass this course

In addition, all students will need to strictly adhere to the following in-class rules. For each class session:

- Be seated in your seat on time
- Sit in the same seat in the class room and display your name tag prominently
- Shut off all laptops, tablets, phones, and any other mobile devices for the duration of the session

Teaching/Contact Hours

Teaching/contact hours: 27.5


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2-3 hours prior reading prep for each session, 1 hour at the end of each day, about 4 hours of independent work for each individual assignment, and about 20-25 hours (total) of group work for completing the group project

Course Preparation and Reading

We will use a wide array of topical content including articles, blogs, posts, book excerpts, case studies, and my lecture notes. Pre-readings for each session will be posted well in advance.

Streams

	E612 A SPR25	SPR25	Lil Mohan	Block Week
	E612 B SUM25	SUM25	Lil Mohan	Block Week