

Course Type	Course Code	Name of the Course	L	T	P	Credit
DE	EMSD510	Generative AI	3	0	0	3
Course Objective						
The course introduces the students with the basic concepts of Generative AI. The objective is to understand the applications of Generative AI in various business areas and to leverage Generative AI technologies to increase productivity and workflow in the evolving business landscape.						
Learning Outcome						
Upon completing this course, students will be able to: (a) Understand the necessary steps for successful implementation of Generative AI in various business areas. (b) Develop skills to create a roadmap for successful implementation of Generative AI application (c) Build Generative AI-Powered business applications with Python.						
Unit No	Topics to be covered	Lecture hours	Learning Outcomes			
1	Introduction to Generative AI: Core concepts of Generative AI. Building blocks of Generative AI. Generative AI Market Analysis. Functioning of Generative AI. Generative AI Model Types. Generative AI applications.	10	After completing this section students will be able to: • Understand basic concepts of Generative AI. • Understand core capabilities of leading Generative AI tools as applied to business and professional settings. • Understand key technical components of Generative AI technology • Understand market growth of Generative AI. • Explain architecture and core building blocks of Generative AI. • Identify strategies, factors, enablers, and barriers in adoption of Generative AI.			
2	Platforms for Generative AI: Foundation models. Large Language Models (LLMs). Reinforcement learning and LLM-powered applications.	10	After completing this section students will be able to: • Evaluate opportunity of LLMs and utilize their capabilities for their business. • Develop a roadmap to design and implement new business ideas using LLMs. • Understand how companies are creating value with cutting-edge technology.			
3	Responsible and Ethical AI: Need for a responsible AI practice. Business case for responsible AI. Ethical considerations with AI. Framework for how to operationalize responsible AI.	10	After completing this section students will be able to: • Understand need for a responsible AI practice. • Understand how to operationalize responsible AI.			
4	Generative AI Applications: Impact of Generative AI in industries, such as Education, Healthcare, Supply Chain, etc. Issues, Limitations, and Concerns surrounding AI. Building Generative AI-Powered Applications with Python.	12	After completing this section students will be able to: • Examine complexity levels for implementation of Generative AI. • Familiarize with the approaches towards Generative AI applications in various business areas. • Create a roadmap for successful implementation of Generative AI application. • Build Generative AI-Powered Applications with Python.			
	Total	42				

Textbooks

1. Bernard Marr, Generative AI in Practice: Ways Generative Artificial Intelligence is Changing Business and Society, Wiley, 2024.

Reference books

1. David E. Sweenor, Yves Mulkers, Generative AI Business Applications: An Executive Guide with Real-Life Examples and Case Studies, TinyTechMedia LLC, 2024.