

**Course Code:** INT426

**Course Title:** Generative Artificial Intelligence

**L T P:** 2 0 2

**Credits:** 3

**Course Weightage:** ATT: 5 CA: 25 MTT: 20 ETT: 50

**Exam Category:** 11 (Mid Term Exam: MCQ – End Term Exam: MCQ)

**Course Focus:** EMPLOYABILITY

**Text Book:** Not Applicable

**Reference Book:** Not Applicable

**Software/Equipments/Databases:** Python

**Course Link:** <https://www.coursera.org/programs/int426-generative-ai-8n6df>

**Course Outcomes:** Through this course students should be able to

**CO1 ::** Understand the foundations and principles behind generative models.

**CO2 ::** Gain practical experience in crafting and refining prompts for language models through hands-on exercises and projects.

**CO3 ::** Apply prompt engineering skills to real-world scenarios, such as information retrieval, question-answering, or text generation.

**CO4 ::** Explore different architectures used in large language models, such as transformers, and understand their advantages and limitations.

**CO5 ::** Complete hands-on projects that involve coding and implementing generative models to solve specific problems or generate creative outputs.

**CO6 ::** Apply the learned skills and techniques through hands-on projects that involve a combination of ChatGPT, data analysis, visualization, and presentation creation.

LTP week distribution: (LTP Weeks)	
Weeks before MTE	7
Weeks After MTE	7

### Detailed Weekly Plan

Week	Tentative Duration	Broad Topic	Module	Coursera Link
Week 1	10/01/24-16/01/24	Introduction to Generative AI	Introduction to Generative AI	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/introduction-to-generative-ai">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/introduction-to-generative-ai</a>
		Introduction to Generative AI	Generative AI for everyone	<a href="https://coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai-for-everyone">https://coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai-for-everyone</a>

Week 2	17/01/24-23/01/24	Introduction to Generative AI	GenAI for Everyone	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/genai-for-everyone">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/genai-for-everyone</a>
Week 3	24/01/24-30/01/24	Prompt Engineering	Generative AI Primer	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai</a>
		Prompt Engineering	Introduction to Large Language Models	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/introduction-to-large-language-models">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/introduction-to-large-language-models</a>
		Prompt Engineering	Prompt Engineering for ChatGPT: Module 1	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering</a>
		Test-Code Based 1		
Week 4	31/01/24-06/02/24	Prompt Engineering	Prompt Engineering for ChatGPT: Module 2	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering</a>
		Prompt Engineering	Prompt Engineering for ChatGPT: Module 3	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering</a>
Week 5	07/02/24-13/02/24	Prompt Pattern II	Prompt Engineering for ChatGPT: Module 4	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering</a>
		Prompt Pattern II	Prompt Engineering for ChatGPT: Module 5	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering</a>
Week 6	14/02/24-20/02/24	Prompt Pattern III	Prompt Engineering for ChatGPT: Module 6	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/prompt-engineering</a>
		Test-Code Based 2		
Week 7	21/02/24-27/02/24		Spill Over	
MTE				
Week 8	14/03/2024-20/03/2024	Large Language Models	Generative AI with Large Language Models: Module 1	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai-with-llms">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai-with-llms</a>
		Large Language Models	Generative AI with Large Language	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai-with-llms">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai-with-llms</a>

			Models: Module 2	
Week 9	21/03/2024-27/03/2024	Large Language Models	Generative AI with Large Language Models: Module 3	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai-with-llms">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/generative-ai-with-llms</a>
Week 10	28/03/2024-03/04/2024	Code with AI	Learn to code with AI	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/learn-to-code-with-ai">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/learn-to-code-with-ai</a>
		Code with AI	ChatGPT for Beginners: Save time with Microsoft Excel	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/projects/chatgpt-for-beginners-save-time-with-microsoft-excel">https://www.coursera.org/programs/int426-generative-ai-8n6df/projects/chatgpt-for-beginners-save-time-with-microsoft-excel</a>
			<b>Test – Code Based 3</b>	
Week 11	04/04/2024-10/04/2024	Code with AI	ChatGPT Playground for Beginners: Intro to NLP AI	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/projects/rudi-hinds-chatgpt-playground-for-beginners-intro-to-nlp-ai">https://www.coursera.org/programs/int426-generative-ai-8n6df/projects/rudi-hinds-chatgpt-playground-for-beginners-intro-to-nlp-ai</a>
		Code with AI	Build AI Apps with ChatGPT, Dall-E, and GPT-4	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/build-ai-apps-with-chatgpt-dalle-gpt4">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/build-ai-apps-with-chatgpt-dalle-gpt4</a>
Week 12	11/04/2024-17/04/2024	ChatGPT Advanced Data Analysis	ChatGPT Advanced Data Analysis:Module 1	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis</a>
		ChatGPT Advanced Data Analysis	ChatGPT Advanced Data Analysis:Module 2	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis</a>
Week 13	18/04/2024-24/04/2024	ChatGPT Advanced Data Analysis	ChatGPT Advanced Data Analysis:Module 3	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis</a>
		ChatGPT Advanced Data Analysis	ChatGPT Advanced Data Analysis:Module 4	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis</a>
		ChatGPT Advanced Data Analysis	ChatGPT Advanced Data Analysis:Module 5	<a href="https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis">https://www.coursera.org/programs/int426-generative-ai-8n6df/learn/chatgpt-advanced-data-analysis</a>
			<b>Test – Code Based 4</b>	
Week 14	25/04/2024-01/05/2024		Spill Over	

It is mandatory to complete the number of courses for being eligible for End Term Examination along with the attendance criteria of the university. The links of the courses as shared in the IP should be completed on/before the last teaching day as per the academic calendar of the university.

**Scheme for CA:**

CA Category of this Course Code is: **A0304** (Total 4 tasks, 3 best out of 4 to be considered)

Component	Is Compulsory	Weightage	Description
Test (Code Based)	No	33.33	Test 1 will be from unit 1 and unit 2. Test will consist of multiple-choice questions of 30 marks. Test will be conducted in offline mode.
Test (Code Based)	No	33.33	Test 2 will be from unit 2 and unit 3. Test will consist of multiple-choice questions of 30 marks. Test will be conducted in offline mode.
Test (Code Based)	No	33.33	Test 3 will be from unit 4 and unit 5. Test will consist of multiple-choice questions of 30 marks. Test will be conducted in offline mode.
Test (Code Based)	No	33.33	Test 4 will be from unit 4, unit 5 and unit 6. Test will consist of multiple-choice questions of 30 marks. Test will be conducted in offline mode.