

Semester VIII

DISCIPLINE SPECIFIC CORE COURSE – 8.1 (DSC-8.1)

Artificial Intelligence Tools for Office Management – II

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Artificial Intelligence Tools for Office Management – II DSC-8.1	4	1	0	3	Pass in Class XII	NIL

Learning Objectives

The objective of this course is to provide an understanding of Artificial Intelligence (AI) tools and its applicability in increasing productivity of day-to-day operations in modern office efficiently.

Learning Outcomes

After completion of the course, learners will be able to:

1. Explain the AI techniques in use.
2. Learn the applications of AI in real world.
3. Understand and explore the use of AI tools for increasing productivity.
4. Understand and explore the available Generative AI chatbots and voice assistants.

SYLLABUS OF DSC-8.1

Unit 1: AI Techniques

8 hours

Natural Language Processing, Recommendation Systems, Predictive Analysis, Decision Support Systems, Robotics, Fuzzy Logic, Speech Recognition, Text Analytics, Image Processing. Generative AI and Prompt Engineering.

Unit 2: Applications of AI

12 hours

Digital Assistants, Chatbots, Search Engines, Social Media, Robots, Online shopping, Fraud Detection in Banks, Demand/Sales forecasting, Transportation, Finance, Manufacturing, Education, Agriculture, Advertising.

Unit 3: AI for Enhancing Productivity

12 hours

Searching- Explore Perplexity for searching for prompt/descriptive text, content creation, price comparison, etc.

Transcription/Notes-taking: Explore Otter.ai for transcribing meetings, notes making.

Video Generation: Explore Canva AI for creating videos using images.

Image Generation: Explore Dall-E 3 for generating images using AI.

Others: Project Management, Task Scheduling, Data Visualization, etc.

Unit 4: AI Assistants and Chatbots

13 hours

Introduction to Generative AI Chatbots. Familiarize students with different chatbots and explore these chatbots for performing different tasks. ChatGPT, Microsoft Copilot, Google Gemini.

Perform tasks: Summarize reports, Voice-to-text, Draft email/Notice, Write a resume, Create learning/teaching plan, Create personalized daily summaries, etc.

Introduction to voice assistants. Familiarize students with different voice assistants, Alexa, Siri, etc. and explore their use for performing different tasks.

Practical Exercises:

The learners are required to do practical exercise from unit 3 & 4.

Suggested Readings:

11. John Paul Mueller & Luca Massaron (2018). “*Artificial Intelligence for Dummies*”
Wiley
12. Peter Norvig & Stuart Russell (2009). “*Artificial Intelligence: A Modern Approach*”
Pearson.
13. Perplexity: <https://www.perplexity.ai/>
14. Otter.ai: <https://otter.ai/>
15. Canva AI: <https://www.canva.com/ai-assistant/>
16. Dall-E 3: <https://openai.com/index/dall-e-3/>
17. ChaptGPT: <https://openai.com/index/chatgpt/>
18. Microsoft Copilot: <https://copilot.microsoft.com/>
19. Google Gemini: <https://gemini.google.com/>

Notes:

1. Suggested readings shall be updated and uploaded on the college website from time to time.
2. Examination scheme and mode shall be as prescribed by the Examination branch, University of Delhi from time to time.