# B. DES.

| Course Name: Ai Tool 1- Introduction to prompt Engineering   |             | Semeste           | r: 1      |                 |  |  |
|--|-------------|-------------------|-----------|-----------------|--|--|
|  |             |                   |           |                 |  |  |
| Course Code:   |             | Course Credits: 2 |           |                 |  |  |
| Course Type:   | Con         | tact Hours        | /Week     | Total           |  |  |
| Theory cum Practical   | L           | Т                 | Р         | Hours/week      |  |  |
|  | 1           |                   | 2         | 3               |  |  |
| Total Contact Hours/ Semester (equal to total hours/week x 18):  | 54          |                   |           |                 |  |  |
| Course Aim:  |             |                   |           |                 |  |  |
| The aim of this course is to equip Foundation level students with  | the chille  | and know          | ladga nay | occory to harn  |  |  |
| thinking and problem-solving abilities, and foster creativity by gui<br>these tools.   | iding the   | m to explo        | re innova | tive ways of us |  |  |
| Course Learning Outcomes:  |             |                   |           |                 |  |  |
| On successful completion of the course, the students will be able  | e to:       |                   |           |                 |  |  |
| CLO1: Develop the ability to apply prompt engineering technique  | es to Diffe | erent softw       | /are's.   |                 |  |  |
| CLO2: Demonstrate through exploration of novel approaches to a<br>adaptability and resourcefulness in their software-driven endeav |             | on, fosterir      | ng a mind | set of          |  |  |
| Course Content:  |             |                   |           |                 |  |  |
| Unit 1: Introduction to AI: ChatGPT  |             |                   |           | 10 H            |  |  |
| 1.1 Overview of Artificial Intelligence (AI)   |             |                   |           |                 |  |  |
| 1.2 Introduction to ChatGPT  |             |                   |           |                 |  |  |
| 1.3 ChatGPT Applications and Use Cases   |             |                   |           |                 |  |  |
| Unit 2: ChatGPT from zero to hero  |             |                   |           | 24 H            |  |  |
| 2.1 ChatGPT Fundamentals   |             |                   |           |                 |  |  |
| 2.2 Building Conversational Agents   |             |                   |           |                 |  |  |
| 2.3 Advanced ChatGPT Features and Customization  |             |                   |           |                 |  |  |
|  |             |                   |           | <b>20</b> H     |  |  |
| Unit 3: Integration of Ai into MS Office   |             |                   |           |                 |  |  |
| Unit 3: Integration of Ai into MS Office<br>3.1 Understanding AI Integration in MS Office  |             |                   |           |                 |  |  |
|  |             |                   |           |                 |  |  |
| 3.1 Understanding AI Integration in MS Office<br>3.2 Implementing ChatGPT in MS Office Applications                                |             |                   |           |                 |  |  |

### Websites:

Website: OpenAI URL: https://www.openai.com/ Harvard Reference: OpenAI. (n.d.). OpenAI. [Website]. Retrieved from https://www.openai.com/

Website: Stanford University - "CS50's Introduction to Artificial Intelligence with Python" URL: https://onlinelearning.harvard.edu/course/cs50s-introduction-artificial-intelligence-python Harvard Reference: Stanford University. (n.d.). CS50's Introduction to Artificial Intelligence with Python. [Website]. Retrieved from https://online-learning.harvard.edu/course/cs50s-introduction-artificial-intelligence-python

Website: Adobe Photoshop - Official Tutorials URL: https://helpx.adobe.com/photoshop/tutorials.html Harvard Reference: Adobe. (n.d.). Adobe Photoshop - Official Tutorials. [Website]. Retrieved from https://helpx.adobe.com/photoshop/tutorials.html

### Online Resources:

Resource Title: "Introduction to Artificial Intelligence" (Coursera) Author: Andrew Ng Year: Ongoing URL: https://www.coursera.org/specializations/deep-learning Harvard Reference: Ng, A. (n.d.). Introduction to Artificial Intelligence. [Online Course]. Coursera. Retrieved from

https://www.coursera.org/specializations/deep-learning

Resource Title: "Ethical and Inclusive AI" (Harvard University) Year: Ongoing URL: https://onlinelearning.harvard.edu/course/ethical-and-inclusive-ai Harvard Reference: Harvard University. (n.d.). Ethical and Inclusive AI. [Online Course]. Retrieved from https://online-learning.harvard.edu/course/ethical-andinclusive-ai

| Programme Name:   |                                |                            |                      |                           |  |  |
|---|--------------------------------|----------------------------|----------------------|---------------------------|--|--|
| Course Name: Ai Tool 2 -Introduction to Basic Generative Ai   |                                | Semest                     | Semester: 2          |                           |  |  |
| Course Code:  |                                | Course                     | Course Credits: 2    |                           |  |  |
| Course Type:  | Type: Contac                   |                            |                      | Total Hours/week          |  |  |
| Theory cum Practical  | L                              | Т                          | Р                    | 1                         |  |  |
|   | 1                              |                            | 2                    | 3                         |  |  |
| Total Contact Hours/ Semester (equal to total hours/week x 1  | 8): 54                         |                            |                      |                           |  |  |
|   |                                |                            |                      |                           |  |  |
| Course Aim:   |                                |                            |                      |                           |  |  |
| This course is designed to empower Foundation level student<br>Artificial Intelligence (AI) and its transformative role within va<br>techniques, and applications of Generative AI, students wi<br>technology to enhance their creative and problem-solving abi | rious design<br>Il gain the sl | disciplines<br>kills neede | . By del<br>ed to le | ving into the principles, |  |  |
|   |                                |                            |                      |                           |  |  |
| Course Learning Outcomes:   |                                |                            |                      |                           |  |  |

On successful completion of the course, the students will be able to:

CLO1: Students will develop and understanding of the principles, concepts, and functioning of Generative AI and its relevance to their chosen design field.

CLO2: Students will learn how to apply Generative AI to optimize and create customized and personalized design solutions, catering to specific user needs and preferences.

Course Content: Unit 1: Generative AI image with midjourney 15 hrs 1. Introduction to midjourney 2. Understanding generative AI in midjourney 3. Creative art generation with midjourney 4. Real-world applications and case studies Unit 2: generative AI image with adobe firefly 15 hrs 1. Introduction to ADOBE FIREFLY 2. Exploring image generation with ADOBE FIREFLY 3. Innovative design with ADOBE FIREFLY 4. Real-world applications and case studies Unit 3: Generative AI in Adobe Photoshop 12 Hrs 1.1. Introduction to Generative AI in Photoshop 1.2. Image Enhancement and Restoration with Generative AI 1.3. Creative Art Generation with Generative Al 1.4. Real-World Applications and Case Studies Unit 4: Generative AI in Adobe Illustrator 12 Hrs 2.1. Introduction to Generative AI in Illustrator 2.2. Vector Graphics Enhancement with Generative AI 2.3. Innovative Design Generation with Generative AI 2.4. Real-World Applications and Case Studies Websites: Website: midjourney URL: https://www.Midjourney.Com/ harvard reference: midjourney. (N.D.). Midjourney. [Website]. Retrieved from https://www.Midjourney.Com/ Website: openai - ADOBE FIREFLY URL: https://openai.Com/research/adobe firefly harvard reference: openai. (N.D.). Adobe firefly. [Website]. Retrieved from https://openai.Com/research/adobe firefly Website: Adobe Photoshop - Official Tutorials URL: https://helpx.adobe.com/photoshop/tutorials.html Harvard Reference: Adobe. (n.d.). Adobe Photoshop - Official Tutorials. [Website]. Retrieved from https://helpx.adobe.com/photoshop/tutorials.html Website: Adobe Illustrator - Official Tutorials URL: https://helpx.adobe.com/illustrator/tutorials.html Harvard Reference: Adobe. (n.d.). Adobe Illustrator - Official Tutorials. [Website]. Retrieved from https://helpx.adobe.com/illustrator/tutorials.html Online Resources: Resource title: "generative AI: models and applications" (coursera) author: various instructors year: ongoing URL: https://www.Coursera.Org/specializations/generative-ai harvard reference: various instructors. (N.D.). Generative ai: models and applications. [Online course]. Coursera. Retrieved from https://www.Coursera.Org/specializations/generative-ai Resource title: "generative AI in design" (adobe blog) URL: https://theblog.Adobe.Com/generative-ai-in-design/ harvard reference: adobe. (N.D.). Generative ai in design. [Online article]. Retrieved from https://theblog.Adobe.Com/generative-ai-in-design/

Resource Title: "Al in Design: Adobe Creative Cloud Integration" (Coursera) Author: Various Instructors Year: Ongoing URL: https://www.coursera.org/specializations/adobe-creative-cloud Harvard Reference: Various Instructors. (n.d.). Al in Design: Adobe Creative Cloud Integration. [Online Course]. Coursera. Retrieved from https://www.coursera.org/specializations/adobe-creative-cloud

Resource Title: "Illustrator Tutorials" (Adobe) URL: https://www.adobe.com/products/illustrator/learn/getstarted.html Harvard Reference: Adobe. (n.d.). Illustrator Tutorials. [Website]. Retrieved from https://www.adobe.com/products/illustrator/learn/get-started.html

| Programme nan                        | ne:   |                       |                             |                      |                    |  |
|--------------------------------------|---|-----------------------|-----------------------------|----------------------|--------------------|--|
| Course name: A<br>Generation         | i Powered 1 - Advanced Generative AI and AI Mode  | el.                   | Semester                    | Semester: 3          |                    |  |
| Course code:                         |   |                       | Course cr                   | edits: 2             |                    |  |
| Course type:                         |   | Con                   | tact hours,                 | act hours/week Total |                    |  |
| Theory cum p                         | ractical  | L                     | Т                           | Р                    | hours/week         |  |
|                                      |   | 1                     |                             | 2                    | 3                  |  |
| Total contact ho                     | ours/ semester (equal to total hours/week x 18): 54   | •                     |                             |                      |                    |  |
|                                      |   |                       |                             |                      |                    |  |
| harness the pow<br>mastering this ir | course aims to equip students in design disciplines<br>ver of prompt engineering for generative AI as an a<br>nnovative approach, students will enhance their cap<br>ing their ability to innovate and excel in the dynam | dditiona<br>pacity to | al tool for i<br>o generate | deation              | By exploring and   |  |
| Course learning                      | outcomes:   |                       |                             |                      |                    |  |
| On successful co                     | ompletion of the course, the students will be able to   | D:                    |                             |                      |                    |  |
| CLO1: Will beco<br>models.           | me proficient in Stable Diffusion techniques, allowi  | ng then               | n to create                 | efficien             | t generative Al    |  |
| CLO2: Become s                       | killed in using GitHub for teamwork and project ma  | anagem                | ent, seaml                  | essly me             | erging             |  |
| CLO3: Develop<br>in their respecti   | Knowledge to develop creative design solutions & tave fields.   | ackle de              | sign challe                 | enges an             | d drive innovation |  |
| Course content:                      | :   |                       |                             |                      |                    |  |
| Unit 1: Introduc                     | tion to Stable Diffusion  |                       |                             |                      | 12 hrs             |  |
| 1.<br>2.<br>3.<br>4.<br>5.           | Introduction to Generative AI and Stable Diffusion<br>Fundamentals of Generative AI<br>Understanding the Challenges Addressed by Stab<br>Key Principles and Algorithms<br>Diffusion Process in Generative Models          |                       | sion                        |                      |                    |  |
| 6.                                   | An Overview of Important Algorithms in Stable D   | iffusion              |                             |                      |                    |  |

| Unit 2: Practical Implementation of Stable Diffusion   |               |
|--|---------------|
|  | <b>12</b> hrs |
| 1. Implementing Stable Diffusion Models  |               |
| 2. Hands-On Implementation of Stable Diffusion Models  |               |
| 3. Model Training and Optimization Techniques  |               |
| 4. Hands-On Exercises and Coding   |               |
| 5. Coding and Building Stable Diffusion Models   |               |
| 6. Practical Challenges and Solutions in Implementation  | 1E bro        |
| Unit 3: Leveraging GitHub for Generative Al  | 15 hrs        |
| 1. Introduction to GitHub for Collaborative Projects   |               |
| 2. Understanding GitHub and Its Role in Collaborative Development  |               |
| <ol> <li>Setting Up GitHub Accounts and Repositories</li> <li>Setting Up and Managing Repositories</li> </ol>  |               |
| 5. Creating and Managing GitHub Repositories   |               |
| 6. Collaborative Workflows and Version Control   |               |
| Unit 4: Building Personal Generative Models with Stable Diffusion and GitHub   | 15 hrs        |
|  | 2111 CT       |
| 1. Combining Stable Diffusion and GitHub for Personal Projects   |               |
| 2. Integrating Stable Diffusion Models with GitHub Repositories  |               |
| 3. Building Personal Generative Models   |               |
| 4. Real-World Applications and Case Studies  |               |
| <ol> <li>Showcase of Personal Generative AI Projects</li> <li>Analyzing Real-World Applications and Success Stories</li> </ol>   |               |
|  |               |
| Learning resources:  |               |
| Websites:  |               |
| GitHub Guides  |               |
|  |               |
| URL: https://guides.github.com/  |               |
| Harvard Reference: GitHub. (n.d.). GitHub Guides. Retrieved from https://guides.github.com/  |               |
| Stanford University - Stable Diffusion   |               |
|  |               |
| URL: https://dawn.cs.stanford.edu/research/stablediffusion/  |               |
| Harvard Reference: Stanford University. (n.d.). Stable Diffusion. Retrieved from   |               |
|  |               |
| https://dawn.cs.stanford.edu/research/stablediffusion/   |               |
| https://dawn.cs.stanford.edu/research/stablediffusion/<br>Online Resources:  |               |
|  |               |
| Online Resources:<br>OpenAl's Official Blog  |               |
| Online Resources:<br>OpenAl's Official Blog<br>URL: https://www.openai.com/blog/   | blog/         |
| Online Resources:<br>OpenAl's Official Blog  | blog/         |
| Online Resources:<br>OpenAI's Official Blog<br>URL: https://www.openai.com/blog/<br>Harvard Reference: OpenAI. (n.d.). OpenAI's Official Blog. Retrieved from https://www.openai.com/<br>PyTorch Tutorials - Generative Adversarial Networks (GANs)  | blog/         |
| Online Resources:<br>OpenAI's Official Blog<br>URL: https://www.openai.com/blog/<br>Harvard Reference: OpenAI. (n.d.). OpenAI's Official Blog. Retrieved from https://www.openai.com/<br>PyTorch Tutorials - Generative Adversarial Networks (GANs)<br>URL: https://pytorch.org/tutorials/beginner/dcgan_faces_tutorial.html   | -             |
| Online Resources:<br>OpenAl's Official Blog<br>URL: https://www.openai.com/blog/<br>Harvard Reference: OpenAl. (n.d.). OpenAl's Official Blog. Retrieved from https://www.openai.com/<br>PyTorch Tutorials - Generative Adversarial Networks (GANs)<br>URL: https://pytorch.org/tutorials/beginner/dcgan_faces_tutorial.html<br>Harvard Reference: PyTorch. (n.d.). PyTorch Tutorials - Generative Adversarial Networks (GANs). Re<br>https://pytorch.org/tutorials/beginner/dcgan_faces_tutorial.html | -             |
| Online Resources:<br>OpenAl's Official Blog<br>URL: https://www.openai.com/blog/<br>Harvard Reference: OpenAl. (n.d.). OpenAl's Official Blog. Retrieved from https://www.openai.com/<br>PyTorch Tutorials - Generative Adversarial Networks (GANs)<br>URL: https://pytorch.org/tutorials/beginner/dcgan_faces_tutorial.html<br>Harvard Reference: PyTorch. (n.d.). PyTorch Tutorials - Generative Adversarial Networks (GANs). Re   | -             |
| Online Resources:<br>OpenAl's Official Blog<br>URL: https://www.openai.com/blog/<br>Harvard Reference: OpenAl. (n.d.). OpenAl's Official Blog. Retrieved from https://www.openai.com/<br>PyTorch Tutorials - Generative Adversarial Networks (GANs)<br>URL: https://pytorch.org/tutorials/beginner/dcgan_faces_tutorial.html<br>Harvard Reference: PyTorch. (n.d.). PyTorch Tutorials - Generative Adversarial Networks (GANs). Re<br>https://pytorch.org/tutorials/beginner/dcgan_faces_tutorial.html | -             |

| Programme Nan                         | ne:  |          |                 |           |                 |  |
|---------------------------------------|--|----------|-----------------|-----------|-----------------|--|
| Course Name: A                        | i Powered 2 - Basics of AI to Improve Business   |          | Semester        | : 4       |                 |  |
| Course Code:                          |  |          | Course Cr       | edits: 2  |                 |  |
| Course Type:                          |  | Cont     | tact Hours/     | Week      | Total           |  |
| Theory cum Pr                         | actical  | L        | Т               | Р         | Hours/week      |  |
|                                       |  | 1        |                 | 2         | 3               |  |
| Total Contact Ho                      | ours/ Semester (equal to total hours/week x 18): 54  |          |                 | 2         | 5               |  |
|                                       |  | ·        |                 |           |                 |  |
| field of business<br>websites for suc | s course is linked to the overall learning of the sem<br>, it aims at giving the students the knowledge and<br>cessful design business ideas. Students will learn h<br>ata analyzation and interactive data visualization. | practica | ıl skills to le | everage A | Al software and |  |
|                                       |  |          |                 |           |                 |  |
| Course Learning                       | Outcomes:  |          |                 |           |                 |  |
| On successful co                      | mpletion of the course, the students will be able to   | 0:       |                 |           |                 |  |
|                                       | proficiency in data visualization and analysis, enabli<br>d extract valuable insights from data in the design  |          |                 | ate comp  | pelling         |  |
|                                       | vledge in web analytics and design optimization to<br>line presence for their design business.   | enhano   | ce user exp     | eriences  | and effectively |  |
| Course Content                        |  |          |                 |           |                 |  |
| <b>Unit 1:</b> Data Visu              | ualization and Analysis with Tableau Public  |          |                 |           | 18 Hrs          |  |
| 1.                                    | Introduction to Data Visualization and Tablea  | u Publ   | ic              |           |                 |  |
| 2.                                    | Data Connection and Data Types   |          | -               |           |                 |  |
| 3.                                    | Advanced Visualization Techniques  |          |                 |           |                 |  |
| 4.                                    | Data Sharing and Publishing  |          |                 |           |                 |  |
| 5.                                    | Data Sharing and Publishing  |          |                 |           |                 |  |
| 6.                                    | Additional Resources and Future Learning Pa  | othe     |                 |           |                 |  |
| 7.                                    | Hands-on Projects and Practical Applications   |          |                 |           |                 |  |
| <b>Unit 2:</b> Web Ana                | lytics and Design Optimization with Google Data S  | tudio    |                 |           | <b>18</b> Hrs   |  |
| 1.                                    | Introduction to Web Analytics and Google Da  | ata Stu  | dio (3 hou      | rs)       |                 |  |
| 2.                                    | Data Collection and Preparation  |          |                 | ,         |                 |  |
| 3. Basic Web Analytics Techniques     |  |          |                 |           |                 |  |
| 4. Design Optimization Techniques     |  |          |                 |           |                 |  |
|                                       | 5. Advanced Analysis and Reporting   |          |                 |           |                 |  |
| 6.                                    | Capstone Project and Review  |          |                 |           |                 |  |
| Unit 3: Chatbots                      | and AI Agents for Data Automation  |          |                 |           | 18 Hrs          |  |
| 1.                                    | Introduction to Chatbots and AI Agents   |          |                 |           |                 |  |
| 2.                                    | Automated Data Analysis in Tableau Public  |          |                 |           |                 |  |
| 3.                                    | Integrating Chatbots and AI agents with Tabl   | eau Pu   | blic and G      | ioogle D  | ata Studio      |  |
| 5.                                    |  |          |                 | 0.0 0     |                 |  |

- 4. Setting up automated data retrieval and analysis processes
- 5. Data Automation in Google Data Studio

### Learning Resources:

For Data Visualization and Analysis with Tableau Public:

Websites:

- Tableau Official Website: Provides resources, community forums, and a platform to interact with other Tableau users 3 .
- DataAnalyticsBooks.com: Offers a list of books to learn Tableau from scratch 2 .
- ProgrammingCube.com: Lists some of the best books for mastering Tableau for data
- analytics and data visualization 4.

For Web Analytics and Design Optimization with Google Data Studio: Websites:

Coursera - "Automating Data Analysis with AI Agents and Chatbots"

Author: Various Instructors

Year: Ongoing

URL: https://www.coursera.org/specializations/automating-data-analysis

Harvard Reference: Various Instructors. (n.d.). Automating Data Analysis with AI Agents and Chatbots. [Online Course]. Coursera. Retrieved from

https://www.coursera.org/specializations/automating-data-analysis

AI and Chatbot Integration Tutorials on Medium

URL: https://medium.com/ai-and-chatbot-integration

Harvard Reference: Author(s). (Year). AI and Chatbot Integration Tutorials on Medium. [Medium Blog]. Retrieved from https://medium.com/ai-and-chatbot-integration

- AnalyticsVidhya.com: Provides a list of must-read books and blogs on web analytics 7 .
- Supermetrics.com: Offers a step-by-step guide on designing dashboards in Google Data Studio 8 .
- Business2Community.com: Provides insights on how to use Google Data Studio to build better dashboards 9 .

Online Resources:

• Udemy Course on Data Analytics with Google Data Studio: An online course that covers key insights from data analytics using Google Data Studio.

| Programme Name:  |         |                    |           |          |            |
|--|---------|--------------------|-----------|----------|------------|
| Course Name: Generative Design 1 – Text to 3D              |         | Semester: 5        |           |          |            |
| Course Code:   |         |                    | Course Cr | edits: 2 |            |
| Course Type:   |         | Contact Hours/Week |           |          | Total      |
| Theory cum Practical                                       |         | L                  | Т         | Р        | Hours/week |
|  |         | 1                  |           | 2        | 3          |
| Total Contact Hours/ Semester (equal to total hours/week x | 18): 54 |                    | •         | •        | •          |

Course Aim: This course aims to enable students in design disciplines to harness generative AI as a tool for translating textual descriptions into 3D prototypes and objects, facilitating the realization of design concepts while also serving as a creative ideation aid, thereby expanding their capacity to visualize, iterate, and innovate in the realm of design.

Course Learning Outcomes:

On successful completion of the course, the students will be able to:

CLO1: Develop the ability to critically evaluate and iterate on AI-generated 3D designs, ensuring that they align with the intended concepts and functional requirements in the field of design.

21

15

18 hrs

### Course Content:

Unit 1: Introduction to Generative AI for 3D hrs

- 1. Overview of Generative AI in 3D Design
- 2. Introduction to www.masterpiecex.com
- 3. Navigating the User Interface
- 4. Practical Applications of 3D Generation

## Unit 2: Creating 3D Models with Text

hrs

- 1. Text-to-3D Fundamentals
- 2. Hands-On 3D Model Creation
- 3. Real-World Projects and Case Studies

### Unit 3: Advanced Techniques in 3D Generation

- 1. Text-Based 3D Animation
- 2. Integrating 3D into Various Industries
- 3. The Role of Generative AI in the 3D Industry

### Learning Resources:

Websites:

Website: Masterpiecex - Official Tutorials URL: https://www.masterpiecex.com/tutorials Harvard Reference: Masterpiecex. (n.d.). Masterpiecex - Official Tutorials. [Website]. Retrieved from <u>https://www.masterpiecex.com/tutorials</u>

Online Resources:

Resource Title: "Generative AI for 3D: Text-to-3D Modeling" (Coursera) Author: Various Instructors Year: Ongoing URL: https://www.coursera.org/specializations/generative-ai-3d Harvard Reference: Various Instructors. (n.d.). Generative AI for 3D: Text-to-3D Modeling. [Online Course]. Coursera. Retrieved from https://www.coursera.org/specializations/generative-ai-3d

| Programme Name:                                  |       |                         |          |            |
|--|-------|-------------------------|----------|------------|
| Course Name: Generative Design 2 – Text to Video |       | Semester: 6             |          |            |
| Course Code:                                     |       | Course Cr               | edits: 2 |            |
| Course Type:                                     | Conta | ontact Hours/Week Total |          |            |
| Theory cum Practical                             | L     | Т                       | Р        | Hours/week |

|  | 1 | 2 | 3 |
|--|---|---|---|
| Total Contact Hours/ Semester (equal to total hours/week x 18): 54 |   |   |   |

Course Aim: This course aims to empower students in design disciplines to harness generative AI as a tool for transforming textual descriptions into video content, facilitating the realization of design concepts while also serving as a creative ideation resource. By mastering the use of generative AI for video creation, students will expand their ability to visualize, iterate, and innovate in the field of design, enhancing their proficiency and creativity.

Course Learning Outcomes:

On successful completion of the course, the students will be able to:

CLO1: Develop the ability to create video from prompted textual description, ensuring that they align with the intended concepts and functional requirements in the field of design.

CLO2: Enhance critical analysis skills for refining AI-generated video content, promoting creative innovation in design.

### Course Content:

| Unit 1: | Gener | rative AI Text to Video with Pika Labs  | 15 |
|---------|-------|---|----|
| hrs     |       |   |    |
|         | 1.    | Introduction to Generative AI for Video |    |
|         | 2.    | Getting Started with Pika Labs          |    |
|         | 3.    | Creating Video Content from Text        |    |

4. Advanced Features and Customization

### Unit 2: Real-World Applications and Projects with Pika Labs

#### hrs

- 1. Industry-Specific Video Generation
- 2. Ethical Considerations in Al Video Creation
- 3. Project Showcase and Case Studies
- 4. Future Trends in Generative Al Video

### Unit 3: Generative AI Text to Video with Morph Studio

- 1. Introduction to Morph Studio
- 2. Text-to-Video Creation with Morph Studio
- 3. Enhancing Videos with AI
- 4. Interactive and Dynamic Video Content

### Unit 4: Practical Use Cases and Creative Video Projects with Morph Studio

12 hrs

15 hrs

12

- 1. Personalization and Customization
- 2. Business and Marketing Applications
- 3. Showcasing Student Projects
- 4. Exploring the Future of AI-Generated Video

### Learning Resources:

Websites:

Website: Pika Labs - Official Tutorials

URL: https://www.pikalabs.com/tutorials Harvard Reference: Pika Labs. (n.d.). Pika Labs - Official Tutorials. [Website]. Retrieved from https://www.pikalabs.com/tutorials Website: Morph Studio - AI Video Tools URL: https://www.morphstudio.com Harvard Reference: Morph Studio. (n.d.). Morph Studio - AI Video Tools. [Website]. Retrieved from <u>https://www.morphstudio.com</u>

Online Resources:

Resource Title: "AI-Driven Video Production" (Coursera) Author: Various Instructors Year: Ongoing URL: https://www.coursera.org/specializations/ai-video-production Harvard Reference: Various Instructors. (n.d.). AI-Driven Video Production. [Online Course]. Coursera. Retrieved from https://www.coursera.org/specializations/ai-video-production

| Programme Name:                                  |                     |                          |             |           |            |
|--|---------------------|--------------------------|-------------|-----------|------------|
| Course Name: Ai and Ethics                       | c<br>c              |                          | Semester: 7 |           |            |
| Course Code:                                     |                     |                          | Course C    | redits: 2 |            |
| Course Type:                                     |                     | Contact Hours/Week Total |             |           |            |
| Theory cum Practical                             |                     | L                        | Т           | Р         | Hours/week |
|  |                     | 1                        |             | 2         | 3          |
| Total Contact Hours/ Semester (equal to total ho | ours/week x 18): 54 |                          |             |           |            |

Course Aim: This course aims to provide students with a comprehensive understanding of ethics and inclusivity in design, fostering the development of essential skills and an empathetic design mindset. By emphasizing the practical application of ethical and inclusive design principles in real-world projects, students will be equipped to drive positive social change through their design endeavors.

Course Learning Outcomes:

On successful completion of the course, the students will be able to:

CLO1: Students will demonstrate the ability to apply inclusive design strategies in various project contexts. CLO2: Develop the skills needed to design ethically and inclusively, considering a wide range of perspectives and needs.

CLO3: To apply ethical and inclusive design principles in real-world projects, driving social innovation and positive impact.

10 Hrs

### Course Content:

### Unit 1: Ethical Design

1. Introduction to ethical considerations in design.

|            | 2. Ethical Frameworks and Theories Exploring various ethical frameworks and the                | neories         |
|------------|--|-----------------|
|            | relevant to design.  |                 |
|            | 3. Analyzing real-world cases of ethical dilemmas in design.                                   |                 |
|            | 4. Reflecting on personal ethics and discussing various scenarios.                             |                 |
|            |  |                 |
| Unit 2:    | Principles of Inclusive Design   | 12              |
| Hrs        |  |                 |
|            | 1. Introduction to inclusive design and its importance.  |                 |
|            | 2. Exploring frameworks for practicing inclusive design.                                       |                 |
|            | 3. Understanding and designing for a range of user needs and abilities.                        |                 |
|            | 4. Introduction to accessibility standards like WCAG   |                 |
|            |  |                 |
| Unit 3:    | Engaging with Communities  | 12 Hrs          |
|            | <ol> <li>Exploring methods for engaging with different communities.</li> </ol>                 |                 |
|            | 2. Developing empathy through user research and engagement.                                    |                 |
|            | <ol><li>Conducting co-design workshops with various user groups.</li></ol>                     |                 |
|            | 4. Gathering feedback and iterating on design solutions.                                       |                 |
|            |  |                 |
| Unit 4:    | Real-world Applications of Ethical & Inclusive Design  | 10Hrs           |
|            | <ol> <li>Identifying real-world projects for applying ethical and inclusive design.</li> </ol> |                 |
|            | 2. Working on projects with a focus on ethical and inclusive design principles.                |                 |
|            | <ol><li>Reviewing peers' projects and providing constructive feedback.</li></ol>               |                 |
| Unit 5:    | Final Projects and Reflection  | 10Hrs           |
|            | 1. Working on final projects that demonstrate ethical and inclusive design.                    |                 |
|            | 2. Presenting final projects and receiving feedback.   |                 |
|            | 3. Reflecting on the learning journey and discussing future applications of ethica             | al and inclusiv |
|            | design.  |                 |
| Learning   | Resources:   |                 |
| _          | Magazines  |                 |
|            | 5  |                 |
| Design Is: | sues MIT Press Journals  |                 |
| She Ji: Th | e Journal of Design, Economics, and Innovation Elsevier  |                 |
| Disability | and Society Taylor & Francis Online  |                 |
|            |  |                 |
|            | and Online Resources   |                 |
| Websites   |  |                 |
|            | r Excellence in Universal Design: universaldesign.ie   |                 |
|            | Design Group: inclusivedesigngroup.com   |                 |
| Ethical De | esign Manifesto: ind.ie/ethical design   |                 |
| Online Re  | 2011/062   |                 |
|            | Course: Inclusive Design   |                 |
|            | se: Ethical Leadership: Character, Civility, and Community                                     |                 |
|            | Learning: Designing for Accessibility  |                 |
|            |  |                 |
|            | s Focused on Indian Context:   |                 |
| -          | iaj, M. (2017). Designing for the Bottom of the Pyramid. Routledge India.                      |                 |
|            | Design and Culture Taylor & Francis Online (Check for articles related to Indian design o      | context)        |
| Website    | National Institute of Design: nid.edu  |                 |
| website.   | 5  |                 |

These resources have been selected to provide a comprehensive understanding of ethical and inclusive design practices. They offer a blend of theoretical knowledge, practical insights, and examples of ethical and inclusive design in real-world contexts. The resources focused on the Indian context aim to provide insights and applications relevant to design practices in India, while also catering to the needs of international students by covering universally applicable concepts and principles of ethical and inclusive design.

| Programme Name                    | :  |      |           |           |            |
|-----------------------------------|--|------|-----------|-----------|------------|
| Course Name:                      | Ai and Responsible Design Leadership             |      | Semester  | : 8       |            |
| Course Code:                      |  |      | Course Ci | redits: 2 |            |
| Course Type: Theory and Practical |  | Cont | act Hours | Total     |            |
|                                   |  | L    | Т         | Р         | Hours/week |
|                                   |  | 1    |           | 2         | 3          |
| Total Contact Hour                | rs/ Semester (equal to total hours/week x 18): 5 | 4    |           |           | •          |

**Course Aim:** To immerse students in the interplay between AI and design leadership skills, emphasizing the importance of integrating ethical considerations in AI-powered design solutions. Through analyzing real-world case studies of Ai Leadership and innovative Ai technologies, participants will gain a holistic understanding of the Ai tools and application landscape and undertake a rigorous research project, culminating in the drafting of a comprehensive research paper or an audio-visual presentation on Ai-driven design leadership.

Course Learning Outcomes:

On successful completion of the course, the students will be able to:

**CLO1:** Critically evaluate AI-driven design solutions, demonstrating a deep understanding of social context and ethical considerations, in developing and implementing leading Ai solutions.

**CLO2:** Students develop a robust pipeline and research methodologies tailored to understand the intersection of AI and design through real world case studies.

**CLO3: P**resent a research project or audio-visual presentation, that demonstrates their ability to contribute original design insights and critiques to the evolving discourse on AI in responsible design leadership.

### Course Content:

Unit 1: Framing the Ai-Design Research Landscape

12 Hrs.

- Introduce how Ai design is at the intersection of technology, art, human behavior, and ethics presenting historically unique context.
- Analyse how design paradigms are evolving and shifting with the ability of Ai to process enormous amounts of data transforming the human machine collaboration process.
- Ai integration in design and the societal and ethical challenges it raises.

Unit 2: Research Methodologies for Ai Design

12 Hrs.

| • | Mixed method approach |
|---|-----------------------|
|---|-----------------------|

- User centric Evaluations
- Iterative research approaches

Unit 3: Meaningful Presentation of Ai Design research data

30 Hrs.

- Presentation strategies for Ai design case study data
- Visualization with Context: Present data in a visually digestible manner using charts, graphs, and infographics to illustrate patterns, trends, and key findings.
- Narrative Storytelling: Instead of just showcasing raw data using graphics, weave a compelling narrative audio-visual around the research.
- Ethical and Practical Implications: AI research, especially in design, often comes with ethical and practical ramifications that need to be highlighted
- Researching and including potential biases, ethical dilemmas, or real-world applications and challenges in research findings.
- Creating the final research output in print or audio-visual format.

### Learning Resources:

Websites and Online Resources
 URL:\_https://pair.withgoogle.com/guidebook/ | Google's PAIR (People + AI Research) comprehensive guidebook aimed at designers
 URL:\_https://www.microsoft.com/en-us/ai/business-school | I Microsoft's AI Business School - learning modules tailored for business leaders.
 URL:\_https://ainowinstitute.org/ | AI Now Institute at New York University -

Interdisciplinary research on the social implications of artificial intelligence