COURSE STRUCTURE

AND

SYLLABUS FOR

UNDERGRADUATE PROGRAMME (B. Des)

1st year (Semester I)

(APPLICABLE FROM AY 2024-2025 ONWARDS)

CENTRAL INSTITUTE OF TECHNOLOGY KOKRAJHAR

COURSE LAYOUT OF BACHELOR OF DESIGN

SEMESTER I

Sl. No.	Course Code	Course Name	L	T	P	C
01.	UHS101	English for Technical Writing	2	0	2	3
02.	UMD102	Introduction to Design	2	0	0	2
03.	UMD103	Computer Fundamentals and Operation	2	0	0	2
04.	UMD104	Foundations of Storytelling and Narrative Design	2	1	0	3
05.	UMD105	History of Art and Appreciation	2	0	0	2
06.	UMD171	Design Thinking Lab	0	0	2	1
07.	UMD172	Introduction to Design Lab	0	0	4	2
08.	UMD173	Computer Fundamentals and Operation Lab	0	0	2	1
09.	UMD175	History of Art and Appreciation Lab	0	0	4	2
10.	UMD191*	Design Studio – I (Digital Drawing Technique)	0	0	4	2
	Contact Hours:	29	10	1	18	20

^{*} The course code was originally UMD196 (for 2024-2025 batch). It has been amended to UMD191 from 2025-2026 batch onward with the approval of the 19th Senate meeting of the institute.

COURSE CONTENTS

SEMESTER – 1

Course Title: English For Technical Writing

L-T-P-C: 2-0-2-3

Course Code: UHS101

Course Content:

Module I: Vocabulary Building

- 1.1. The concept of word formation
- 1.2. Root words from foreign languages and their use in English
- 1.3. Understanding prefixes and suffixes to form derivatives.
- 1.4. Synonyms, antonyms, functional vocabulary, transitional words, idioms and phrasal verbs, and standard abbreviations.

Module II: Basic Writing Skills

- 1.1. Sentence structures
- 1.2. Use of phrases and clauses in sentences
- 1.3. Importance of proper punctuation
- 1.4. Creating coherence
- 1.5. Organizing principles of paragraphs in documents
- 1.6. Techniques for writing precisely

Module III: Identifying Common Errors in Writing

- 1.1. Subject-verb agreement
- 1.2. Noun-pronoun agreement
- 1.3. Misplaced modifiers
- 1.4. Articles
- 1.5. Prepositions
- 1.6. Redundancies
- 1.7. Cliches

Module IV: Nature and Style of Sensible Writing

- 1.1. Describing
- 1.2. Defining
- 1.3. Classifying
- 1.4. Providing examples or evidence
- 1.5. Writing introduction and conclusion

Module V: Writing Practices

- 1.1. Letter writing, memo, report
- 1.2. Email
- 1.3. CV, resume
- 1.4. Comprehension, paragraph writing, essay writing

Module VI: Language Lab

(This Module involves interactive practice sessions in Language Lab)

- 1.1. Listening comprehension: receiving, attending, interpreting, recalling, evaluating, responding
- 1.2. Speaking Skills: introduction of English Sounds with IPA transcription, tone, intonation, stress, pronunciation, intonation, stress and rhythm
- 1.3. Grammar: subject-verb agreement, reviewing tense, voice, clause
- 1.4. Business Writing: successful letters and e-mails, job application letter, cv/resume, report writing, proposal writing
- 1.5. Common everyday situations: conversations and dialogues
- 1.6. Communication at workplace
- 1.7. Interviews
- 1.8. Formal presentations

Text/Reference Books:

- 1. AICTE's Prescribed Textbook: English (with Lab Manual), Khanna Book Publishing Co.
- 2. Effective Communication Skills. Kul Bhushan Kumar, Khanna Book Publishing, 2022.
- 3. Practical English Usage. Michael Swan. OUP. 1995.
- 4. Remedial English Grammar. F.T. Wood. Macmillan. 2007
- 5. On Writing Well. William Zinsser. Harper Resource Book. 2001
- 6. Study Writing. Liz Hamp-Lyons and Ben Heasly. Cambridge University Press. 2006.
- 7. Communication Skills. Sanjay Kumar and PushpLata. Oxford University Press. 2011.
- 8. Exercises in Spoken English. Parts. I-III. CIEFL, Hyderabad. Oxford University Press.

Course Title: Introduction To Design

L-T-P-C: 2-0-4-4

Course Code: UMD102 / 172

Class Hours/week	2	4
Expected weeks	12	12
Total hours of classes	24	48

Course Objectives:

The objective of this course is to provide fundamental knowledge design and its application on various fields relates to our day-to-day life. The course gives an exposure to various specialization and application in the field of design and how to approach them.

Course Outcome:

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

- 1. Understand about the basic knowledge and information about the design and its application.
- 2. Various specializations exist in the field of design.
- 3. How to apply design knowledge in our day-to-day life.
- 4. Practical application of design knowledge.

MODULE	TOPIC	COURSE CONTENT	HOURS
1	UNIT – 1 Introduction	Introduction of Design. Arts and Social Sciences. Design as a creative professional career. Interrelationship of Design to Engineering. Interrelationship of 2D & 3D forms.	6 / 12
2	UNIT – 2 History	Brief history of developments in Design and Technology. Aesthetics, Ergonomic, Scientific and Engineering considerations in Design.	6 / 12
3	UNIT – 3 Understanding Design	Case studies in Product, Communication, and Environment Designs. Stages in the design processes. Design and indigenous technology.	6 / 12
4	UNIT – 4 Role of Design	Role of Design in creating the future. Status of Design profession in India and worldwide.	6 / 12

- 1) D. Norman, Design of Everyday Things, Currency Books, New York, 1990.
- 2) R. Hollis, *Concise History of Graphic Design*, Thames and Hudson, 1994.
- 3) P. Sparke, *Introduction to Design and Culture in the* 20th Century, Routledge, 1986.
- 4) J. Guy, 20th Century Design, Thames and Hudson, 1993.
- 5) M.A. Muser and D.Macleon, Art and Visual Environment, MIT Press, 1996.
- 6) Visual Intelligence, Donald D. Hoffman, 2000
- 7) M.N. Horenstein, Design Concepts for Engineers, Prentice Hall UK, 2002.
- 8) J.H. Earle, *Engineering Design Graphics*, Addition Wesley, 2003.

Course Title: Computer Fundamentals & Operation L-T-P-C: 2-0-2-3

Course Code: UMD103 / 173

Class Hours/week	2	2
Expected weeks	12	12
Total hours of classes	24	24

Course Objectives:

To introduce students to the fundamental concepts of computers, their operations, and applications. This course aims to equip students with the necessary skills to use computer systems efficiently, understand basic networking, number systems, internet, web technologies, and Microsoft Office tools for their design projects and academic work.

Course Outcome:

Upon successful completion of this course, students will be able to:

- 1. Understand the basic components and operations of computers.
- 2. Apply knowledge of number systems in computing.
- 3. Comprehend basic networking concepts and the internet.
- 4. Utilize web technologies for academic and design purposes.
- 5. Demonstrate proficiency in Microsoft Office applications.

MODULE	TOPIC	COURSE CONTENT	HOURS
1	Unit – 1	Definition of Electronic Computer, History, Generations, Characteristic and Application of Computers, Classification of Computers, Computer	6/0
	Definition and History of computer	Languages, Generation of Languages, Algorithm, Flow charts.	
2	Unit – 2 Components of	Components of Computer system, Memory–different types, functions, concept of I/O devices.	4/0
	computer system	Types of software, Role of Operating System	
3	Unit – 3	Number system -Decimal, binary, octal, hexadecimal number systems and conversion from one system to	6/0
	Number system	another, Coding System -ASCII, EBCDIC	
	Unit – 4	Fundamentals of networking – network topology, concept of LAN, WAN, MAN, network devices –	
4	Fundamentals of networking	NIC, hub, bridge, switch, repeaters, gateway, modem, transmission media	4/0
5	Unit – 5	Internet and World Wide Web: Hypertext Markup Language, DHTML, WWW, Gopher, FTP, Telnet,	4 / 0
5	Basics of Internet and Web technology	Web Browsers, Net Surfing, Search Engines, Email, Benefits and impact of e-commerce.	4/0
6	Unit – 6	Basic feature of MS Office, Office Tools, MS Excel,	0./24
	Introduction to MS Office	MS PowerPoint.	0 / 24

- 1. Computer Fundamentals, Pradeep K Sinha, Priti Sinha, 8th Edition, Publisher BPB Publication, 2004.
- 2. Fundamentals of Computers, V. Rajaraman, Publisher PHI Learning, 2014.
- 3. *Microsoft Word, Excel, and PowerPoint: Just for Beginners*: Rajib Mathur, Publisher Outskirts Press, 2015.

Course Title: Foundations of Storytelling and Narrative Design L-T-P-C: 2-1-0-3

Course Code: UMD104

Class Hours/week	3
Expected weeks	12
Total hours of classes	36

Course Objectives:

The objective of this course is to introduce students to the foundational concepts of storytelling and narrative structures. It aims to impart a thorough understanding of the elements that constitute a compelling story, the various narrative structures, and the importance of storytelling and narrative design in multimedia communications.

Course Outcome:

By the end of this course, students will be able to:

- 1. Understand the basics of storytelling and its significance.
- 2. Identify and analyze the elements of a story.
- 3. Explore different narrative structures and their applications.
- 4. Develop skills in creating engaging and coherent narratives.
- 5. Apply narrative design principles to multimedia projects.

MODULE	TOPIC	COURSE CONTENT	HOURS
1	Unit – 1 Introduction to Storytelling	Definition and history of storytelling, The role of storytelling in culture and society, Types of storytelling: Oral, written, visual, digital, Case studies of impactful storytelling.	7
2	Unit – 2 Elements of a Story	Characters: Protagonist, antagonist, and supporting characters, Plot: Structure, development, and types of plots, Setting: Time and place, Theme: Central ideas and messages, Conflict: Internal and external, Point of View: First person, second person, third person.	7
3	Unit – 3 Narrative Structures	Traditional narrative structures: Linear, non-linear, circular, Three-act structure, Hero's Journey, Freytag's Pyramid, Nested and parallel narratives, Case studies of different narrative structures in literature and media.	7
4	Unit – 4 Narrative Design Principles	The importance of narrative design in multimedia projects, Techniques for effective narrative design: Visual storytelling, interactive storytelling, Balancing narrative and interactivity, Incorporating user experience (UX) in narrative design, Tools and software for narrative design.	7
5	Unit – 5 Application of Storytelling and Narrative Design	Developing a story concept, Creating character profiles and storyboards, Writing scripts and narratives for multimedia, Integrating narratives into multimedia projects: Games, animations, interactive media, Group project: Create a short multimedia project with a strong narrative design.	8

- 1. "The Hero with a Thousand Faces" by Joseph Campbell, Publisher Perseus Books Group, 2008.
- 2. "Story: Substance, Structure, Style and the Principles of Screenwriting" by Robert McKee,

- Publisher Methuen, 1999.
- 3. "The Anatomy of Story: 22 Steps to Becoming a Master Storyteller" by John Truby, Publisher Farrar, Straus and Giroux, 2008.
- 4. "Narrative Design: Working with Imagination, Craft, and Form" by Madison Smartt Bell, Publisher WW Norton, 2000.
- 5. "Digital Storytelling: A Creator's Guide to Interactive Entertainment" by Carolyn Handler Miller, Publisher CRC Press, 2019.
- 6. "Save the Cat! Writes a Novel: The Last Book On Novel Writing You'll Ever Need" by Jessica Brody, Publisher Ten Speed Press, 2018.
- 7. "Into the Woods: A Five-Act Journey Into Story" by John Yorke, Publisher Harry N. Abrams, 2015.

Course Title: History of Art and Appreciation

Course Code: UMD105 / 175

Class Hours/week	2	4
Expected weeks	12	12
Total hours of classes	24	48

L-T-P-C: 2-0-4-4

Course Objectives:

- To use artistic terminology and display a comprehension of design aspects and principles when studying a variety of artistic creations.
- To evaluate artwork from historical and cultural circumstances and distinguish between the methods and materials used in various works of art.
- To study prehistoric art, Indian art history, architecture, and folk-art forms; to comprehend and express the influence of the arts on culture and society.
- To explore the development of Western art movements and Indian modern art.
- To understanding how technology and design are used in media art.

Course Outcomes:

- Apply terminology related to art in relation to specific sections of art.
- Exhibit and explain knowledge of art elements and principles of design.
- Identify between the methods and supplies used to create different designs.
- Analyse and evaluate creative works constructively.
- Demonstrate an understanding of the impact of arts design and technology on culture.

MODULE	TOPIC	COURSE CONTENT	HOURS
1	Unit – 1 Pre-historic Art	Subject matter and techniques in cave paintings.	3/6
2	Unit – 2 History of Indian art & Architecture	Ancient Indian Art & Crafts: Harappa & Mohenjo-Daro Civilization (town planning and sculpture).	3/7
3	Unit – 3 Indian Traditional and Folk Art	Traditional, Folk Art - Madhubani, Kalamkari, Warli.	5/7
4	Unit – 4 Indian Morden Art	Progressive artist group and Bengal school of art.	4/7
5	Unit – 5 Western Art	Renaissance art.	3/7
6	Unit – 6 Modern Western Art	Impression Art, Cubism Art, Surrealism art.	3 / 7
7	Unit – 7 Media Art and Technology	Design and technology.	3/7

- 1. Brown, R. M. (2009). Art for a modern India, 1947-1980. Duke University Press.
- 2. Tömöry, E. (1982). A history of fine arts in India and the west.
- 3. Mitter, P. (2007). *The Triumph of Modernism: India's Artists and the Avant-garde*, 1922-47. Reaktion Books.
- 4. Berger, J. (2008). Ways of seeing. Penguin UK.
- 5. Wren, L. (2018). *Perspectives on Western Art: Source documents and readings from the Renaissance to the 1970s*. Routledge.
- 6. Mitter, P., Mukherji, P. D., & Balaram, R. (2022). 20th century Indian art: modern, post-independence, contemporary.
- 7. Sinha, M. (2003). Call of the real: contemporary Indian artists from Bengal.
- 8. Belton, R. J. Art History: A Preliminary Handbook (1996).
- 9. Bhattacharya, S. K. (1994). Trends in Modern Indian Art. MD Publications Pvt. Ltd.
- 10. Huntington, S. L., & Huntington, J. C. (2014). *The Art of Ancient India: Buddhist, Hindu, Jain.* Motilal Banarsidass.

Course Title: Design Thinking L-T-P-C: 0-0-2-1

Course Code: UMD171

Class Hours/week	2
Expected weeks	12
Total hours of classes	24

Course Objectives:

The primary objective of this course is to introduce students to the fundamental concepts and methodologies of design thinking. The course aims to enhance students' critical thinking, creativity, and innovative capacity, enabling them to approach problems in a user-centered manner and develop effective solutions.

Course Outcome:

By the end of this course, students will be able to:

- 1. Understand and apply the principles and processes of design thinking.
- 2. Employ empathy to gain insights into user needs and problems.
- 3. Develop creative and innovative solutions through ideation techniques.
- 4. Prototype and test solutions effectively.
- 5. Reflect on the design process to improve and iterate on solutions.

MODULE	TOPIC	COURSE CONTENT	HOURS
1	Unit – 1 Introduction to Design Thinking	Definition and history of design thinking, Key principles and phases of design thinking, Comparison with traditional problem-solving methods, Case studies of successful design thinking applications.	5
2	Unit – 2 Empathy and User Research	Importance of empathy in design thinking, Techniques for conducting user research: interviews, surveys, observations, Creating empathy maps and user personas, Identifying pain points and user needs.	5
3	Unit – 3 Ideation Techniques	Brainstorming and mind mapping, SCAMPER (Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, Reverse), Role-playing and storyboarding, Evaluating and selecting ideas.	5
4	Unit – 4 Prototyping and Testing	Types of prototypes: low-fidelity vs high-fidelity, Tools and materials for prototyping, User testing methods: A/B testing, usability testing, feedback collection, Iterating based on feedback.	4
5	Unit – 5 Implementation and Reflection	Planning and managing the implementation of solutions, Communicating design solutions effectively, Reflective practice: learning from success and failure, Case studies of implemented solutions.	5

- 1. "Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation" by Tim Brown, Publisher HarperCollins, 2009.
- 2. "The Design of Everyday Things" by Don Norman, Publisher Basic Books, 2014.
- 3. "Design Thinking: Integrating Innovation, Customer Experience, and Brand Value" by Thomas Lockwood, Publisher Allworth Press, 2009.
- 4. "Creative Confidence: Unleashing the Creative Potential Within Us All" by Tom Kelley and David Kelley, Publisher William Collins, 2014.
- 5. "Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days" by Jake Knapp, Publisher Simon & Schuster, 2016.

Course Title: Design Studio – I (Digital Drawing Technique) L-T-P-C: 0-0-4-2

Course Code: UMD191

Class Hours/week	4
Expected weeks	12
Total hours of classes	48

MODULE	TOPIC	COURSE CONTENT	HOURS
1	Project 1	Project based on following contents: Implementation of design or art elements & principle on drawing.	12
2	Project 2	Project based on following contents: Graphic Design and Computer Art. The styles and forms of Art (paintings, sculpture and applied art). Basic Typo design, Basic concept of Photography, Natural Study Perspective knowledge, Outdoor study, Calligraphy Life drawing etc.	12
3	Project 3	Project based on following contents: Basic type of Animation movie concept, Doodle Design, Handmade drawing or Sketches implement on digital print making techniques etc.	12
4	Project 4	Final design-based project report	12