SVKM'S NMIMS Deemed to be UNIVERSITY | SCHOOL OF DESIGN

Course Outcomes

B.Des. (Humanising Technology)

Year I/ Semester I

Sr no.	Course name	Description	Outcome
1.	Design Drawing	Develops an understanding of the basic drawing skills that allow students to discover different ways to communicate ideas visually.	• Develop an expertise in hand sketching as a means to illustrate one's ideas.
2.	Digital Skills I	Familiarises with the softwares, tools, possibilities to create Digital illustration, photo enhancements and manipulations.	• Gain expertise using the relevant softwares to create various visual designs with right understanding of application to various media's digitally as well as for print
3.	Typography	Explores the fundamentals of type through the study of letterforms and typographic explorations.	• Familiarise with the theory and fundamentals of type forms and apply the nuances of typography when designing a layout to communicate the content.
4.	Design Fundamentals	Examines the elements and principles of design in the applications of visual representations. It will further guide students in understanding the subjectivity and objectivity related to aesthetics.	• Deconstruct and apply elements, principles and fundamentals of design in print and digital medias.
5.	Design Theory	Develops creative thinking skills and enriches the understanding of methods and strategies in design practices.	• Familiarize design in scope and context, while appreciating its processes and applications. • Develop design thinking skills that enable and elevate the act of design.
6.	Social Anthropology	Explores the relevance of understanding the social context of design. Students are introduced to thinking critically about the ideologies behind the construction of objects, spaces and tools used in their daily life.	• Evaluating cultural objects and practices through an ethnographic lens in order to get a deeper understanding of the user's worldview.

Sr no.	Course name	Description	Outcome
7.	Business Communication	Grooms designers in the professional world related to communication and listening skills.	• Design professionals with an aptitude to practice stakeholder-centric communication in design and business contexts.
8.	Research Pathway I	Acquaint students with basic terminologies of research and equip them to develop skills in writing research articles.	• Write an article with the required skills, keeping in mind the research terminologies.

Year I/ Semester II

Sr no.	Course name	Description	Outcome
1.	Form Explorations	Encourages material explorations, form generations and building of four dimensional forms by imbibing and utilizing workshop skills.	• Applying skills to manipulate various materials to make quick prototypes and 3D sketches • Creating tangible forms using BioMorphism as an approach and applying principles of form semantics.
2.	Fundamentals of Photography	Introduces the fundamentals of a camera and explores using photography for visual communication and document.	• Learn the fundamentals of basic photography • Familiarise and build sensibility with the essentials of photography in communication of a concept/ narrative • Critique images and demonstrate measurable skills in basic photography
3.	Communication Design	Outlines the skill and knowledge to create visual designs and narratives for effective communication.	• Accomplish skills sets to design for effective communication • Familiarise with process and recognise the elements when designing a character and appreciate its role in storytelling
4.	Design Research	Introduces the tools and mindset to conduct empathy research, in addition takes up the tenets, frameworks to synthesise and define an insightful and in-depth problem statement.	• Formulate the required inquisitive, empathy, non-judgmental mindset • Gain expertise in conduct of empathy research using the appropriate tools To learn to synthesise data and make connections within the data points using the available frameworks • Frame an appropriate actionable problem statement with reference to user needs and contextual alignments
5.	Introduction to Cognitive Science	Aids in understanding the user behavior by deconstructing their mental model with respect to beliefs, attitudes and translates the knowledge in the context of Design research.	• Deconstruct the relevance of human behavior in design scenarios and translate the knowledge in Design research context.

Sr no.	Course name	Description	Outcome
6.	Creative Coding	Focuses on learning essential coding skills and practices through creating procedural and interactive visualizations that form the essential groundwork for further technology applications.	• Creating visual experiences using essential coding concepts and algorithms to manipulate data, add external media, and program interactions
7.	Research Pathway II	Develops an ability to read, critique and write white papers. It equips the students to understand the importance and use of white papers as well as make them capable of writing white papers using best practices.	• Develop skill to critique papers • Understand the significance and importance of white paper. • Equipped to write a white paper.

Year II/ Semester III

Sr no.	Course name	Description	Outcome
1.	Art of Storytelling	Familiarises with the process and tools of storytelling to create compelling narratives to pitch solutions whilst keeping users at the centre.	• Understand and speak the language of the users. • Synthesize to the fullest for easier communication & retention.
2.	Narrative Prototyping	Develops skills to build minimalistic and efficient storyboards for compelling narrative represented through audio visual media. This skill enables prototyping and walk through of solutions.	• Build compelling audio-visual narratives to communicate prototypes and walkthroughs.
3.	Digital Skills II	Helps to build expertise in using the relevant softwares to generate to industry standard audio visual representations.	• Using new age techniques to achieve excellence using industry standard software skills to communicate video prototypes and walkthroughs.
4.	Interface Design	Introduces the design of user interfaces and focusing on improving usability and user experience.	• Gain a foundation in the process, components and deliverables of digital user experience design
5.	Data Visualisation	Build skills to decode complexity and represent complex information in simple, efficient visuals.	• Interpreting data to generate insights and creating visualisations to communicate an impact or a decision
6.	Ideation & Prototyping	Familiarize with the process of concept building and introduces the use of various tools, skills and iterative prototyping processes to bring concepts to reality.	• Brainstorm with imagination and creativity thinking skills and sketch a wide range of possibilities to action the problem statement • select one's ideas without personal bias • Visualize, conceptualize and translate an idea into a physical artifact. • Practice iterative prototyping

Sr no.	Course name	Description	Outcome
7.	Cognitive Ergonomics I	Prepares the student to recognize the process of user cognition that considers perceptive, affective, and socio-environmental attributesthat influence the decision making. This knowledge is applied when crafting effective,user-centric experiences.	• Prepare the student to recognize and craft effective, user-centric interventions based on the fundamentals of human cognition.
8.	Ethnography	Ethnography Aids in the exploration of cultural sensitivity, and building a knowledge base on cultural idioms that can inform contextual design. Ethnocentric ideals are challenged and the students are encouraged to be perceptive to alternate perspectives. Students learn the links between material and non-material culture, and how to study people in their lived environment.	• To evaluate the extent of influence culture has on people, and to deconstruct the local and global identities
9.	Web Coding	Focuses on the interface of coding and hardware with mobile or web applications to see and practice possibilities with design as the focus. It also explores 3D digital software to visualise tangible products.	• Creating and developing essential skills to design and develop a website • Prototyping by applying 3D modelling principles to create CAD models using Fusion 360
10.	Business Acumen I	Introduces the elementary concepts of marketing such as market research, trends and forecasting.	• To recognise and familiarise with the fundamentals of Marketing to relate its importance in Product /service design

Course Outcomes
B.Des. (Humanising Technology)

Year II/ Semester IV

Sr no.	Course name	Description	Outcome
1.	Physical Computing	Develops electronic (sensors & proto boards) and coding skills required to prototype interactive interactions with physical objects.	• Creating an interactive artifact using a proto board and appropriate sensors and actuators. • Demonstrate the ability to evaluate and interpret the design concept and translate them into working prototypes by using appropriate technology.
2.	Digital Skills III	Introduces Unity as a tool for prototyping 3D animations, experiences and interactive games.	• Ability to prototype animations and interactive games using Unity as a tool
3.	Simple Product Design	Introduction to the design and prototyping of a tangible product, considering the principles of physical ergonomics, materials, processes and user needs.	• To create a simple product by applying the Design process, considering the principles of physical ergonomics, materials, processes and appropriate user need and intent
4.	Sensorial Design	Enriching design by including multi- sensorial perceptions.	• Integrate all human senses to create multi-sensorial objects of design • Apply sensorial studies to enhance creativity of the solution
5.	Usability Testing	Deals with the testing of usability factors of solutions to iterate with certainty.	• Create a test case by evaluating the methods and principles of Usability with respect to the object of design • Analyse and report the findings with recommendations in the framework expected.
6.	Cognitive Ergonomics II	Enables the students to apply the decision-making strategies and system thinking approach when designing solutions.	• Enable decision making strategies and system thinking for effective design.
7.	Interaction Design	Uses concepts and applications in human computer interaction (HCI) to inform the design of interactions while taking into consideration the social, cultural and psychological contexts of users.	• Design and prototype delightful and functional Human Computer Interaction considering the technological, behavioral and social aspects
8.	Business Acumen II	Uses Business Economics and Finance to understand the dynamics of firms, marketsand budgets.	• Familiarize a design student with the basic concepts of accounting and finance and their applications in a business environment

Sr no.	Course name	Description	Outcome
9.	Research Pathway III	Develops an ability to read, understand the structure of research papers. It equips the students to inculcate the best practices of writing research papers and prepare them to develop essential skills to design a scientific research poster.	• Understand the significance and importance of a case study. • Equipped to write a research paper. • Create content and develop essential skills to design a scientific research poster.

Year III/ Semester V

Sr no.	Course name	Description	Outcome
1.	NGO Internship	A month-long internship in social design, it facilitates the application of the learnings of the foundation years on field.	• The students comprehend and design process at grass root levels. • Develop sensitivity to marginalised society to design for greater good.
2.	Web and Mobile Experiences	Deconstructs the process of the design for web and mobile experiences and gain expertise in UX, UI design, pitching, validation and deployment processes.	• Deconstruct the entire life cycle of a web and mobile experience design project and gain expertise in conceptualisation, pitching, design and validation of such projects.
3.	Connected Experiences	Focuses on research, design and prototyping of connected experiences across various sectors with a functionable understanding of IoT technology.	• Designing connected systems that address problems through multiple touchpoints.
4.	Data Design	Focuses on using complex, real time data to design constructive stories considering core visual ergonomics and decision science.	• To design compelling visual narratives depicting transitional data to communicate a predefined goal.

Year III/ Semester VI

Sr no.	Course name	Description	Outcome
1.	Immersive Experiences	Aims to build skills and capabilities to experiment and design contextual virtual experiences as solutions to the problem at hand.	• At the end of the course, students will have relevant knowledge of XR in order to design experience led delightful, contextual solutions to the problem at hand.
3.	Creative Entrepreneurship	Using experiential learning, builds the basic fundamentals of Entrepreneurship. Addresses the process of creating and evaluating a business idea, to plan business generation and craft an effective pitch.	• Understand the fundamentals of Entrepreneurship including various concepts like business models, marketing and finance • Evaluate a Business Idea / Project validation • Construct an effective pitch to different stakeholders including 'Angel Investors'
4.	Behavioural Design	Behavioural Design facilitates the interpretation of the science of human behaviour, to design persuasive interventions by applying behavioural insights and the methods derived from games and gameplay as approaches, to systematically and intentionally change behaviours while solving design challenges in a physical or a digital world."	• Decode the human behaviour by applying the principles of behavioural design and incorporate the game design elements to build user engagement and bring about behavioural transformation through design frameworks.
5.	Intellectual Property Rights for Designers	Imparts relevant knowledge to understand the appropriate legal structures with reference to Designs, Patents, Copyrights and Trademarks.	• Understand the applicability of appropriate laws to protect and safeguard one's IP rights. • Gain awareness of crimes and recourse under the IPL.

Year IV/ Semester VII

Sr no.	Course name	Description	Outcome
1.	Research Paper	Provides an opportunity to construct arguments, and build new knowledge whilst exploring individual interests and convictions as a designer.	• Equipped to write a research paper based on the standard guidelines issued by conferences and journals with high impact factor
2.	Capstone project	Analyses a real-life-problem and design the solution where in creativity and value creation are in balance. This project will elucidate the skills, rigour, and competencies of a Humanising technology students.	• Give students the opportunity to find an urgent and relevant problem to solve in individual capacity. • Applies key learning of the program at a conceptual and practical level when designing an innovative solution.

Year IV/ Semester VIII

Sr no.	Course name	Description	Outcome
1.	Industry Internship	Train the students with the current practice trends as a designer and build on-the-job skills required to successfully work in a professional environment. In addition, opportune an experiential validation of a student's preference to a certain design domain in professional practice.	• Applies the learning with respect to processes, deliverables, professional conduct expected during the tenure of your six month internship.