

**School of Planning and Architecture, Bhopal
Department of Design**

**Post Graduate Programme in Design
Master of Design Course
Syllabus of Two years (Four Semesters) course**

**Detailed Syllabus of Semester wise Subjects
(Thrust area: Communication Design)**

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Semester 1

Subject	: Design Science Foundation
Subject Code	: MDES 101
Semester	: 1 st
Number of Credits	: 08 credits
Student Learning Hours (in a week)	: 14 hours
Type of Examination	: Viva Voce

About : Design Foundation is offered as a common subject for all the new entrants and helps the students to understand the essence of design and the role of a designer in a contextual enquiry. The lecture and practice-based design work conducted in this subject, is broader in scope and more integrated in approach. The different professional backgrounds that the students bring to the discussions and design explorations enables all students to recognize and work in interdisciplinary ways. During the process of learning, the students are expected to realise their capacity and position themselves in the decision-making process to select any one subject area between product design or communication design for further professional study.

Content : Design as Art, Origin of Art, Design as Whole.
Cognitive Principles of Art: Visual grammar, Gestalt psychology, Visual composition, Application of Colours, Ways of seeing.
Design Thinking: a combined approach of art, human science and technology
Workshop Technology, Properties of Materials for Visual composition, Exploration and Realisation of Form. Design exploration with Light, Sound, Touch, Perception.
Cognitive Function of Art: Problem-Solving and Critical Thinking, Spatial Reasoning, Creativity and Ideation, Lateral thinking.
Study of co-evolution of Culture and Cognition through human-activity and space relationship. Study of the practical common-sense methods and everyday reasoning for social order.

Methodology: Lecture, Demonstration, Studio and Workshop Practice, Field Study

Reference: What is Art? Leo Tolstoy
Design as Art, Bruno Munari
Ways of Seeing, John Berger
Basic Design: the dynamics of visual form, Maurice de Sausmarez,
The Artful Mind, Mark Turner
Art in Time: A World History of Styles and Movements, Gauvin Alexander Bailey,
Alistair Rider, Matthew McKelway
Design Methods, John Chis Jones
Ethnomethodology, Harold Garfinkel
Social Psychology, Michael A Hogg & Joel Cooper
Critical Design in Context, Matt Malpass
Lateral thinking, Edward de Bono

Subject : History of Art, Design and Technology
Subject Code : MDES 102
Semester : 1st
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Written

About : History of Art and Design provides a critical overview on evolution of human life as a pattern of art, and impact of design on evolving material culture in different art forms at various regional markets with the support of trade and economic production system. The subject explores a detailed history of various art forms, objects and environments those reflected the changing socio-economic patterns according to the timeline. Students are expected to study a case, based on historical perspectives. It enables the students to analyse past movements to inform contemporary practices, leading to fostering critical thinking and visual literacy.

Content: Medieval art, Renaissance art, Neo-classical, Rococo, Mughal, Rajasthani, Symbolism, Impressionism, Realism, Art Nouveau, Romanticism, Bauhaus, De Stijl, Suprematism, Constructivism, Cubism, Fauvism, Pop art, Abstract Expression, Postmodernism, Digital art.
Key Technological Drivers: Materials, Energy, Communication, Transportation.
Middle Ages and Renaissance,
Consumer Revolution, Design, Commerce and Trade,
Mechanization and Industrial Revolution, Design reform, Politics and Society, Theory and Design, Popular Styles, Design after Modernity, Information age.

Methodology: Lecture, Demonstration, Studio and field study

Reference: Design in Context, Penny Sparke
The Consumer Revolution, Michael Kwass
Art in Time: A World History of Styles and Movements, Gauvin Alexander Bailey, Alistair Rider, Matthew McKelway
A History of Communication Technology, Philip Loubere
History of Technology Volume 6, A. Rupert Hall and Norman Smith
History of Diplomacy and Technology: From smoke signals to artificial intelligence, Jovan Kurbalija
Nexus: A Brief History of Information Networks from the Stone Age to AI, Yuval Noah Harari

Subject : Design Management, Innovation and Entrepreneurship
Subject Code : MDES 103
Semester : 1st
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Written

About : The objective of Design Management is to help the students to bridge the gap between creativity and business strategy. It guides the students to manage different professional teams through role playing game, to innovate marketable design solutions through strategic thinking, brand management, management of design processes and communication strategy.

Content: Fundamentals of Design Management: Management of business performance, Startup and Entrepreneurship, understanding Professional Service Firm, Client-consultancy relationships, Patenting process, Value of Design: Individual and Organizational creativity, Marketing as differentiation, Innovation as coordination through design, Strategy as transformation through design.
Design Management in Practice: Design firm, Operational, Functional and Strategic design management, Design strategy vs Strategic Design,

Methodology: Lecture, Demonstration, Studio work, group discussion and field study

Reference: Design Management, Brigitte Borja De Mozota
Brand Gap, Marty Neumeier
Design Management, Sotiris T Lalaounis
Innovation Management and New Product Development, Trott

Subject : Computational Design and Basic AI
Subject Code : MDES 111
Semester : 1st
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Time Problem and Viva Voce

About : The subject offers an opportunity to initiate a dialogue between intuition and technology, creativity and computation. Various software in this subject may help the students not only build the model of a design concept, but a responsive system, an entity of a set of rules that adapts and evolves with each parameter one can adjust. Students can collaborate with technology and test variations, analyse performance and refine outputs through iterative loops. The subject creates an opportunity to extend till Extended Reality also.

Content: Modeling of curves, Surfaces and solid manipulation of CAD models, Parametric modeling, Project in re-engineering a product using computer tools for reverse engineering geometry, Design evaluation, Modification, prototyping and manufacturing drawing.

Methodology: Lecture, Demonstration, Studio and field study

Reference: CAD/CAM, I. Zeid

Semester 2

Subject : Communication Theory and Visual Research
Methodology
Subject Code : MDES 221
Semester : 2nd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Written

About : The objective of this subject is to provide a brief account of various communication theories for social communication and some of the ways in which social scientists can incorporate visual images into their research, together with a discussion of why they might wish to. The emphasis is very much on the use of visual materials as one among several research methods that may be employed by a researcher during the course of an investigation.

Content: Message cycle, Factors of Communication, 7 C's of communication, Berlo's message components, Theory of Communication, Reading pictures, Encountering the visual, Material vision, Research strategies, Making images, Presenting research results, Perspectives on visual research.

Methodology: Lecture, Demonstration, Studio based co-learning and field study

Reference: Visual Methods in Social Research, Marcus Banks
Design and Creativity, Guy Julier and Liz Moor

Subject : Visual Graphics
Subject Code : MDES 222
Semester : 2nd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Viva Voce

About : The objective of the subject is to understand the theoretical concepts of graphical composition and learn the practice of graphic design with theoretical background and specific software skills to communicate design ideas. The subject equips students with technical knowledge, production skills, material awareness, and industry standards necessary for designing effective printed communication.

Content: Visual Ergonomics, Gestalt Principles, Nature of representation, Dimensions of context, Language of visual world, Semiotics, Modernism, Post-modernism, Photo narratives, Typography, Illustrations. History and evolution of Printing, Role of Print in Contemporary Design, Design for Print: different printing processes, colour management, paper fundamentals, material selection strategy, contextual aspects of print design.

Methodology: Lecture, Demonstration, Studio based co-learning and field study

Reference: Graphic Design Theory, Meredith Davis
Editorial illustration: context, content and creation, Andrew Selby

Subject : Information Design
Subject Code : MDES 223
Semester : 2nd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Time Problem

About : Students learn to transform complex data and content into accessible, meaningful, and intuitive visual formats such as maps, diagrams, charts, wayfinding systems, and infographics. The course develops analytical thinking, visual structuring skills, and clarity in communication through data-driven design.

Content: User-centred approach, Clarity and simplicity, Structure and Organization, Visual Hierarchy and Emphasis, Consistency, Accessibility, Production system in Virtual media.

Methodology: Lecture, Demonstration, Studio based co-learning and field study

Reference: The Charles Visual Display of Quantitative Information, Edward Tufte
Information is Beautiful, David McCandless
Envisioning Information, Edward Tufte
Information Design: Research and Practice, Black, Luna, Lund & Walker

Subject : User Interaction and User Experience
Subject Code : MDES 224
Semester : 2nd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Viva Voce

About : The objective of the subject is to focus on the study of experience any user likes to gain while using virtual or print based media and accordingly to design the various elements and aspects of the content to offer that particular experience. Design of elements of the content i.e. User Interaction is a subset of the User Experience.

Content: Introduction to UXD - User Interaction of products and user experience
Understanding the process of User experience Design- Research methods and tools.
Understanding the User Needs and Goals
Ideation and Design- Interaction Design, Information Architecture, Wireframing & Storyboarding
Development and testing of prototype- Introduction and Usability Testing, Introduction of prototyping tools and ways of conducting Usability Test.
Exploration of XR with digital media, Environmental Graphics, Way finding & GPS.

Methodology: Lecture, Demonstration, Studio based co-learning and field study

Reference: The Elements of User Experience: User-Centred Design for the Web by Jesse James
Observing the User Experience: A Practitioner's Guide to User Research, Mike Kuniavsky
Sketching User Experiences: Getting the Design Right and the Right Design Book, Bill Buxton
Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests, Jeffrey Rubin,
Ux for Xr: User Experience Design and Strategies for Immersive Technologies, Cornel Hillmann

Subject : Web based Development
Subject Code : MDES 225
Semester : 2nd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Time Problem

About : Students learn to transform complex data and content into accessible, meaningful, and intuitive visual formats such as maps, diagrams, charts, wayfinding systems, and infographics. The course develops analytical thinking, visual structuring skills, and clarity in communication through data-driven design.

Content: Introduction to Web Technologies, HTML fundamentals, CSS basics, CSS layout techniques, Practical component

Methodology: Lecture, Demonstration, Studio based co-learning and field study

Reference: HTML, CSS, and JavaScript All in One, Sams Teach Yourself, Julie C. Meloni and Jennifer Kyrnin
Web Design With HTML & CSS : HTML & CSS Complete Beginner's Guide, Prem Kumar

Subject : Visual Design Project
Subject Code : MDES 226
Semester : 2nd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Viva Voce

About : The aim of the subject is to learn the total process of visual design starting from problem identification to conceptualization and validation of final concept through different evaluation techniques for target user groups. This process of design consists of many methods applicable at different segments of the visual design process. Students can apply this process while designing any virtual or print media in future.

Content: Design thinking, Problem identification, Analysis of problem/s, Experimentation of theoretical model, Design brief, SWOT analysis, Strategy and positioning of the design content, Ideation and conceptualization, Evaluation techniques and Finalization of concept/s. Prototype to a scale and validation, Design drawing specification.
Sustainable Consumption and Production.

Methodology: Lecture, Demonstration, collaborative learning and workshop practice

Semester 3

Subject : Summer Internship
Subject Code : MDES 301
Semester : 3rd
Number of Credits : 02 credits
Student Learning Hours (in a week) : 04 hours
Type of Examination : Viva Voce

About : The aim of the subject is to make the students familiarise with the industrial processes of professional practices as well as being accustomed to professional communication with clients.

Content: Identification of scope of Industrial work in a particular industrial organization, Joining and reporting to organization, completion of work atleast for sixty hours, documentation of work done by the student in the organization, documentation of industrial processes by the student.

Methodology: The internship will be done in the summertime between M.Des 1st yr and M.Des 2nd year. The student can join the organization and complete the tasks given to them atleast for sixty hours as a trainee. The student may also visit the industry and document the industrial production processes as a part of training. The students will present their training work in front of the jury in viva voce.

Subject : Consumer Experience Research and Service Branding
Subject Code : MDES 302
Semester : 3rd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Written

About : The subject helps the students to study the research methods to explore the possible experiences, the target users are looking for in consumption and production activities of service process and design the brand communication to connect to the target user groups.

Content: Finding the target user, Cognitive load theory, Choosing research methods to capture the experience, Description of experiences, Design of brand for target experience of user groups.

Methodology: Lecture, Demonstration, collaborative learning and studio work

Reference: User experience research, Marty Gage & Spencer Murrell
The art and science of UX design, Anthony Conta
Brand Gap, Marty Neumeier
Brand Management Checklist, Brad Vanauken

Subject : Social Analysis in Design
Subject Code : MDES 321
Semester : 2nd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Written

About : The objective of this subject is to introduce students to the relationship between design and social, cultural, and political contexts. To develop the ability to critically analyze societal structures and their influence on design and design's impact on society. To foster sensitivity toward diverse user groups. To enable students to integrate social insights into meaningful and responsible design solutions

Content: Introduction to Social Analysis, Social Theories and Frameworks, Ethics in design research in social context, Users, Communities, and Context, Culture and Design, Ethics and Responsibility in Design.

Methodology: Lecture, Demonstration, Studio based co-learning and field study

Reference: Design for the Real World, Victor Papanek
Caps Lock: How Capitalism Took Hold of Graphic Design, and How to Escape from It, Ruben Pater
The Design of Everyday Things, Don Norman

Subject : Visual Narratives
Subject Code : MDES 322
Semester : 3rd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Time Problem

About : The objective of this subject is to develop students' ability to construct compelling stories through visual media. The course focuses on narrative structure, sequencing, symbolism, character development, and visual language across formats such as illustration, comics, photography, film, animation, and digital platforms. Students learn to translate ideas, emotions, and concepts into coherent visual storytelling systems that communicate effectively to diverse audiences.

Content: Imagery, Composition and layout, Colour and symbolism, Narrative structure, Characters design, Emotion, Story Building, Story Boarding.

Methodology: Lecture, Demonstration, Studio based co-learning and field study

Reference: The Politics of Design, Ruben Pater,
Comics and Sequential Art, Will Eisner,
Visual Storytelling: The Art and Technique, Tony Sweet,
On Photography, Susan Sontag.

Subject : Motion Graphics
Subject Code : MDES 323
Semester : 3rd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Viva Voce

About : The objective of this subject is to focus on animating graphic design elements, text, and shapes to communicate information, commonly used in business explainers and User interaction.

Content: Compositing, Rotoscopy, Blender: Working with 3D, Scripting and Workflow
Chroma Keying

Methodology: Lecture, Demonstration, Studio based co-learning and field study

Reference: Motion Graphics and Visual Effects, Shailu Singh & Neha Khandare,
Motion Design Toolkit: Principles, Practice, and Techniques, Austin Shaw & John Colette,
Visual Storytelling: The Art and Technique, Tony Sweet,
Storyboards: Motion in Art, Mark Simon.

Subject : Pre-production in Animation/ Videography
Subject Code : MDES 324
Semester : 3rd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Viva Voce

About : The objective of pre-production in animation or videography is to focus on essential planning phase before actual animation begins, encompassing scriptwriting, storyboarding, character design, and voice recording

Content: 12 principles of animation, Story and Script, Concept art and design, Storyboarding, Animatics, Voice recording, Asset creation and rigging.

Methodology: Lecture, Demonstration, Studio based and workshop co-learning and field study

Reference: Animation Masterclasses - from Pencils to Pixels: A Complete Course in Animation & Production, Tony White
Techniques in Animation Production, Arun Prajapat
Directing for Animation, Tony Bancroft

Subject : Post-production in Animation/ Videography
Subject Code : MDES 325
Semester : 3rd
Number of Credits : 04 credits
Student Learning Hours (in a week) : 07 hours
Type of Examination : Viva Voce

About : The objective of post-production in animation or videography is to learn the assembly of rendered animation, audio and visual effects.

Content: Compositing, Color grading and correction, Sound design and mixing, Animation editing, VFX/ Motion Graphics, Final rendering & output.

Methodology: Lecture, Demonstration, Studio based and workshop co-learning and field study

Reference: Animation Masterclasses - from Pencils to Pixels: A Complete Course in Animation & Production, Tony White
Techniques in Animation Production, Arun Prajapat
Directing for Animation, Tony Bancroft
Film Technology in Postproduction, Dominic Case

Semester 4

Subject : Final Design Project
Subject Code : MDES 401
Semester : 4th
Number of Credits : 18 credits
Student Learning Hours (in a week) : 31 hours
Type of Examination : Viva Voce

About : The objective of the subject is to study different situational contexts of daily life and analyse the complexity of a problem for deriving a design brief. Students can apply their knowledge from previously learned subjects and create viable solution/s with functional prototype/s through various design methods. At the end, they can validate the prototype.

Students may collaborate with industries to conduct their final design project. In that case, if required, they may stay out of campus to complete their project.

Content: Problem analysis and identification, Experimentation of theoretical model, Design strategy and market positioning, Design brief, SWOT analysis, Design specifications, Ideation and conceptualization, Evaluation techniques and Finalization of concept/s. Functional prototype to a scale and validation, Manufacturing drawings.

Methodology: Experimentation and Demonstration, Collaborative learning and Workshop practice

Subject : Design Seminar and Report Writing
Subject Code : MDES 402
Semester : 4th
Number of Credits : 02 credits
Student Learning Hours (in a week) : 04 hours
Type of Examination : Viva Voce

About : The objective of the subject is to learn and write the report for design project. Different types of referencing systems will be adopted in writing. At the end the students will present the report in the form of seminar.

Content: Content of report, Introduction, Literature review, Problem study and analysis, Primary and Secondary study, Theoretical experimentation, Design brief and specification, Ideation and concepts, Detailing of Concepts, Finalization of concept through evaluation methods, Final Prototype and validation, Manufacturing Drawing. Bibliography and References.

Methodology: Lecture, Demonstration and Studio practice

Reference: Different types of reference systems