Dhirubhai Ambani
Institute of Information and Communication Technology

DA-IICT Road, Gandhinagar, Gujarat, India 382007.
Tel.: +91 79 6826 1700 I Fax: +91 79 6826 1710 I Web: www.daiict.ac.in

MDes –Masters in Design (Communication Design) Programme

The Master of Design (Communication Design) is a two year post-graduate programme (4 semesters). The programme offers the students opportunity to specialize in Visual Communication Design and Interaction Design. Its distinctive pedagogic format encourages learning of basic design skills, the use of digital technologies and an understanding of the cultural and aesthetic aspects of communication practices. The objective of the programme is to prepare young professionals for careers in creative media and infotainment industries and the academia. Unlike other Design programmes offered in various institutions the MDes programme in DA-IICT blends Design concepts, skills and practices with Liberal Arts inputs from the domains of sociology and anthropology that help the student to understand and engage with diverse real life contexts within which they have to evolve specific communication strategies.

The overall objective of the programme is to prepare students towards employability in the creative media industry (as visualizers, game and app developers, advertizing creatives etc) to develop their own independent studios and start ups and also pursue further studies in Design Research and Teaching.

Programme Outcomes (POs)
As stated by NBA, POs represent the knowledge, skills and attitudes the students should have acquired at the end of the programme.

PO1: **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2: **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3: **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs

with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Programme Specific Outcomes (PSOs)

PSO1: To apply the theoretical concepts of information technology and practical knowledge in analysis, design and development of computing systems and interdisciplinary applications.

PSO2: To work as a socially responsible professional by applying ICT principles in real-world problems.

Programme Educational Objectives (PEOs)

PEO1: To prepare students with foundation alarts with cultural and creative sensibility required for successful communication of ideas and information within specific social contexts.

PEO2: To prepare students with foundational arts with cultural and creative sensibility required for successful communication of ideas and information within specific social contexts.

PEO3: To prepare students ready for work professionally in a range of Communication Design sectors in the corporate world, in the academic and in individual startups.

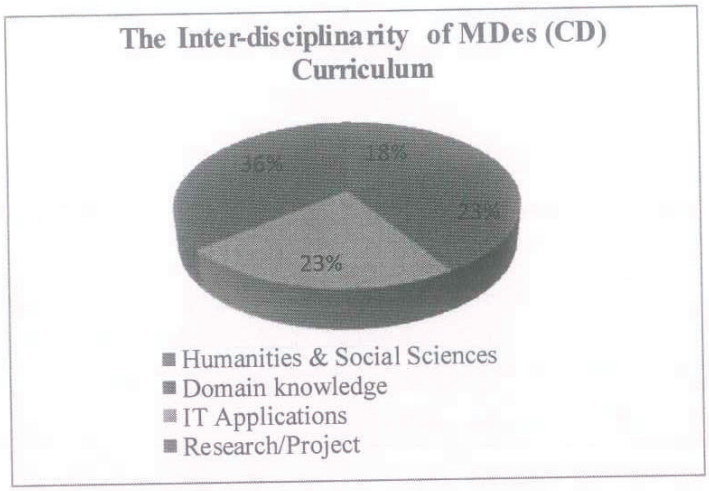
PEO4: To prepare students who will be socially responsible citizen with ethical and leadership qualities and effective interpersonal skills.

Curriculum Structure

The two-year programme of study leading to M. Des. degree is divided into four semesters along with a summer semester between the first and second years. Each semester student will take up four courses offered by the program. In each semester, a student must register for a minimum of 12 credits. An M. Des. student must have a minimum CPI of 6.0/10.0 in order to graduate and must maintain a minimum CPI of 5.0/10.0 in order to continue in the program. The distribution of courses for MDes(CD)programme is as under:

Subject area	**No. of credits**
Programme Core courses	42
Research/Specialization exposure	13
Design Project	15
Total credits	**70**

- Total Credits requirement – 70 for graduation.
- Course credit - 45
- Research/Project credit – 25
- 23% of the total credit is for domain knowledge
- 23% of the total credit is forIT applications
- 18% of the total credit is for Humanities and Social Sciences
- 36% of the total credit is for Project



The curriculum structure

Semester I	**Semester II**
Approaches to Culture and Communication: (3-0-0-3)	Fundamentals of Design - II (3-0-4-5)
Fundamentals of Design – I (3-0-2-4)	Research Methodologies - Ethnography and its Applications (3-0-0-3)
Image-Text-Sound (3-0-4-5)	Introduction to Narratology (3-0-2-4)
Information Design (3-0-4-5)	Photography (1.5-0-2-2.5)
Design History (1-0-2-2)	Video (1.5-0-2-2.5)
	Interaction Design (1-0-4-3)
Semester III	**Semester IV**
Animation (3-0-2-4)	Individual Design Project (0-0-30-15)
Web Design: Applications, Inter-Connectibility (3-0-2-4)	
Thematic Seminar/Workshop or a RR Course (3-0-0-3)	
Research Application: Constructing Narratives (3-0-2-4)	
Research Proposal Seminar: Rationale, Process, Outcome (1-0-4-3)	

Course details

Semester I. Foundation Semester

1. Approaches to Culture and Communication

This course will introduce students to a series of lectures and discussions on the role of technology and culture in communication. It aims to explore the ways in technology mediates and transforms cultural meanings in practices of social communication. The primary focus of this course would be on identifying specific fields of social communication, and understanding the kinds of design problems and solutions these can generate. It will introduce students to a range of analytical frameworks derived from studies of both aesthetics and semiotics. These frameworks would apply to understanding communication practices in Indian as well as in cross-cultural contexts. Students will be encouraged to understand that an appreciation of the intent of communication is a significant factor in the process of effective communication design and that it is important to develop the ability to decode 'point of view' and 'perspective' in relation to meanings. The course which will be organized through readings, lectures, and seminar presentations aims to help students to intellectually integrate the domains of design and technology with society and culture. It will provide the essential foundations for them to undertake their individual projects in the second year when they would be oriented to develop a more in-depth understanding of the principles of communication through either Visual Design or Interaction Design.

2. Fundamentals of Design

Design is an interdisciplinary activity – characterized by the constant preoccupation of co-relating disciplines, dealing with and trying to understand the complex and interesting worlds of the physical, biological, imaginary, and human all of which are multivariate in character. The Fundamentals of Design course is an attempt to sensitize students to this complex, dynamic and multidimensional scenario. The main objective of this course is to acquaint students of Communication Design to the means and methods of approaching, investigating and solving problems creatively by providing them with appropriate design and conceptual skill sets. The course would emphasize the latitude and value of individual thinking and the students' ability to observe and see which would enable them to apply themselves creatively in solving problems. The areas that would be covered would be drawing - a process of observation, recording and representation which would include various kinds of representation for 2D. Objective of this course is in providing the student with a foundation in the grammar for design for communication based on ideas and concepts like color, composition, typography and layouts/space,

illustration for specific needs. The course would culminate in a project that student would integrate skills and aptitude acquired in the course.

3. Information Design

Information design covers the promoting and enhancing of making the complex simple. It facilitates and transforms complex, unorganized, or unstructured data into useful, usable information both with efficiency and effectiveness. The attempt would be to discover and articulate the meaning in data, and create the map that allows others to use the information easily, through meaningful reductions and interpretations of complex data by using writing and analytical skills to transform unstructured ideas into concrete, meaningful information.

The course would cover the defining, planning, and shaping of the contents of a message: it is designing understanding for a particular environment it is presented in with the intention of achieving specific objectives with reference to the needs of users and creating navigation and hierarchy that makes information intuitively and easily accessible.

The course would also cover the essential aspects of Information Systems and Architecture to establish and understand types of information systems and the role of such systems and their technological foundations. The key components of Information Systems and key issues in implementation, explaining how design problems are conceived, researched, analyzed and resolved in different contexts would be discussed. The methods and frameworks used in conceptualizing, designing and implementing information systems, through Information Architecture would also be considered.

The course encourages exploring how information can be structured and visualized to create effective communications and to stimulate viewer attention and engagement through design. Building sensitivity, via case studies, Information Collection, Conceptual Data Analysis, Information Mapping and Visualization along with User Studies are introduced as means towards developing concise, clear and visually sophisticated communication material. The course provides students with an introduction to structuring and presenting information with an emphasis on meaning, clear communication and visual aesthetics that in turn enhance how people read, understand and use information.

4. Image-Text-Sound

Introduction to elements of composition: This course aims at exploring how words, images and sounds are put together for a range of communication events and forms.

Students would be expected to research, document and compose presentations deploying multi-media. They will be encouraged to read and explore ideas from design aesthetics and semiotics to understand compositional styles and aesthetic choices in traditional as well as contemporary forms of communication media in which visual, verbal and aural elements are combined to make effective communication events. Students would be able to appreciate diverse technologies of communication in rural or urban, India or in local or global media platforms and explore how image, text and sounds are combined to generate a context specific meanings in specific contexts.

This could be exemplified in case of advertisements, mounting of event such as theatrical, exhibition, and installation or ritual performances. By the end of the semester students are expected to acquire the skills and the theoretical insights that are needed to understand the relationships between composition and context in multimedia formats.

5. Introduction to the History of Design

This module will introduce students to a brief history of Design practice and pedagogy as it evolved in the context of the Industrial Revolution and the onset of the age of mass production in the late 19th and early 20th century. The objective of this course is to enrich students' understanding of Design not merely as practice but as a vast intellectual field spanning several disciplines. Students will be introduced to the economic, political, cultural and technological contexts within which Design Schools, Design movements and Design Styles took shape in Europe, the United States and later India. The objective is to help students understand how Design practice and pedagogy was closely linked to modern consumerism and nationalism on the one hand and on social, political, and environmental movements on the other. The course will focus on specific movements as the Art and Crafts Movement of the late 19th century, Art Noveau, Bauhaus and the Modernist Era, along with Alternative Design movements, such as appropriate design, universal design, and socially responsible design etc. By the end of the module students expected to be able to make connections between what they learn in class and the larger economic, social and cultural context in which they would work.

Semester II. Extension of Foundations

1. Fundamentals of Design - II

This course deals with the advanced aspects of color, composition, virtual 3D spaces, Typography as image, Illustration for information design, and Digital Photography as means of explore, visualize and communicate complex ideas with high levels of data density. This course would present an entry point to moving image and sound analysis, structure, methodology, concepts and experimentation for communicating specific ideas as well as to explore the possibilities/potential of each medium. Consideration of 'mediums' would focus on moving image scenarios that would include cinema, animation, multimedia and Sound Design and for 2D and virtual 3D environments. Students should acquire from the field of 'Design History' the understanding of visual language that is applied for range of visualization essential for practice of sketching, photography, film and animation.

2. Research Methodologies - Ethnography and its Applications

Contemporary information technologies are often said to be immersive, creating distinctive and highly detailed virtual experiences. Thus the discipline of ethnography, which teaches researchers to understand social activity through immersive exposure, seems particularly appropriate to study of communication design Ethnographic analysis provides powerful tools to understand how communication systems deeply affect individuals and societies. The course introduces the foundations and basic methods of ethnography derived from the fields of visual anthropology and cognitive anthropology. It will look at several applications of these disciplines to current communication practices. Students would be expected to undertake fieldwork assignments and related applied activities such as collection of empirical data, qualitative data, contextual inquiry and usability testing that provides the foundations for user-centered interaction and visual design. The objective of the course is to provide the student the intellectual tools to develop research capacity for the final design projects they would have to undertake.

3. Introduction to Narratology

This course will introduce students to the critical place of narratives in communication practices. The theoretical starting point of this course will be an understanding that narratives are found and communicated through a range of media such as verbal and written language, gestures, music, visual art and film. Narratives have also acquired in new and complex forms in computing environments and digital networks. Beginning from a range of questions related to simple forms of story –telling, students in this course will be acquainted with the more sophisticated insights of practitioners of what is

known as "narratology". Starting from the theoretical propositions of Vladimir Propp (Morphology of the Folktale 1928) the course will survey the writings of Claude Levi Strauss, Gerard Genette, Roland Barthes, and Mieke Baal among others. By the end of the course students will be expected to develop a deep understanding of both the thematic and modal aspects of story –telling. In other words, they will be engaging with both the structure of the narrative and the manner of its telling. This course is intended to prepare them for a subsequent course on the construction and translation of narratives in different media.

4. Photography

The course will commence with the History of Photography with an overview of the technical and creative development of photography through time and will introduce students to the science of Photography with and overview of the chemistry and physics in the subject. The course will emphasize on the critical analysis of the works of masters, around a broad range of photographic images from a variety of genres and institutions including: advertising, print and digital news media, social-networking sites and art. In doing so, they are expected to build sensitivity to the reading of Photographic imagery. They will be encouraged to engage in a critical evaluation of the relationship between the textual specificity of the photograph and the contexts of its production, distribution and reception. This would be an opportunity for the students to engage and reflect on photographic images.

This module on Photography will build on previously learnt skill sets of the students to learn how to frame an image using the camera - through observation, content, context, composition, colour, and light primarily to understand and build an aesthetic sensibility. The students will learn to train the eye train to develop perfect compositions through the viewfinder and learn to effectively capture expressive moments with accuracy and aesthetics to develop a keen sense of storytelling through still images

This course aims to introduce students to the application and use of photography in design through a creative use of the camera, its controls and techniques. It aims to generate an understanding of the symbiotic relationship between the photographic image and other design skills and develop an understanding of digital practice, which include the technical aspects of resolution, colour, contrast, light and the manipulation of these aspects in images through theory and practice.

5. Video - Documentary Filmmaking

The aim of the course is to establish an understanding in students about the elements of documentary filmmaking through a practical approach; to establish an understanding of the complexities of this medium through critical analysis and study of acclaimed documentaries and documentary filmmakers.

The courses would introduce students to a brief history of documentary filmmaking to examine the narratives of historically important films and filmmakers and how they have affected society - biopics, video essays, craft documentaries etc. and compare it to current trends in documentary filmmaking. With this as a base the basic narrative tools/devices used to tell a story - interviews, montages, inserts, intercuts, color family, mood boards, voice over would be discussed, to examine how each tool and device makes an impact on the overall narrative. How narrative structures differ and are constructed based upon what is to be communicated. Understanding audiences - shaping films according to the audience - how geography, history, culture, language and understanding affect a film.

The course would also examine the relationship between the subject and a filmmaker; engaging with the subject, understanding the aspects of communication, establishing perspectives, ethics and integrity.

The course would cover the technical aspects of moving image and sound - treatment for a documentary - elements of composition – the camera as a narrative tool – the Art of framing, camera movements, angles, lensing, compositions, video gear, and elements of cinematography to help tell a story. Sound as a narrative tool - sound recording, voice over, music to support a story.

The students will be introduced to the complexities of shooting in the field – focusing on narrative/direction – establishing a balance between style and content, the technical and aesthetic aspects.

Editing for moving image - The concepts that govern editing as a process in which a documentary film takes its form, accommodating and integrating different basic editing techniques to support narratives – relevance and importance of devices like voice over, montage, overlay edit, silence.

The course would also cover Sound in details as an integral part of film making – both the aesthetic and practical aspects of sound leveling, mixing, foley recording, voice over, music would be covered in theory and practice, and finally subtitling, graphics, motion graphics, end and opening credits, title of the film, data intermediate etc. to conclude the process.

6. Principles of Interaction Design

Interaction Design involves designing for meaningful interactions between humans and their artifacts and this idea is easily extended to include interactions between humans with the help of their artifacts. Designing for interaction requires understanding human engagement and communication with technology and to use that knowledge to design artifacts within specified contexts and constraints that create more useful and satisfying experience for the users. With the explosive growth of digital technology, interaction design is now being applied largely to interactions with digital artifacts. Interaction design includes elements from the fields of human factors; human computer interaction, collaborative work and learning, digital design, cognitive ergonomics, informatics, information systems, and interface design. This course will cover the underlying principles of a wide range of issues, and includes empirical studies with design implications and extensive work on lab and field based exercises. This course is designed to cover the breadth of the field and to enable the students to be adept and competent in grasping and dealing effectively with design issues involving interaction with a range of devices, services and users. This course requires the students to investigate a specific area or a context in depth and develop understandings and design implications in order to deliver an innovative proposal and prototype.

Semester III. Joining Concepts and Applications

1. Animation

The aim is to sensitize students to the structure, nature, systems, and communication potential of the medium of animation. This course would be an introduction to the fundamentals (principles and dynamics) of motion and movement in animation – both theory and practice. The course would equip students with the basic concepts, methods/means and language to conceptualize and visualize simple ideas through animated sequences/films. Storytelling, Storyboarding, Animatics, Setting a stage, and kinetics would be the main areas to explore the limits of the medium. The course is set to exploring ways to communicate complex ideas and hidden worlds effectively using the language of animation, from entertainment -films and gaming to Instructional material. The course would also introduce students to the art of developing and visualizing characters for animated films. Exploration and experimentation with lip synchronization, aesthetics of sound, track lying, and creating animated sequences with/to sound.

2. Web Design: Applications, Inter-connectibility

Through discussing various examples students would be introduced to Web Concepts and Design. What are the basic technical requirements and production processes needed for a basic web site development and construction. Topics include site design, image processing, visual web editors, html and layout, interface design and basic behaviors. Along with this aspects of connecting to a network would be provided as hands on experience. As a class project, students would start setting up a site that would become a context to apply things they learn and present the work for others. Through this process the student will learn to combine various software that are available and that must be utilized to create a multimedia content. As each multimedia approach requires a different combination of software the students need to understand the potential advantage and disadvantages of specific software, their compatibility amongst each other, cross-platform applications and the optimum manner in which they can be used with minimum generation-loss of end product. The rationale behind this course is that hardware- software compatibility for the optimum communication is essential and it is best understood by a hands-on, lab-based exploration of multimedia fundamentals. Emphasis will on end product design, concept development and collaborative techniques as used in professional multimedia prototyping. Additionally, students will learn about a variety of hardware and software options including, but not limited to, image editing, digital video and input/output concerns. This course will consider the concepts, technical requirements and production processes needed for web site development and construction. Topics covered will include interface design,

web animation and interactivity, video and audio for the web and interactive end products. Primary objective is to present and explore concepts and tools for interactivity in multimedia.

3. Thematic Seminar/Workshop or a RR Course

Faculty involved with the M.Des. program and or visiting faculty would conduct a seminar or a workshop for the students to either learn or explore some new areas of multimedia techniques and applications. If and when required an open elective offered in the Institute may be considered as a substitute for the seminar course. In case a seminar or workshop is not offered the student could take up a reading and research (RR) course with any faculty member after providing the formal plan of arrangement between the student and the faculty concerned to the M.Des. committee. Please note that the focus of this course has been not fixed in order to take advantage of students' changing interests, faculty's own research interest and the particular area of expertise that a visiting faculty brings from outside including the design industry.

4. Research Application: Constructing Narratives

This course is meant to encourage students to apply the theoretical insights drawn from the earlier course on narratives and develop their own narrative form around a particular idea or message they wish to communicate. They will encourage translating narratives from one medium to another and analyzing the differing demands of each. This course will involve a group project wherein students will be tested on their capacities to work together and develop a product that reflects coordinated team work. For example, they can work together to develop a public interest message through paper, voice and screen and develop a keen sense of the narrative as it takes shape through each medium.

5. Research Proposal Seminar: Rationale, Process, Outcome

This seminar's main focus will be help students to formulate their final project proposals. Students will be expected to engage in informed discussions about their design problems with the faculty. They will be required to provide a clear rationale for the selection of a project and explain how they intend to implement the skills and aptitudes gained from the courses offered in the program. It is essential that students in this seminar are intellectually capable of integrating the technical component of their design project with questions derived from their understanding of the social and cultural contexts of communication. They are expected apply the research methodologies learnt in the previous course and write up a concrete proposal in accordance with a set of given guidelines. The primary objective of this seminar is to enable students to make

informed decisions about the nature of the project they wish to undertake and the range of intellectual skills they need to work on it. Once they have decided on a proposal, they will in the next and final semester work in consultation with an assigned team of faculty. This course will equip student with the necessary tools to determine appropriate methodology for specific design research needs and teach them how to find supporting resources, and the ability to critically evaluate existing research. This course should help the student to initiate and plan the individual research project in the IV semester.

Semester IV. Individual Design Project

The last and final semester is dedicated to developing and completing the research proposal developed in the previous semester (See Semester III). This semester will give a chance for each individual to now undertake and execute the final project for which they have been provided general foundation as well as a specialization developed along with the research and creative outlook. Each student would be responsible to work in close individual collaboration with two faculty members (at least one of them must be a regular faculty of the institute) to complete the final design project. The faculty would evaluate the work done and accordingly submit it for final processing of the project by a jury of examiners.

PROCEDURE:

It is expected that the individual student will work on their own with guidance from the research committee. Consultation with the committee members is essential for avoiding the situation in final analysis where no body but the student alone is responsible for the poor quality of work- leading to failure in the last module.

- The last module will culminate into the seminar presentation where the students committee has to be present.
- This seminar MUST be scheduled and held before the last week of the term.
- It will be student's responsibility to organize the final seminar date.
- Each student will have to organize individual presentation for the study committee and be engaged in a discussion after the individual presentation is made.
- This session would be open to the whole institution and subject to evaluation.
- The committee members will evaluate the final product and it's presentation and asks for the two copies of CD as well as a document on the project itself. Committee members may invite individuals or individual specially to assist in the evaluation of the student work from within the institute or out- side of the institute.
- Document must be made available to committee members prior to the seminar.
- If the final assessment requires that student makes some alterations to the final project, the committee would set up the dead line by which the revisions must be made by the student.
- This would be required for the student to earn the final degree.

Suggested outline for what the presentation should include :

- Identification of the communication event or the need of communication.
- How multimedia is utilized

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- Aspects of designed communication
- Technology as combined to create the desired communication
- Presentation of the final product in form of a CD