MDes – Masters in Design (Communication Design) Program Structure

Objective of the program
The Master of Design (Communication Design) is a two year post-graduate program (4 semesters). The program 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 program is to prepare young professionals for careers in creative media and infotainment industries and the academia. Unlike other Design programs offered in various institutions the MDes program 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 program is to prepare students towards employability in the creative media industry (as visualizers, game and app developers, advertising creatives etc) to develop their own independent studios and start ups and also pursue further studies in Design Research and Teaching.

MDes(CD) Program Educational Objectives (PEO)

- provide students with foundation with cultural and creative sensibility required for successful communication of ideas and information within specific social contexts.
- provide emphasis on content-driven design as opposed to technology-driven design.
- prepare students with necessary skills to apply the required tools of communication in culturally and socially sensitive ways.
- prepare students ready for work professionally in a range of Communication Design sectors in the corporate world, in the academic and in individual startups.
MDes(CD) Program Outcomes (PO)

After successful completion of the MDs(CD) program students will have:

- essential skills and arts for making effective communication design into innovative and sensitive design applies to specific societal contexts.
- ability to use communication design tools for creative design practice and outcome.
- ability to create effective design solutions to problems of communication, and apply them to deal with the rapidly changing world.
- confidence to contribute and work as professional by using communication design in Media & Entertainment industries, Govt. and non-government organizations, e-education and infotainment within India and abroad.
- ability to acquire social and ethical attributes that enable them in applying their skills for societal needs.
- ability to communicate effectively both orally and written.

Curriculum Structure

The two-year program of study leading to MDs 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 MDs 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 MDs(CD) program is as under:

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<thead>
<tr>
<th>Subject area</th>
<th>No. of credits</th>
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<tbody>
<tr>
<td>Programme Core courses</td>
<td>42</td>
</tr>
<tr>
<td>Research/Specialization exposure</td>
<td>13</td>
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<tr>
<td>Design Project</td>
<td>15</td>
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<tr>
<td><strong>Total credits</strong></td>
<td><strong>70</strong></td>
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- 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 for IT applications
- 18% of the total credit is for Humanities and Social Sciences
- 36% of the total credit is for Project

The Inter-disciplinarity of MDes(CD) Curriculum

Curriculum structure

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<th>Semester I</th>
<th>Semester II</th>
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<td>Fundamentals of Design - II (3-0-2-4)</td>
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<td>(3-0-0-3)</td>
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<tr>
<td>Fundamentals of Design – I (3-0-2-4)</td>
<td>Research Methodologies - Ethnography and its Applications (3-0-0-3)</td>
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<tr>
<td>Principles of Interaction Design (3-0-2-4)</td>
<td>Introduction to Narratology (3-0-2-4)</td>
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<tr>
<td>Object Oriented Programming (3-0-4-5)</td>
<td>Web Design: Applications, Inter-connectibility (2-0-4-4)</td>
</tr>
<tr>
<td>Writing, Presentation and Communication Skills (1-0-2-3) (P/F course)</td>
<td>Open Elective (3-0-0-3)</td>
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### Course details

#### Semester I

**Approaches to Culture and Communication: (3-0-0-3)**

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 which technology mediates and transforms cultural meanings in practices of social communication. It will introduce students to a range of analytical frameworks derived from visual anthropology, aesthetics and semiotics. Students will be encouraged to understand that 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 the lecture and seminar format will help students to relate the domains of design and technology with society and culture. It will provide the essential conceptual foundations for them to develop a more in-depth understanding of the principles of Visual Communication Design or Interaction Design.

**Fundamentals of Design – I (3-0-2-4)**

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

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<td>Individual Design Project (0-0-30-15)</td>
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<td>Games, Simulations and Modeling (3-0-2-4)</td>
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<td>Thematic Seminar/Workshop or a RR Course (3-0-0-3)P/F course</td>
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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 Multimedia Design to the means and methods of approaching, investigating and solving problems creatively by providing them with appropriate design and conceptual skill sets. 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.

**Principles of Interaction Design (3-0-2-4)**

Interaction Design involves designing for meaningful interactions between humans and their artifacts. With the explosive growth of digital technologies, 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 include 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.

**Object Oriented Programming (3-0-4-5)**

The course is designed to impart knowledge and develop skills required to solve real world problems using object oriented approach with java language as a tool. It aims at developing skills in programming, software design and development It would introduce the concepts of object
oriented programming and java like, basic structures in java, abstraction, objects and classes, inheritance, polymorphism, encapsulation, reusability of class, interface, GUI programming, deploying java applications and accessing data bases in java.

**Writing, Presentation and Communication Skills (1-0-2-3) (P/F course)**

This course is meant to underscore the significance of written and verbal skills in the processes of conceptualizing and designing communication. The course will combine a seminar and workshop format where students will be focusing on one specialized aspect of written or verbal communication every week. They will be introduced to both the formal conventions of academic and technical writing as well as the wider range of styles associated with creative writing. Their verbal skills will be developed through exercises involving group discussions, extemore speaking, and formal presentations. This course aims to help students formulate ideas, and articulate these to appropriate target audiences and contexts.

**Semester II**

**Fundamentals of Design - II (3-0-2-4)**

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.
Research Methodologies - Ethnography and its Applications (3-0-0-3)
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 social and cultural anthropology 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.

Introduction to Narratology (3-0-2-4)
This course will introduce students to the critical place of ‘story-telling’ 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 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.

Web Design: Applications, Inter-connectibility (2-0-4-4)
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. Emphasis will be 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. 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.

Open Elective
Students will select one Open Elective offered by the Institute. It could be a Technical or Non Technical elective.

Semester III
Animation (3-0-2-4)
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.

Games, Simulations and Modeling (3-0-2-4)
This course will introduce the students to the principles of game design as a process based on ‘situated learning theory’. Students will be taught how games need to be understood as process
based systems that produce models and representations algorithmically through player interaction. Students will be exposed to analysis of games as complex narrative structures and the importance of rules which help one to play the game as a learning experience. Students, after studying some of the existing games would be encouraged to design games with learning potential. Students will learn the technology aspects by understanding the use of Game programming Libraries, Gaming Application Programming Interface, and Graphics API (Direct X and Open GL) and Game engines.

**Thematic Seminar/Workshop or a RR Course (3-0-0-3) P/F course**
Faculty involved with the MDes 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 MDes 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.

**Research Application: Constructing Narratives (3-0-2-4)**
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.
Research Proposal Seminar: Rationale, Process, Outcome (1-0-4-3)
This seminar’s main focus will be to help students to formulate their final project proposals. 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. They are expected to 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. This course should help the student to initiate and plan the individual research project in the IV semester.

Semester IV
Individual Design Project (0-0-30-15)
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 undertake and execute the final project for which they have been provided general foundations as well as a specialization together with specific research skills. 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.