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PGDPD NEW MEDIA An Approach Document

Introduction

The virtual canvas of new media is much larger, diverse and multidimensional than envisaged previously. Newly emerging technologies have transformed every possible dimension of new media communication and design as well as our understanding of this field. To a great extent, new media is a convergence and/or extension of Graphic Design, Mass Communication, Film, Video, Animation and Multimedia. This makes the task of understanding new media very difficult.

Perhaps the most important theme in new media is **convergence**. Video, audio, and text have become digital and are combining in ways never possible before. The real convergence is occurring at digital level where all the media, technology and expertise meet. Therefore, in this sense the language of digital media is the language of digits. However, today the New Media lies at the crossroads of digital technology and traditional media. New and old media skills often overlap and combine into new, diverse skill sets. New media professionals need to have a solid footing in not only in new technologies or all emerging technologies, but also in all traditional media representation techniques. The new breed of new media needs to be a good communication designer, as well as a good digital designer; not only a talented artist with a brush, but also a talented artist with a computer tablet, keyboard, mouse or any newly emerging digital device & programmer's brain. And every new media professional needs to be skilled in planning and project management.

Defining New Media

Growth of New Media is directed and dictated by technology. Therefore New Media can be understood in terms of upcoming and emerging technologies. However, this will lead to unstable definition of New Media since technology is continuously changing. The other approach to define would be to find out certain stable factors behind the development of New Media. By the arrival of Information Technology (IT) and electronic/digital communication, there is an abundance of information. It raises various issues of managing the information and knowledge. Along with other technology factors, information and knowledge has become an integral part of New Media. Therefore the New Media may be defined as info-media or Knowledge Media. However, more important aspect of New Media is the user experience. New Media extends beyond *Interface Design*, *Interaction Design* and *Information Design* in various ways. On the one hand it is the convergence of all these and on the other hand it is the spirit of innovation that takes New Media beyond them. In true sense, New Media is an innovative media that creates experiences.

Therefore, New Media may be defined as an innovative media that generates experiences using all the possible divergent media, expertise and emerging technologies.

It is evident that there are overlapping areas between New Media and rest of the established disciplines. New media shares concepts of visual design, composition, page layout, typography, and illustration with graphic design. It shares concepts viz., content design, scriptwriting, and animation with film, video, and animation. In a certain sense new media is an extension of multimedia and therefore it is bound to share methods and processes of designing with multimedia. Multimedia is an amalgamation and convergence of various traditional media viz., audio, video, text etc. however, new media has an additional components called '**Gray Cells**'. As New Media is engaged into installations, user studies, interface design, and developing smart devices it has strong overlap with Product Design. The up coming emotive computing or affective computing suggests that in future the New Media will also have resemblance with aesthetics, poetry, Artificial Intelligence and psychology.

However, '**generation of novel experiences leading to user delight**' is the core component that distinguishes new media from rest of the disciplines in very clear terms. With the advent of the Internet and Web technologies, there was a great revolution in media. For the first time in the history of 'communication media', the traditional 'passive user' has been bestowed with the power to control, customize, personalize and dictate the media and therefore resultant '**experiential participation**' becomes the defining quality of

new media. This involves new ways of interface design, navigation design, human computer interaction and user-centered design.

The emerging digital technologies and software languages are playing a crucial role in shaping up the new media field. With Intelligent agents and new techniques in Artificial Intelligence (AI), New Media is becoming stronger and stronger. Game design, Interactive Storytelling, digital actors and digital films, online examination, Expert systems, Intelligent Search Agent for gathering information and organizing content are some of the areas where AI has already become an integral part of new media and also suggests the future directions. Therefore, Intelligent Systems Design that covers most of the above-mentioned areas is another vital component of new media that distinguishes New Media from rest of the media and also accommodates certain aspects of Product Design. As the digital technology is evolving it has become fairly clear that screen based computation will be soon obsolete and new ways of digitization and computing will emerge. Already people are talking about embedded technologies and folk computing. Therefore, defining New Media from a particular perspective is very difficult and all such attempts would be self-defeating.

Thus the spirit of innovation and participatory experience augmented with Interaction, Information and Intelligence are the essential aspects of new media that make this discipline most unique.

Apart from these core areas, the discipline of New Media loosely comprises of Interaction Design, Information Architecture, User Studies, Instructional Design, Edutainment, Interface Design, Navigation Design, Human Computer Interaction (HCI), Interactive Storytelling, Digital Typography, Virtual Ergonomics, Virtual Aesthetics, Expert Systems powered by AI, Distance Learning, Computer Based Training, Web Based Training, E-Commerce, Interactive TV, Simulation, User Centered Design, Game Design, New Media for Special Needs, Virtual Communities, Virtual Libraries, Virtual Tours, E-Books, Virtual Exhibitions, Data Bases, Tele-Conferencing, Interactive New Media Products, Smart New Media Toys etc.

Although it is not possible to cover all these areas in a regular course work, students are encouraged to select some of these areas of their choice or any emerging area to carry out their projects in the third semester. During the first semester they acquire basic understanding of design while in the second semester they are introduced to the core courses of New Media and they are equipped to take up projects of their choice in the third semester.

New Media at NID

NID is a unique institution with design excellence, depths of intellect and time-tested pedagogical processes. It has done pioneering work in creating design awareness and establishing design standards in India. Over the past four decades, NID has gained international recognition as one of the foremost institutions in the field of design. It has received several national and international awards.

By the advent of Information Technology (IT), NID has geared up itself to keep pace with rapidly changing technologies. In the new economy the concept of capital is redefined in terms of knowledge. Hence, the economy will be knowledge and innovation oriented. NID envisages a lion's share in the new millennium economy through innovation, invention and design intervention that is knowledge oriented.

The New Media Design programme at NID offers an opportunity to explore and innovate in the newly emerging digital technologies and related areas. Digital technology has opened up new possibilities of synergistic convergence of multimedia, animation, video, text, sound etc. The programme aims at nurturing new media designers and design managers who are conversant with digital technologies and its dynamics.

New Media courses provide students with necessary design foundations on cognitive psychology and media studies, as well as an understanding of the essential and specialized design courses, the ability to communicate, team-work, and problem solving. **Students graduating with New Media degrees will be creative thinkers** who possess broad-based technical and design skills. New Media courses provide electives and project-based learning experience to develop core competencies in problem solving, creativity, communication, and knowledge of the design production process and understanding of subtle nuances of the design process. New Media courses provide industry training that links real world experience to the classroom. They get hands on experience on industry projects to inculcate professional values. New Media

courses assist students in portfolio development, vital to modern career building. New Media programme addresses student's immediate occupational needs with the flexibility to adapt to rapidly changing industry trends. The Department of New Media at NID demonstrates a long-term capacity for producing high-end Experience- designers.

'Learning by doing' is the motto of the New Media programme. Students are given strong foundations with interdisciplinary studies, through a careful process of analysis and synthesis, a recipe for innovation and invention, to shape up the mind of a New Media designer. With this time-tested design pedagogy, the programme is gearing up to lead the New Media design movement at national level as well as international level.

New Media Course Structure

As per the overall NID course structure and pedagogical approach, the New Media course is fine-tuned as follows. Each semester is of 20 weeks duration and the students are supposed to take all the courses that are offered. The entire curriculum is broadly divided into Core courses, Supplementary and complimentary courses, Electives, Field studies, Self-studies, Internship and Diploma Project/ Research-intensive dissertation.

Core courses in first two semesters are planned very carefully since these are the formative semesters in student's career. These are broadly divided as main courses, supplementary courses and complimentary courses. Students also work on a project of their choice during these semesters if necessary. The field studies are planned to augment and support the core courses. The self-study assignments help students to inculcate research habits and are exposed to state-of-the-art in the New Media. The third semester is dedicated to projects of student's choice. In the fourth semester the students go for industry internship. Fifth semester is completely dedicated to the Industry sponsored Diploma Project or a research intensive dissertation that will accompany a New Media product.

Apart from this, certain pedagogical themes have been assigned to each semester. These themes provide a necessary philosophical foundation to shape up and structure of the New Media programme. These themes are based on the following assumptions. Firstly, since students from varied disciplines join the programme, it is thought that some inputs on foundations of design and explorations are essential in the very first semester. Secondly, since New Media at NID starts at the PG level it is expected that after completion of the course, the students would attain complete mastery over their areas of interest. Thirdly, it is necessary for a New Media designer to inculcate professional values along with the application-oriented research to sustain and survive in the continuously changing market situations. These pedagogical themes are as follows.

First Semester - Explorations

Second Semester - Essentials and Enhancement

Third Semester - Projects and Professionalism

Fourth Semester - Work Experience

Fifth Semester - Work Experience/ Research and Application

DETAILED COURSE STRUCTURE

First Semester – Exploration and Enrichment

The first semester core courses are treated as foundational courses where students will learn basics of design from cognitive psychological perspective, explorations into new media and related software skills required for to be in tune with cutting edge technologies. They have **Design Cognition, Linear & Non-linear Storytelling and Multi-Sensory Design** along with **Design Process** as their main core courses. These main courses are supplemented by a course on **Design Overview, Creativity Workshop, Research Methodology and Communication Studies**.

Second Semester - Essentials and Mastery

The second semester core courses are considered as essential core courses that will give the students a quantum jump initiation into the New Media. These three courses are absolutely essential for New Media since they formulate the main body of the discipline. User is the king of New Media. There will be a course on **User Studies** introducing students with various ways of understanding user through contextual enquiry,

user profile and user analysis. The course on **Information Design** will introduce the students various ways of organizing and manipulating content i.e., to create, acquire, represent, present, store, and distribute content using New Media. The second course on **Interaction Design** will introduce them to the real strength of New Media i.e., Interaction and participatory experience. It will focus on interface design as well as navigation design. These three essential courses are supplemented by a course on Instructional Design since this has become a very demanding field in New Media. The **instructional design** strategies are very useful in all sorts of New Media applications. Apart from these core courses there are two supplementary courses to give exposure to various issues related to **Cognitive Ergonomics*** and **Cross-Cultural Studies*** which are upcoming areas in the field of communication. Students also get an opportunity to enrich their perspective through taking up a course of their choice out of given list under **Open Elective**.

** Cognitive Ergonomics and Cross-cultural Studies might be shifted to other semesters if required*

Third Semester - Specialization and Professionalism

The third semester is treated as a semester of projects. The students will select one or two vital areas of their interest and work on the projects. The subjects may range from Instructional Design, Edutainment, Interactive Storytelling, Game Design, E-Commerce, Navigation Design, Intelligent Design and Human Computer Interaction (HCI) or so on. Through these projects, student will acquire complete mastery over these areas and will be able to shape up career in these areas. In the course on **New Media Systems Design**, they will learn the basics of systems thinking that they will be able to apply to the advancements in the digital media and expert systems using Artificial Intelligence and computer generated virtual scenarios. There will be one more vital course called **New Media Design Management** where students will be introduced to different models of design management and other relevant issues. The rise of international networks poses considerable issues for traditional law and policy makers struggling to cope with designing and enforcing regulations across the territorial boundaries of nation-states.

Apart from these regular courses New Media Programme will introduce them to the frontiers of New Media through seminars, workshops, and study tours and so on. Since the field of New Media is expanding with the speed of light, it is essential to be in tune with the latest developments in the field. This programme will update the students regarding the cutting-edge developments and front-line avenues in the New Media. This will be complimented by appropriate inputs on **New Media Research Methods** and audience studies and if required they will do thorough study of any New Media product. During these three semesters students will also get an opportunity to work on class room projects as well as industry sponsored projects.

Fourth Semester - Internship in the industry

Fifth Semester - Work Experience/ Research and Application

The students will take up industry-sponsored Diploma Project or a Research project.

If they take up Research project they will require to submit a dissertation along with the New Media product. Description of the dissertation is as follows:

Dissertation: As a part of their final post graduate dissertation, students will undertake an independent research project culminating in the dissertation on a topic agreed upon and a New Media product demonstrating the application and manifestation of the research. The dissertation is expected to be oriented towards a research that has direct application in the industry. It may be investigative and inventive in nature and may contribute significantly to the advancement of the field of New Media. Although, there are no lectures in this semester, introductory sessions will provide guidance on dissertation writing, research methods and data collection. A supervisor will be allocated to students depending on the area of research.

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