**Syllabus
2022-23**

PG DIPLOMA IN

# DIGITAL

# MEDIA

**DEPARTMENT OF NEW MEDIA**

**INDIAN INSTITUTE OF MASS COMMUNICATION**

# Syllabus 2022-23

## PG DIPLOMA IN

# DIGITAL MEDIA

### Department of New Media

### Indian Institute of Mass Communication

**COURSE OBJECTIVES**

- To develop in students an understanding of Digital Media and enable them to appreciate potential and limitations of Digital Media.

- To encourage students to appreciate and participate in Digital Media researches.

- To develop skills to encourage the production of media messages using variety of digital tools.

- To introduce students to various career opportunities in New Media.

The PG Diploma shall be divided into two semesters. The duration of each semester shall be of six months

**Academic Calendar for the Session of 2022-23**

| | |
|---|---|
| **Introduction with all Course Directors and Faculty Members of IIMC and classes will be started** | **9th November 2022** |
| **Orientation Lectures for all PG Diploma Courses** | **21st to 25th November 2022** |
| **First semester examinations** | **24th March to 31stMarch 2023** |
| **Commencement of IInd semester** | **3rd April 2023** |
| **Second semester examinations** | **17th July to 21st July 2023** |
| **Internship/Placements** | **24th July 2023 onwards** |
| **Announcement of final result** | **3rd week of August 2023** |

- Each Semester shall comprise of five papers.

**COURSE OUTLINE**

| PAPER | SUBJECT | Marks (Theory) | Marks (Practical) |
|-------|---------|----------------|-------------------|
| I | **Communication Theories, Concepts and Process** | **70** | **30** |
| II | **Understanding Digital Media** | **70** | **30** |
| III | **Media Laws and Ethics** | **70** | **30** |
| IV | **Multimedia Content Creation** | **40** | **60** |
| V | **Introduction to CMS** | **50** | **50** |
| VI | **Communication Research** | **60** | **40** |
| VII | **Digital PR and Corporate Communication** | **40** | **60** |
| VIII | **Fact Checking and Verification** | **30** | **70** |
| IX | **Data Journalism – Reporting and Editing** | **30** | **70** |
| X | **Emerging Technologies** | **70** | **30** |

## FIRST SEMESTER

**Paper 1: Communication Theories, Concepts and Process**

UNIT 1 : Communication Theories

UNIT 2 : Communication Models

UNIT 3 : Forms of Media and Communication

UNIT 4 : Digital Media Theories

UNIT 5 : Media Effects and Society

**Paper 2 : Understanding Digital Media**

UNIT 1 : Introduction to the Digital Media

UNIT 2 : Digital Media Characteristics

UNIT 3 : Internet as a Medium

UNIT 4 : Digital Audiences

UNIT 5 : Digital Media Design

**Paper 3 : Media Laws and Ethics**

UNIT 1 : Introduction to Media Laws

UNIT 2 : Digital Laws Across the World

UNIT 3 : Cases from the Communication Field

UNIT 4 : Ethical Concerns in Digital Age

UNIT 5 : Open Sources/Resources Movement in Digital Age

**Paper 4 : Multimedia Content Creation**

UNIT 1 : Introduction to Multimedia & Journalism

UNIT 2 : Online Story Construction

UNIT 3 : Editing Content for Searchers and Scanners

UNIT 4 : Tools and Techniques for Online Journalism ( Mapping, Timeline, Infographics, Podcasts, Explainer Videos etc)

UNIT 5 : Mobile Journalism

**Paper 5 : Introduction to CMS**

UNIT 1 : Introduction to CMS

UNIT 2 : Introduction to HTML

UNIT 3 : Working with WordPress, Joomla & Drupal

UNIT 4 : Design and Development of Digital Portal

UNIT 5 : HTML Exercise and CMS Practicals

**Paper 6: Communication Research**

UNIT 1 : Introduction to Research

UNIT 2 : Online Research Process and Methods

UNIT 3 : Social Media Research

UNIT 4 : Introduction to various Research Software

UNIT 5 : Research Paper Writing and Seminar

**Paper 7: Digital PR and Corporate Communication**

UNIT 1 : Introduction to Public Relations

UNIT 2 : Introduction to Corporate Communication

UNIT 3 : Introduction to Digital Marketing

UNIT 4 : Social Media Monitoring

UNIT 5 : Digital Tools for PR and CC Professionals

**Paper 8: Fact Checking and Verification**

UNIT 1 :  Introduction to Misinformation Ecosystem

UNIT 2 :  Types of Misinformation and Disinformation

UNIT 3 :  Fact Checking Visuals ( Photos and Videos)

UNIT 4 :   Fact Checking Locations

UNIT 5 :   Social Media Audit

**Paper 9 : Data Journalism – Reporting and Editing**

UNIT 1 : Introduction to Data Journalism

UNIT 2 : Big Data Integration and Processing

UNIT 3 : Sources of Data

UNIT 4 : Data Gathering and Analysis

UNIT 5 : Data Visualization


**Paper 10: Emerging Technologies**

UNIT 1 : Artificial Intelligence

UNIT 2 : Augmented Reality

UNIT 3 : Virtual Reality

UNIT 4 : Entrepreneurship and Innovation

UNIT 5 : Creating Interactive Content in Unity, Co Spaces, etc.

# Paper 1: Communication Theories, Concepts and Process

**Theory Marks: 70**

**Practical Marks: 30**

**OBJECTIVES:**

- To familiarize students with the concept of communication and media practices.
- To introduce them to prominent theoretical paradigms and models.
- To introduce students to the digital culture and new media environments to understand the potential and limitations of the same.
- To encourage them to assess the communication process, especially digital communication in light of social contexts and its effects.

**UNIT 1 : Communication Theories**

- Definition, Elements, Process and Scope of Communication
- Indian Philosophy of Communication: Sadharanikaran, Sahridaya, Natya Shastra
- Normative Theories of Press
- Understanding Media as Text: Signs and Codes in Media

**UNIT 2 : Communication Models**

- Linear and Non- Linear  models of communication
- Shannon-Weaver Mathematical Model; Westley and MacLean's Model; Gerbner's Model
- Four Models of Communication: Transmission; Ritual or Expressive; Publicity; Reception Model

**UNIT 3 : Forms of Media and Communication**

- Forms of Communication: Verbal and Non-Verbal; Mediated and Non-Mediated Communication
- Levels of Communication: Intrapersonal, Interpersonal, Group, Mass Communication

- Forms of Media: Print, Electronic Media and Digital forms of Media – New media, Digital Media, Social Media
- Characteristics of Digital Media: Machine-human Interface, Interactivity, Convergence, Immersion, etc.

## UNIT 4 : **Digital Media Theories**

- Concept and definitions of Digital Media
- Digital media: Impersonal, Interpersonal, Hyper-personal
- Concept and theories of Virtual Identity
- Social and Para-social media
- CMC and theories of Digital Media: Network theory, Mediatisation theory and actor-network theory, Online Disinhibition

## UNIT 5 : **Media Effects and Society**

- Audience Effect Theories: Direct effect paradigm, Limited effect paradigm, Alternative paradigm (Cultural effect)
- Changing practices of journalism and political economy of digital media
- Cinema: Digital processes and effects
- Animation and Gaming: Children as Audience
- Social Media Practices and Audience Effects (Social media influencers; trolling; etc.)
- Digital Media and Participatory Culture: Public Sphere
- Media Literacy

**Practical:**

Assignments based on the theories and models taught in the Class.

**Suggested Readings:**

- McQuail, D. 2010. *McQuail's Mass Communication Theory*. 6th Edition. London: Sage.
- Baran, S.J. & Davis, D.K. 2006. *Mass Communication Theory: An Introduction*. Indian Edition. South West Coengate Learning.
- Kumar, K.J. 2017. *Bharat mein Jan Sanchar.* Mumbai:Jaico Publishing House. (**HINDI**)
- Adhikari N., *Theory and Practice of Communication – Bharat Muni*, Makhanlal Chaturvedi Rashtriya Patrakarita Evam Sanchar Vishwavidyalaya

- Fiske, J. 1982. *Introduction to Communication Studies*. Routledge.

- Dewdney A. & Peter R. 2014. *The Digital Media Handbook*. 2nd Edition. Routledge. Oxon.

- Lipshultz, J.H. 2014. *Social Media Communication: Concepts, Practices, Data, Law*. New York: Routledge.

- Sharma, R., (2015). 'Media Literacy and Governance: A study of Sangrampur Block in Bihar'. In *Democracy and Good Governance: Reinventing the Public Service Delivery System in India*, Rumki Basu, M. Badrul Alam and Furqan Ahmad. (eds.). India: Bloomsbury.

- Thussu, D. K. 2010. *International Communication: A Reader*. London: Routledge.

- Sreberny, A. 1997. *Media in global context: A reader*. London: Arnold.

- Seargent, P. and Tagg, C. 2014. *The Language of Social Media: Identity and Community on the Internet*. New York: Palgrave Macmillan.

- Grant, A.E. & Wilkinson, J. 2009. *Understanding Media Convergence: The State of the Field*. United Kingdom: Oxford University Press

- Silverblatt, A, Yadav, Anubhuti &Kundu, V. (2022). Media Literacy: Keys to Interpreting Media Messages ( Indian Edition)

# Paper 2: Understanding Digital Media

**Theory Marks: 70**

**Practical Marks: 30**

## OBJECTIVES

- To introduce the basics of Digital Media and its characteristics.
- To explain the internet as a Medium and its practices
- To introduce student to the Digital Audiences and its types
- To describe about Digital Media Design and its techniques

## UNIT 1: Introduction to the Digital Media

- Understanding Digital Media: Evolution and Development
- Digital Media and its computer components
- Digital Media Application Software: Word processing, Spreadsheet, Image Editing.
- Digital Media Revolution: Mass Media Adaptation, Trends, Revolution
- Digital Media Effects: Cybercrime, Privacy, Hate Speech, Surveillance etc.

## UNIT 2: Digital Media Characteristics

- Characteristics of Digital Media: Digital, Interactive, Hypertext, Virtual, Dispersion, Telepresence
- Understanding Credibility of Digital Media
- Credibility Building Process
- Net Neutrality
- Mobile Revolution
- Digital Literacy
- Convergence
- Digital Divide
- Revolution in Communication
- Language Barriers

**UNIT 3: Internet as a Medium**

- Basics of Internet, Characteristics of Internet
- Internet concepts, its working style & uses
- Internet as a Medium: Conceptual & functional dimensions.
- Types of Internet-based communication: Dynamics of communication in CMC and Cohesive Force of online group
- Journalistic uses of Internet: E-mail, Search, Video conferencing, Webcasting, Podcasting, Photo sharing, etc.
- Application for Journalists: Blogs, Portals, Websites, Social media platforms, Wikis, etc.
- Journalistic use of Social Media, Social Networking Sites, Social Media Collaboration (Facebook, Twitter, LinkedIn, Twitter, Instagram, WhatsApp, Skype, Flicker, Sound Cloud etc.)
- Streaming Servers: News Aggregators & SEO

**UNIT4: Digital Audiences**

- Understanding Audiences: Difference between Public, Crowd, Group, Mass & Audience
- Characteristics of Audiences, Types of Audiences, Passive, Active and Participatory Audience
- Audience Conception Tradition: Structural, Behavioural and Cultural
- Audience Autonomy-free or controlled content creators
- Basics of Digital Audiences
- Search Engine Strategies for Digital Audience Acquisition
- Social Media Campaigns and Engagement
- Digital Audience Research and Behaviour
- Digital Audience Analytics
- Digital Audience Management
- Manipulating Digital Media Audience

**UNIT 5: Digital Media Design**

- Essential of Digital Media Design
- Design Blueprint, Digital Illustration, UI & UX

- Photographic Imaging Process
- Data Visualization, Moving Image & Motion Graphics
- Animation
- App Design, 3D Animation, 360 Advertising Campaign
- Website Design & its technology: HTML, DHTML, CSS, JavaScript, ASP, PHP, etc.
- FTP and Streaming Server
- Cloud: Area of Use, utility and advantages
- Cloud services for Journalists: Dropbox, Google Drive
- Speech to Text, Text to Speech, Scanning, OCR, etc.

**Practicals:**

- Make a blog and publish content regularly (10 Marks)
- Analyse a website on the basis of its formatting and structure. (10 Marks)
- Create Design and present a layout of website through power point presentation.(10 Marks)

**Suggested Readings:**

- Athique, A. (2013). *Digital media and society: An introduction*. John Wiley & Sons.
- Buckingham, D. (2007). *Youth, identity, and digital media* (p. 216). The MIT Press.
- Dewdney, A., & Ride, P. (2006). *The Digital Media Handbook*. Routledge.
- Feldman, T. (2003). *An introduction to digital media*. Routledge.
- Lindgren, S. (2017). *Digital media and society*. Sage.

# Paper 3: Media Laws and Ethics

**Theory Marks: 70**

**Practical Marks: 30**

## Objectives:

- To make students aware of the Constitutional rights and duties
- To introduce students to legal and ethical issues of digital media and communication
- To familiarize students with digital media legal framework in India and its implication
- To introduce students to the digital media legal framework across the world with contextual learning through the cases and develop their understanding to assess implications thereof.
- To identify and analyze ethical challenges pertaining to digital media communication

## UNIT 1 : Introduction to Media Laws

- Concept of the Ethics and the Law
- Salient Features of Indian Constitution: Fundamental Rights, Directive Principles of State Policy, Fundamental Duties
- Constitutional Law under Freedom of Speech and Expression: Article 19(1) and 19(2)
- Statutory Laws: IT Act, 2000 and Amendments of 2008, Intermediary Guidelines Rules 2011
- Telecom Regulatory Authority of India Act, 1997
- Registration of Press and Periodicals Bill **(the topic will be accordingly revised as and when the bill is approved and passed)**
- Debates around Personal Data Protection (Draft) Bill **(the topic will be accordingly revised as and when the bill is approved and passed)**
- Defamation; Contempt of Court
- Appellate Bodies: Appellate Grievance Redress Committee; Self-regulatory Grievance Redress Appellate Body by Social Media Companies; Social media and OTT self-regulation

**UNIT 2 : Digital Laws Across the World**

- UNCTAD and Cybercrime Legislation Worldwide
- Declaration on European Digital Rights and Principles
- Privacy Legal Framework: Data Protection Act of 1988; ePrivacy Regulations of 2011 in Ireland; Danish Data Protection Agency and the 2000 Act of Processing
- Personal Data in Denmark; Norwegian Personal Data Act; Data Protection in UK; African Union Convention on Cyberspace Security and Personal Data Protection
- Regulation of the Internet: Communications Decency Act, 1996; The Child Online Protection Act of 1998 in the USA
- Social Media Content and Legal Framework: Network Enforcement Act, 2017 and Amendment of 2021 in Germany; Digital media censorship and 'Great Firewall' in China
- Fake News Laws in South East Asia: Cambodia, Vietnam, Laos and Philippines
- Framework and guidelines for use of social media for Government. Ministry of Communication and Information Technology, India.
- Information Technology (Intermediary Guidelines and Digital Media Ethics Codes) Rules, 2021.

**UNIT 3 : Cases from the Communication Field**

- Net Neutrality
- Facebook-Cambridge Analytica Data Scandal
- Twitter Controversy (in reference to non-compliance with the Digital Ethics Code 2021 in India)
- Antitrust Lawsuit against Google (over dominance in the online advertising market)
- Gender Discrimination Lawsuit against Google News feed and the controversy of Facebook Algorithm
- Pegasus App Controversy, Wikileaks Controversy and Lawsuit , Panama Papers leaks
- Social Media Influencer Lawsuit: Lord & Taylor (2016); Snap Inc. and Luke Sabbat; etc.

**UNIT 4 : Ethical Concerns in Digital Age**

- Post-Truth

- Understanding Fake News, Issues and Challenges
- Hate Speech
- Right to Privacy and digital surveillance; Issues of anonymity
- Cyber bullying, Trolling, Stalking
- Hacking v/s ethical hacking
- Dark Web and the challenges of cyber security
- Communication using robots (& Artificial Intelligence)
- Digital piracy, Plagiarism and Issues of copyright
- Obscenity and Pornography: Issues of representation of women and children

## UNIT 5 : Open Sources/Resources Movement in Digital Age

- Open Source Movement and need for open resources in communication
- Creative Commons Licenses
- Open source platforms (Wiki-leaks, Wikipedia), Open Access Journals
- Open access in Indian Education Sector (Inflibnet, National Digital Library, Repositories etc.)
- Cases related to Open Sourcing: Aaron Swartz, DU Photocopy Case etc
- Criticism of Open Access
- Open source Repositories

**Assessment Method:** Students will be required to present case studies concerning media laws and ethics in India, as a part of real-time practical assessment. Students will be required to write term papers on such cases through a comparative legal frame. The assignment will be conducted for 30 marks during the semester.

**Note:** The digital technologies are continuously evolving and changing the social fabric. The newer legal and ethical challenges are faced by the society, for which governments, non-government organisations and other actors are also continuing their efforts of designing and bringing forth the mechanism – legal and ethical – to deal with those challenges. In this backdrop, the syllabus of the course will be revised periodically keep it relevant and contemporary.

**Suggested Readings:**

- Basu, D.D. 1986. *Law of the Press*. 2nd Edition. New Delhi: Prentice Hall Inc.

- Beall, J. 2013. 'The Open-Access Movement is Not Really about Open Access'. *Triple C*. 11. 589-597. 10.31269/vol11iss2pp589-597.

- Bist, R.S. & Mohanty, V.P. (N.D.). *Open Access Movements and Open Initiatives in India @ Inflibnet Centre, Ahmedabad)* Accessed Online https://ir.inflibnet.ac.in/bitstream/1944/1227/1/236-246.pdf

- Duggal, P. 2018. *Cyber Law 3.0*. Universal, LexisNexis.

- Ess, C. 2020. *Digital Media Ethics*. 3rd Edition. Cambridge: Polity Press.

- Jordan, T. 2013. *Hacking: Digital Media and Technological Determinism*. Cambridge: Polity Press.

- Kashyap, S.C. 1994. *Our Constitution: An Introduction to India's Constitution*. New Delhi: National Book Trust.

- Lipschultz, J.H. 2022. *Social Media Law and Ethics*. New York: Routledge.

- Mangan, D. & Gillies, L.E. (eds.). 2017. *The Legal Challenges of Social Media*. Cheltenham, UK: Edward Elgar Publishing.

- Mittal, R. 2008. 'Cyber Laws'. In K. Sankaran & U.K. Singh (eds.) *Towards Legal Literacy: An Introduction to Law in India*. New Delhi: Oxford University Press. PP. 168-180.

- Packard, A. 2013. *Digital media Law*. 2nd Edition. Sussex:Wiley-Blackwell.

- Pearson, M. & Polden, M. 2019. *The Journalist's Guide to Media Law: A handbook for communicators in a digital world*. New York: Routledge.

- Schiller, H. 1996. *Information Inequality: The Deepening Social Crisis in America*. New York: Routledge.

- Singh, M.K. & Mishra, S.K. (eds.). (2017). *Adhunik Patrakarita ke Vividh Sopan*. New Delhi: Vishwa Gyan Prakashan. **(HINDI)**

- Sorabjee, S.J. 2000. 'Constitution, Courts and Freedom of the Press and the Media'. In Tirpak, B.N. et al (eds.). *Supreme But Not Infallible: Essays in Honour of the Supreme Court of India*.

- Eko, L. 2013. *American Exceptionalism, the French Exception, and Digital Media Law*. Plymouth, UK: Lexington Books.

- Lasch, C. 1987. 'The Degradation of the Practical arts'. In Goldberg, S.E. & Strain, C.R. (eds.). *Technological Change and the Transformation of America*. Southern Illinois University Press. PP. 79-90

- Mhiripiri, N.A. & Chari, Tendai. (eds.). 2017. *Media Law, Ethics, and Polity in the Digital Age*. Hershey PA, USA:IGI Global

- Moor, J. 1985. 'What is Computer Ethics'. In *Metaphilosophy*, Vol 16, No.4.

- Poster, M. 2004. 'The Mode of Information and Postmodernity'. In Blom, R. Karvonen, E. & Melin, H. (eds.). *The Information Society Reader*, New York: Routledge.

- Price, M.E., Verhulst, S.G. & Morgan, L. (Eds.) 2013. *Routledge Handbook of Media Law*. New York: Routledge.
- Stewart, D.R. (ed.) *Social Media and the Law: A Guidebook for Communication Students and Professionals*. 2nd Edition. New York: Routledge.
- Thakurta, P.G. 2011. *Media Ethics*. 2nd Edition. India: Oxford University Press.
- Weisenhaus, D. & Young, S.N M. (eds.). 2017. *Media Law and Policy in the Internet Age*. USA: Bloomsbury

# Paper 4: Multimedia Content Creation

**Theory Marks: 40**

**Practical Marks: 60**

**OBJECTIVES:**

- To Introduce students to the basics of Multimedia Content Creation, Online Story Construction and its process
- To acquaint students with tools and techniques for Online Journalism

## UNIT 1: Introduction to Multimedia & Journalism

- Multimedia Journalism
- Elements of Digital Multimedia: Text, Graphics, Audio, Video & Animation combination into News, Content Generation
- Basics of Visuals: Elements, Composition and Principles
- Dos & Don'ts during traditional journalism versus the multimedia journalism
- E-Journals, E-Zines, Online Magazines
- Webzine Conferences, Webinars, Video Conferencing

## UNIT 2: Online Story Construction

- Basics of online story writing
- Story idea development and updates
- Composing a Succession of Stories, Sustaining Readership
- Turning Interviews, archival tapes and other recorded material into Sound, Oral and Visual Stories
- Using animation, special effects
- Feature Writing for Online Media
- Digital Content and Intellectual Property: Paid & Unpaid Digital Contents (News, Advertisements, etc.)
- Writing for Twitter, Facebook and Blog etc. & tips, tools, and best practices of storytelling

**UNIT 3: Editing Content for Searchers and Scanners**

- Elements of News: Focus, Accuracy, Attribution, Balance, Fairness, Brevity, Clarity, Readability, Human Interest, Fact Checking, Objectivity, On track, Observation, etc.
- Searchers and Scanners
- Rewriting & Reconstruction of News
- Photo & Video Editing
- Multimedia Authoring
- Timeline creation for digital news
- Editing and uploading content on Web, Production to Video Editing with Adobe Premiere & Video Stream Services

**UNIT4: Tools and Techniques for Online Journalism (Mapping, Timeline, Infographics, Podcasts, Explainer Videos, etc.)**

- Tools of Online Content: Mapping, Timeline, Infographics, Podcasts, Explainer videos, etc.
- Sound Basics: Frequency, Pitch, Intensity of Sound, Timbre, Tone Color, Digital Audio basics
- Analog & Digital Signals, Sampling Rate, Bit depth, Channels, Bit rate, Digital Audio file formats.
- Audio Streaming Server & its use, Saving sound files & podcast on Web
- Tips for writing for Audio, Tools and Techniques for Voice Over
- Podcasting: Formats, Planning, Scripting, Recording a Show, Podcast Production Process
- Terms and Tools of Podcast
- Basics of Visuals, TV Journalism v/s Online Video Journalism
- Basic Video Editing, Adobe Premiere Video Editing Techniques
- Importing and Capturing Footage, Sequence and Clip Management
- Timeline & Video & Audio Tracks, Using Multiple Sequences
- Apps for Multimedia Journalists, Compression techniques for Audio and Video
- Virtual Communities, Creating Titles and Graphics

**UNIT5: Mobile Journalism**

- Introduction of Mobile Journalism
- Workflow & Skills Required
- Tools & Apps for Mobile Journalism
- Challenges of Mobile Journalism
- Social Media and Social Networking Sites & Mobile Journalism

**Projects**

- Create a digital media class blog. Post article everyday on the blog based on the day's learning. (20 Marks)
- Produce at least 10 news bulletins on different types of news, features etc. Produce reporting through MOJO (15 Marks)
- Create a podcast of five programmes- Group Assignment (25 Marks)

**Suggested Readings:**

- Adornato, A. (2017). *Mobile and social media journalism: A practical guide*. CQ Press.
- Burum, I., & Quinn, S. (2015). *MOJO: The mobile journalism handbook: How to make broadcast videos with an iPhone or iPad*. Routledge.
- Dancyger, K. (2018). *The technique of film and video editing: history, theory, and practice*. Routledge.
- Quinn, S. (2011). *MoJo-Mobile JournalisM in the asian region*. KAS.
- Ward, M. (2013). *Journalism online*. Routledge.
- Yadav, Anubhuti (2022) New Media Journalism: Emerging Media and New Practices in Journalism, Sterling.
- AL Jazeera. Mobile Journalism
  https://institute.aljazeera.net/sites/default/files/2018/mobile%20journalisn%20english.pdf

# Paper 5: Introduction to CMS

**Theory Marks: 50**

**Practical Marks: 50**

**OBJECTIVES**

- To introduce students to broad types of content management system software so that they can express their creativity using technology.
- To acquaint and equip students with both theory and practical experiences on web development and digital content management so that they become industry-ready using coding as well as codeless web designing.
- To train students to become proficient in basic multimedia process using text, links, interactive photos, audio and video.
- To introduce students to the e-commerce and creator economy where they may contribute in multimedia content generation commercially.

## UNIT 1 : Introduction to CMS

- Introduction to CMS
- Components and Features of CMS
- How Does CMS Work
- Types of CMS - Open source & Commercial CMS
- Characteristics and Advantages of Open Source CMS
- How to Build a Website with a CMS software

## UNIT 2 : Introduction to HTML

- History of HTML, Types/Version and Purposes of HTML
- Basis of HTML: Tags & Attributes
- HTML Element, HTML Codes, Web Browsers and Page Structure
- HTML Editors
- Different uses of HTML: Web pages development, Web document Creation, Data entry support and HTML tables,  Multimedia and embedding, Internet navigation, HTML forms,  Responsive images on web pages

### UNIT 3 : Working with WordPress, Joomla & Drupal

- Introduction to Wordpress: Benefits and features of Wordpress; Kinds Of Websites supported by Wordpress: Business websites, eCommerce stores, Blogs, Portfolios, Resumes, Forums, Social networks, Information portal, Information portal; Adding content in Wordpress; Wordpress plugins for adding website features; pros and cons of using Wordpress

- Introduction to Joomla: Joomla Framework and Joomla Community; Features and benefits of Joomla: Install Joomla on localhost, Website First Page, Control Panel, Joomla Basics, Add Logo to Joomla Website, Change Background color, Joomla Menus, Joomla Settings, Joomla System Settings, Joomla Media Settings, Joomla Metadata Settings, Joomla Emails & Messages, Joomla Templates

- Introduction to Drupal: Unique Features of Drupal; PHP language, Package Managers, Version Control (Git), Twig Templating, Command line interface tools like Drush, CSS pre-processors like Sass, Debugging, Drupal Community

- Introduction to other low-code and no-code web development platforms: Wix, Dreamweaver, etc.

### UNIT 4 : Design and Development of Digital Portal

- Scope of Web Portal Development: Domain, Web Hosting and Sign Up, Web Page Design, Development, Testing and Launch, FTP, Plugins

- Web development timeline: Gathering Information - Purpose, Main Goals, and Target Audience; Planning: Sitemap and Wireframe Creation; Design: Page Layouts, Review, and Approval Cycle; Coding; Testing, Review, and Launch; Maintenance: Opinion Monitoring and Regular Updating

- Types of Websites: Online store, Portfolio, Blog, Landing page, Resume, Event site, Brand website

- Steps in Web Design: Site's Objective - Domain Name-Website Platform: Website hosting, themes, plugins- Theme/Template-Site Map (Home page, About page, Product/services pages, Blog and Contact page) - Website Graphics -Website Copy-Build the Webpage - Interactive Experiences -Build website

**UNIT 5 : HTML Exercise and CMS Practicals**

- Practice and learn HTML using Notepad or Text Edit
- Workshop on structure and style of  webpage with special emphasis on HTML
- Workshop on open source CMS
- Creating and designing content for online platforms; designing and building brand website/ecommerce website and personal Blog with open source CMS. Creation of brand website will be group assignment.

**Suggested Readings:**

- Cordova, Michael (2017). *Wordpress Websites For Business: How Anyone Can Maximize Website Performance And Results.*  Published by Wildblue Press
- Dobbs, Walter (2022). *Wordpress: How to Build a Wordpress Website on Your Own Domain From Scratch*. Published by Tyson Maxwell
- Hauschildt, Sofia (2010). *CMS Made Simple 1.6: Beginner's Guide*. Published by Packt Publishing Limited
- Mehta,Nirav(2010).*ChoosinganOpenSourceCMS:Beginner'sGuide*.PublishedbyPacktPublishingLimited;Illustratededition
- Yates, Leopold (2022). *Html Coding: Learn The Fundamentals Of Web Design With This Comprehensive Guide On Website Formatting.* Notion Press, Chennai.

**Web links:**

- https://www.w3schools.com/html/
- https://html.com/
- https://wordpress.com/
- https://www.sitecore.com/knowledge-center/
- https://visme.co/blog/how-to-design-a-website/
- https://xbsoftware.com/blog/website-development-process-full-guide/

# Paper 6: Communication Research

**Theory: 60 Marks**

**Practical: 40 Marks**

## Objectives:

- To inculcate research aptitude among students
- To introduce students with methods of media and communication research, in general and that of new media environments in particular.
- To provide the students with critical ability to understand the strengths and weaknesses of the methods, quantitative and qualitative, so to develop their abilities to judge the appropriateness of the methods towards scientific research.
- To familiarise students with digital media platforms, research software and the practice of online media research.
- To help students explore and conduct research by practically applying the research steps.
- To build and develop research ethics among students.

## UNIT 1 : Introduction to Research

- Defining Research: Various approaches to research, Types of research
- Elements of Research: Universe, Population, Concept, Construct, Variables, Data sources and representativeness of sample, Error in research, Reliability and validity
- Steps in Research: Identifying the problem, Review of literature and theoretical framework, Setting objectives, Research question/hypothesis, Methodology, Research Design and Methods, Sampling, Data collection, Data analysis and conclusions, Report writing
- Quantitative Research Methods: Survey, Content analysis, Experiment
- Qualitative Research Methods: Ethnography, Observation, In-depth interviews, Focus group discussions, Textual analysis, Discourse analysis Mixed Method; Triangulation
- Research Ethics

**UNIT 2 : Online Research Process and Methods**

- Exploring the Net and finding out the research problem; Using search engines
- Formulating research questions (inductive) and hypothesis (deductive)
- Accessing research databases for Review of Literature
- Accessing Primary and Secondary data sources online
- Data Collection: Google Surveys, Online interviews/Focus groups and transcription (Otter, Descript, etc.)
- Quantitative and Qualitative Analysis: GIS, Spatial Technologies and Digital Mapping, Using specialized software
- Document to Database and Spreadsheet (Google Spreadsheet)
- How to write reports without grammatical error with the help of software, Software used for writing bibliography

**UNIT 3 : Social Media Research**

- Social Media as a site for Research: Identifying the research problem
- Learning through Co-construction and Crowdsourcing; Social Media data gathering and analytics: Social Media Measurement and Social
- Media Monitoring (exploring monitoring and measurement tools for various social media platforms)
- Social Media and advanced content analysis: Computer-assisted analysis; Statistical textual analysis and Basic text and network analytics using social media analyser Netlytic
- Evaluating Trends and Comparisons; Social Media Case Study
- Qualitative approach in Social Media: Social Media ethnographies/Netnography: challenges and applied settings; Crowdsourcing and sentiment analysis (Wikipedia, Ask Metafilter, Quora, etc.); Elemental data transformation operation and qualitative data analysis; Interpreting and making meaning from social media data; critiquing data, historicizing data, visualising data and presenting the report.

**UNIT 4 : Introduction to various Research Software**

- Microsoft Excel : Tabulation (Spreadsheet), Data analysis and presentation

- SPSS : Managing the data, creating statistical analysis, running statistical tests, interpreting SPSS outputs
- R Programming : Data cleaning, Data exploration (graphics), GIS data processing and analysing and visualising
- NVivo : Qualitative data analysis; managing data, analysing data with advanced management, query and visualisation tools; complex data management with identifying themes and conclusions

**UNIT 5 : Research Paper Writing and Seminar**

- Writing abstract
- Research paper writing: Essential elements
- Introduction to various stylesheets and manuals: APA, MLA, Chicago manual
- In-text citations, indents and referencing; Using infographics: tables and charts Plagiarism check
- Elements of effective presentations: Clarity, Precision, communication skills, etc.
- How to prepare PPTs for presenting research

**Research Project:** Students will conduct research under guidance of internal/external faculty members (mentor). Each student will have to submit an extended abstract/synopsis. After finalising the abstract by the next two weeks, students will conduct the research and complete the paper.

**Software requirement:** SPSS, R and RStudio, NVivo, Plagiarism checker

**Assessment Method:** A written test for 60 marks will be conducted at the end of the semester. The research paper writing and presentation will carry 40 marks. Out of these 40 marks, the students will be assessed internally for 20 marks by the mentor, while final paper and presentation will carry 20 marks and will be evaluated by external evaluator.

**Suggested Readings:**

- Berger, A.A., 2016. *Media Analysis Techniques*. New Delhi: Sage.
- Bryman, A. 2008. *Social research methods*. Oxford: Oxford University Press.
- Finger, L. & Dutta, S. 2014. *Ask, Measure, Learn: Using Social Media Analytics to Understand and Influence Customer Behavior*. Sebastopol, CA: O'Reilly.

- Florini, S. 2019. *Beyond hashtags: Racial politics and Black digital networks*. Vol. 19. NYU Press. Available online open access at: http://opensquare.nyupress.org/books/9781479892464/read/

- Gunn, S. & Faire, L. (eds.). 2012. *Research Methods for History*. Edinburgh University Press.

- Hennink, M., Hutter, I. & Bailey, A. 2011. *Qualitative Research Methods*. London: Sage.

- Jackson, S. J., Bailey M. & Welles. B.F. 2020. *# HashtagActivism: Networks of Race and Gender Justice.* MIT Press. Available online open access at: https://direct.mit.edu/books/book/4597/HashtagActivismNetworks-of-Race-and-Gender-Justice

- Kozinets, R. V. 2020, *Netnography 3e: The Essential Guide to Qualitative Social Media Research*. London: Sage.

- Potter, S. 2006. *Doing postgraduate research*. Milton Keynes, UK: Open University in association with SAGE Publications.

- Quinton, S., & Reynolds, N. 2018, *Understanding research in the digital age.* London: SAGE

- Salmons, J. 2014. *Qualitative online interviews: Strategies, design, and skills.* London: Sage Publications.

- Sanjek, R. & Tratner, S. W. (eds.). 2016. *eFieldnotes: The makings of anthropology in the digital world.* Philadelphia, PA: University of Pennsylvania Press

- VanderStoep, S. W., & Johnson, D. D. 2009. *Research Methods for Everyday Life: Blending Qualitative and Quantitative A*. John Wiley & S

- Waller, V., Farquharson, K., & Dempsey, D. 2016. *Qualitative social research: Contemporary methods for the digital age*. Los Angeles: SAGE.

- Wimmer, R. D., & Dominick, J. R. 2000. *Mass media research: An introduction*. Belmont, CA: Wadsworth Pub.

- Chawla, D., & Sondhi, 2016. N. *Research Methodology: Concepts and Cases*. 2nd edition.

- Crowdsourcing and Sentiment Analysis (Twitter Sentiment blog)

- Hine, C. 2015. *Ethnography for the Internet: Embedded, embodied and everyday.* London: Bloomsbury Publishing.

- Kothari, C.R., & Garg, G. *Research Methodology: Methods and Techniques*. 3rd edition.

- Misra, R.P. 2016. *Research Methodology A Handbook*. Rev. Edition.

- Pink, S., Horst, H., Postill, J., Hjorth, L., Lewis, T., & Tacchi, J. (eds.). 2015. *Digital ethnography: Principles and practice.* London: Sage.

- Wolcott, H. 1994. *Transforming Qualitative Data: Description, Analysis, and Interpretation.* Thousand Oaks, CA: Sa

# Paper 7: Digital PR and Corporate Communication

**Theory Marks: 40**

**Practical Marks: 60**

**Objectives:**

- To study the growth, impact and implications of digital media in the context of Public Relations and corporate communication.
- To give hands-on-training to students on digital tools
- To familiarize students with the role and scope of PR in management, its various tools and the emerging importance of the discipline in varying areas.
- To study the evolution of corporate communication and its expanded role in organizational and marketing communication

## UNIT 1 : Introduction to Public Relations

- PR–History, Definitions, Concepts, Role, Scope, Functions, New Emerging Trends
- Theories and Models in PR
- Difference and Similarities between PR, Marketing and Advertising and how they are relevant to each other
- Understanding various concepts, viz., PR, Press Agentry, Publicity, Propaganda
- Public Relations Theories: Rhetoric and persuasion, dialogic theory, systems theory, critical theory and structuration theory
- The Power of Public Opinion and Persuasion
- Defining publics/stakeholders
- PR Practice and Process In-house and PR Consultancy: Difference between In-house PR and a PR Consultancy
- PR as a Source of News
- Tools of Media Relations - Press conferences, Press meet/tours, Press releases, Backgrounders, Rejoinders, Feature writing, Video news releases, Blog writing, etc; Selection of media in reaching out to its various publics.
- Understanding Integrated News room

**UNIT 2 : Introduction to Corporate Communication**

- Corporate Communication: Definitions, Concepts, Role, Scope, Functions and Relevance
- Elements of a Corporate Communication Plan
- Internal and External Communication
- Corporate Governance and Identity
- Corporate Social Responsibility and Sustainable Development
- Crisis Communication
- Media Handling in Times of Crisis
- Cross-cultural and intercultural communication
- Corporate Reputation Management
- Events, Sponsorships, Trade Shows
- Corporate Advertising
- CC/PR in Brand Building
- Financial Markets and Communication
- Investor Relations
- Trade Media and its relevance in CC

**UNIT 3 : Introduction to Digital Marketing**

- Digital Marketing Concept: Evolution and current status
- Digital Media Landscape
- Website Planning and Creation
- Search Engine Optimisation (SEO)
- Search Engine Marketing
- Social Media Marketing
- Video Marketing
- Content Marketing & Strategy
- Web Analytics
- Digital Media Planning and Buying
- E-Commerce Management
- Online Reputation Management
- Adsense, Blogging, and Affiliate Marketing
- Marketing Automation, Influencer & Podcast Marketing

- Soft Skills
- Advent of Hybrid Marketing:  Online Market merging with traditional market
- Various case studies : Successful and Disasters
- Brand presence on social media
- Open Resources

## UNIT 4 : Social Media Monitoring

- The Changing Mass Media Audience and the Emergence of Social Media (Blogs, Facebook, Twitter, YouTube, etc.) and its Impact on Society.
- Definition and Scope of Social Media Monitoring
- Social Media for Consumer insight
- The Role of Social Media in Research
- Social Media Data Management
- Primary Social Media Research
- Tracking Brand mentions and search parameters
- Brand perception and sentiment
- Social customer care strategy
- Social media listening
- SM monitoring and listening tools: Hootsuite, Sprout Social, Agora Pulse, Brand24 and others
- Competitor Analysis, Cross-Channel Tag
- Metrics of engagement and influence

## UNIT 5 : Digital Tools for PR and CC Professionals

- Management & collaboration tools including collaboration, time management, project management, productivity, and sales force automation
- Digital PR Strategies, Metrics and tools
- Brand Reputation Management
- Writing tools
- SEO tools
- Design tools
- Outreach tools
- Team chat tools
- Video conferencing tools

- Intranet or wiki tools
- Tools for spotting trends

**Practicals:**

- Crisis Communication simulation on a current issue
- Production of theme-based Campaigns for online digital media  (Group exercise)
- Visit to PR firms for field exposure and preparation of PR strategy for an online based firm (Individual assignment)
- Case studies on digital marketing in India

**Suggested Readings**

- Gupta, Seema (2020). *Digital Marketing.* Published by McGraw Hill; Second edition
- Jethwaney, Jaishri (2018). *Corporate Communication: Principles And Practice*. Published by SAGE Publications Pvt. Ltd; Second edition
- Narayan S, Narayanan S (2016). *India Connected: Mapping the Impact of New Media*. Published by Sage
- Schmidt, E. & Cohen, J. (2013). *The New Digital Age*. Published by John Murray
- Shrivastava, K. M. (2013). *Social Media in Business and Governance.* Published by Sterling Publishing
- Siarto, Allie & Cole, T. Richard (2013). *Monitoring & Measuring Social Media: Monitoring and Analyzing Conversations in Social Media*. Published by Racom Communications
- Theaker, Alison (2007). *The Public Relations Handbook (Media Practice)*. Published by Routledge; 3rd edition

**MAGAZINES/NEWSPAPERS**

**Business India, Business World, Business Today, Business Standard, The Economic Times, The Financial Express, The Business Standard, Pitch, USP Age**

# Paper 8: Fact Checking and Verification

**Theory Marks: 30**

**Practical Marks: 70**

## OBJECTIVES

- Recognize the problem of misinformation and disinformation in India and across the world
- Define different types of misinformation from Satire to Imposter content
- Analyze various type of Media Content
- Fact-check content using variety of tools and techniques

## UNIT 1 :  Introduction to Misinformation Ecosystem

- Understanding Information Disorder
- Misinformation and Disinformation across the world
- Misinformation ecosystem in India
- Why and How of Information Disorder
- Filter Bubble
- Echo Chamber
- Biases
- Social Media Giants and their role
- National and International Fact checking Initiatives

## UNIT 2 :  Types of Misinformation and Disinformation

- Misinformation, Disinformation and Malinformation
- Satire- The role satire websites and parody handles in spreading misinformation
- Misleading Content
- Imposter Content
- Fabricated Content
- False Context

- False Connection
- Manipulated Content

## UNIT 3 : Fact checking Visuals ( Photos and Videos)

- Power of Visuals
- Visuals as vehicle of misinformation and disinformation
- Keyword Search ( Keyword Planner)
- Google Reverse Image Search
- Searching images on other search engines like Baidu and Yandex- Tineye, Reveye
- Remove Background for search ( Remove bg)
- Manipulated Photo- Fotoforensics, Forensically
- Identifying Faces- Pimeyes
- Advanced Video search
- Invid for video verification
- Youtube Data viewer
- Analyser- Frame by Frame Analysis
- Extract text from Pictures and Videos- Blackbox
- Archiving Content before verification

## UNIT 4 : Fact Checking Locations

- What places can tell?
- Locating the exact spot ( Google Maps, Bing, Naver)
- Geolocation by satellite imagery
- Street View
- Time travel ( Earth pro)
- Exif Data
- Tweets from a particular location
- Snapchat Map
- Locating places through nameplates ( world licenceplate.com)

## UNIT 5 : Social Media Audit

- Advanced Twitter search
- Advanced Facebook search
- Analysing followers, hashtags etc

- Who posted what? Tweetdeck, Crowtangle
- Identifying website creators

**Projects**

- Identify misinformation or disinformation against each category- Satire, Misleading Content, Imposter Content, Fabricated Content, False Context False Connection, Manipulated Content ( 20 Marks)

- One week of immersive practical exercise on fact check (30 Marks)

**OR**

Create Infographic/Explainer video to create awareness on Fact checking and Verification

- Design a training Programme to create awareness on Misinformation and Disinformation (20 Marks)

**Suggested Readings:**

- Bradshaw, Samantha, and Philip N Howard. 'Challenging Truth and Trust: A Global Inventory of Organized Social Media Manipulation', n.d., 26.
- Routledge & CRC Press. 'Fake News: Falsehood, Fabrication and Fantasy in Journalism'. Accessed 22 June 2022. https://www.routledge.com/Fake-News-Falsehood-Fabrication-and-Fantasy-in-Journalism/McNair/p/book/9781032178875.
- Mathis-Lilley, Ben. 'Bashar Al-Assad Uses Phrase Fake News in Dismissing Amnesty International Torture Report'. *Slate*, 10 February 2017. https://slate.com/news-and-politics/2017/02/assad-amnesty-torture-report-part-of-fake-news-era.html.
- Meyer, Robinson. 'Why It's Okay to Call It "Fake News"'. The Atlantic, 9 March 2018. https://www.theatlantic.com/technology/archive/2018/03/why-its-okay-to-say-fake-news/555215/.
- Posetti, Julie, and Alice Matthews. 'A Short Guide to the History of 'fake News' and Disinformation', n.d., 20.
- Ethan Zuckerman. 'Stop Saying "Fake News". It's Not Helping.', 31 January 2017. https://ethanzuckerman.com/2017/01/30/stop-saying-fake-news-its-not-helping/.

# Paper-9: Data Journalism-Reporting & Editing

**Theory Marks: 30**

**Practical Marks: 70**

## OBJECTIVES

- Think Critically and deeply about data and data journalism
- Know how to access the big data and its integration and processing
- Able to find the sources of data and process of data gathering
- Able to analysis and visualize the data

## UNIT 1: Introduction to Data Journalism

- Definition and basics of data journalism
- Story behind the data
- Types of data and key tools (spreadsheets: rows, columns, cells, importing, sorting, filtering)
- Genealogies and origin of data journalism
- Data Literacy
- Issues with data

## UNIT 2: Big Data Integration and Processing

- Introduction of Big Data (volume, velocity, variety, veracity)
- Accounting for method of Data Journalism (Excel functions: mean, median, max, min, rank)
- Data coding, mapping and charts
- Retrieving Big Data
- Aggregation Functions & Platforms Aerospike, Mongo DB, Pandas Data Frames
- Querying Data and Data Integration Scenario
- Big Data Management and Techniques (Splunk, Data Meer)
- Information Integration
- Big Data Processing
- Introduction to Apache Spark

**UNIT 3: Sources of Data**

- Sources of Data & Data gathering
- Government Data, Non-Government Data, Primary & Secondary Data
- Running Survey and Data
- Census Data
- Assembling and Reassembling Data
- R for journalists
- Introduction to Tidyverse and Dplyr packages
- Comparison operators, logical operators, missing values, filter, arrange, select, rename
- Filtering data

**UNIT4: Data Gathering and Analysis**

- Data Gathering and data investigation
- Apps and their affordance for data investigation
- Data Analysis * Interpretation
- Transformations
- Data tabulation
- Open-source coding practice and Testing data
- Processing data: Classification, Segregation and Identification
- Data Presentation.

**UNIT5: Data Visualization**

- Visualising Data stories
- Introduction to various chart types and their use.
- Tools for visualisation.

**Project:**

Develop 5 data based stories and pitch it to News Organisations.

**References**

- Gray, J., Chambers, L., & Bounegru, L. (2012). *The data journalism handbook: How journalists can use data to improve the news*. "O'Reilly Media, Inc.".

- Bounegru, L., & Gray, J. (2021). *The Data Journalism Handbook: Towards a Critical Data Practice* (p. 415). Amsterdam University Press.

- Hermida, A., & Young, M. L. (2019). *Data journalism and the regeneration of news*. Routledge.

- Tong, J. (2022). *Data for Journalism: Between Transparency and Accountability*. Taylor & Francis.

- https://s3.eu-central-1.amazonaws.com/datajournalismcom/handbooks/The-Data-Journalism-Handbook-1.pdf

- https://learn.r-journalism.com/en/wrangling/dates/dates/

# Paper 10: Emerging Technologies

**Theory Marks: 70**

**Practical Marks: 30**

**Objectives:**

- To introduce students with basics of emerging technologies in the Digital Media Industry

- To acquire skill and knowledge on the principles and techniques of artificial intelligent systems and their practical applications relevant to digital media.

- To analyze, differentiate, and evaluate the differences between current augmented reality and virtual reality devices and have practical exposure with their respective environments, uses, perils, and promise

- To identify and learn various practical applications for virtual reality technologies in human interaction/communication

- To familiarize the importance of understanding the relationship between human cognition, perception, interaction, and virtual reality technology and the social and ethical implications of virtual reality technology

- To acquaint students with fundamentals of Entrepreneurship and Innovation and its implications in the Digital Market

## UNIT 1: Artificial Intelligence

- Scope of Artificial Intelligence: Definition, goals and applications
- Different types of AI-based systems
- AI tools
- Applications of AI in media and other fields: AI in Controlling Bias - AI in Social Media - AI in Automated Journalism
- AI automation/augmentation of production, distribution and consumption of news Journalism
- AI & Society: Ethical challenges accompanying AI automation/augmentation
- Implications of AI for media consumers; Implications of AI for future media producers

- Knowledge representation and knowledge engineering
- Means–ends analysis
- TensorFlow and Artificial neural networks
- Machine Learning
- Deep Learning
- Natural Language Processing
- Internet of Things
- Robotic Process, Cybernetics approach to Algorithm: Types of Algorithms and their Uses, Algorithms ethics and manipulation, Algorithm Information, Algorithm Research, Analytics Algorithms and Algorithm for Online Shopping
- AI for marketing analytics
- The Future of Artificial Intelligence

## UNIT 2: Augmented Reality

- Augmented Reality Concepts
- Definition and scope of Augmented Reality
- Augmented Reality as a Digital Media experience
- Applications of AR
- Augmented Environments and Digital Media Forms
- Disadvantages/Dangers of AR
- Benefits of Augmented Reality
- Augmented Reality in Print Media: Technology, Uses, and Problems
- Augmented reality and Social Media: AR virtual stories on social media - AR and live events - AR videos - Increase brand awareness - Augmented Reality (AR) as the Future of Social Media Apps
- Difference between AR and VR
- Future of Augmented Reality

## UNIT 3: Virtual Reality

- Introduction to Virtual Reality: Concepts and Definitions
- History of VR and VR Development Fundamentals: From Greek theater to immersive worlds
- Types of Virtual Reality: Immersive, Non-immersive, Collaborative, web based

- How Virtual Reality Works and practical applications for virtual reality technologies in human interaction/communication
- Understanding Human Perception in virtual environments (Understanding the relationship between human cognition, perception, interaction, and virtual reality technology): The science and theory of human sensory and cognitive systems; Multi-sensory interactions with virtual environments
- Key terms associated with virtual reality technologies (such as AR, VR, XR, mixed reality)
- Immersive Technologies: Immersion and Presence in VR
- Virtual Reality Design and Communication/Interfaces and Interaction: Definitions and fundamental principles of interaction with virtual environments; User interface design; Interface devices
- Social Worlds and Virtual Communities: Early online social worlds; Player/User types; Contemporary VR social worlds: Facebook, Rec Room and others; Flat screen versus immersive VR experiences and social interactions
- Storytelling in Virtual Worlds: Features of VR storytelling versus narrative in films, books or TV; Story structures - linear, branching, alternative endings; The role of POV in virtual storytelling; User interactions and experiences through environmental storytelling; The role of artificial intelligence in VR storytelling
- Applications of Virtual Reality
- Social and ethical implications of virtual reality
- Future of virtual reality technologies

## UNIT 4: Entrepreneurship and Innovation

- Introduction to Entrepreneurship
- Understanding the dynamics of innovation: Different approaches to digital innovation processes; Analyze, evaluate and develop digital innovation process
- Digital Innovation Strategy and Management
- Innovation tools and techniques: User journey mapping, Affinity diagram, Prototyping, Brainstorming, Rapid ideation, Innovation and collaborative innovation frameworks and others
- Understanding the market
- Exploring revenue opportunities

- Developing Product
- Growing Community
- Entrepreneurial journalism
- Content Strategy
- Platforms and Ecosystem
- Digital Innovations environment – organizational, legal, ethical and security issues

## UNIT 5: Creating Interactive Content in Unity, Co Spaces, etc.

- Creating cultural space into an interactive 3D environment
- Explore interactive content tools
- Build Chatbots
- Social outreach apps, live video platforms, text to video creation

**Practicals**:

- Team based virtual reality project using VR tour software
- Digital media opportunity analysis presentation (Group)
- Digital media industry analysis presentation (Group)
- Case study on digital innovation strategies/digital business models
- Create interactive content using digital tools
- Media Startups - Case studies
- One week Workshop on Artificial Intelligence and a three-day workshop on Virtual Reality and Immersive Journalism (atleast 2 or 3 times focusing on different aspects of VR) may be organised during the Academic session.

**Suggested Readings:**

- Abernathy, Muse Penelope & Sciarrino, JoAnn (2018). *The Strategic Digital Media Entrepreneur.* Published by John Wiley & Sons; Illustrated edition.
- Bucher, John (2017). *Storytelling for Virtual Reality: Methods and Principles for Crafting Immersive Narratives.* Published by Routledge; 1st edition
- Connock, Alex (2022).*Media Management and Artificial Intelligence: Understanding Media Business Models in the Digital Age*. Published by Routledge; 1st edition (18 November 2022)
- Daniela, Linda (2020). *New Perspectives on Virtual and Augmented Reality*. Published by Routledge; 1st edition

- Goel, Lavika(2021). *Artificial intelligence: concepts and applications.* Published by Wiley India Pvt Ltd(1 January, 2021)

- Guha, Suman(2022). *Win The Digital Age with Data: How To Use Analytics To Build Products That Customers Love*. Published by Notion Press; 1st edition

- Idemudia, C. Efosa (2019). *Handbook of Research on Social and Organizational Dynamics in the Digital Era*. Published by IGI Global

- Konasani, Reddy Venkata & Kadre, Shailendra. *Machine learning and Deep learning using Python and Tensor flow.* YourPublished by McGraw Hill; first edition (8 October, 2021); McGraw Hill Education (India) Private Limited, B-4, Sector-63, Dist. Gautam Budh Nagar, Noida – 201 301, UP

- Pradhan, Manaranjan & Kumar, Dinesh U (2019). *Machine Learning using Python*. Published by Wiley India Pvt. Ltd.

- Rich, Elaine; Knight, Kevin & Nair, B. Shivashankar (2017). *Artificial Intelligence*. Published by McGraw Hill Education; 3rd edition

- Russell, Stuart & Norvig, Peter (2015). *Artificial Intelligence: A Modern approach.* Published by Pearson Education India; 3rd edition (1 January 2015)

- Schmalstieg, Dieter & Höllerer, Tobias (2016). *Augmented Reality: Principles & Practice.* Published by Pearson Education India; First edition

- Shetty, G Chetankumar(2020). *Augmented Reality - Theory, Design and Development.* Published by McGraw Hill; First edition (5 August 2020); McGraw Hill Education (India) Private Limited, B-4, Sector-63, Dist. Gautam Budh Nagar, Noida – 201301, UP.

- Thakur, Kiran Dr.; Pandit, Makarand Dr. & Josh, Yogesh Dr. (2022). *Fundamentals of Digital Journalism*. Published by Vishwakarma Publications

- Whittington, Dick (2018). *Digital Innovation and Entrepreneurship*. Published by Cambridge University Press

**Websites and Journals:**

- www.inquiriesjournal.com
- www.intellectbooks.com
- www.journals.scholarsportal.info
- www.ooir.org
- www.ores.su
- www.researchgate.net
- www.reutersdigitaljournalism.com
- www.tandfonline.com

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**DEPARTMENT OF NEW MEDIA**

**PG DIPLOMA IN DIGITAL MEDIA**

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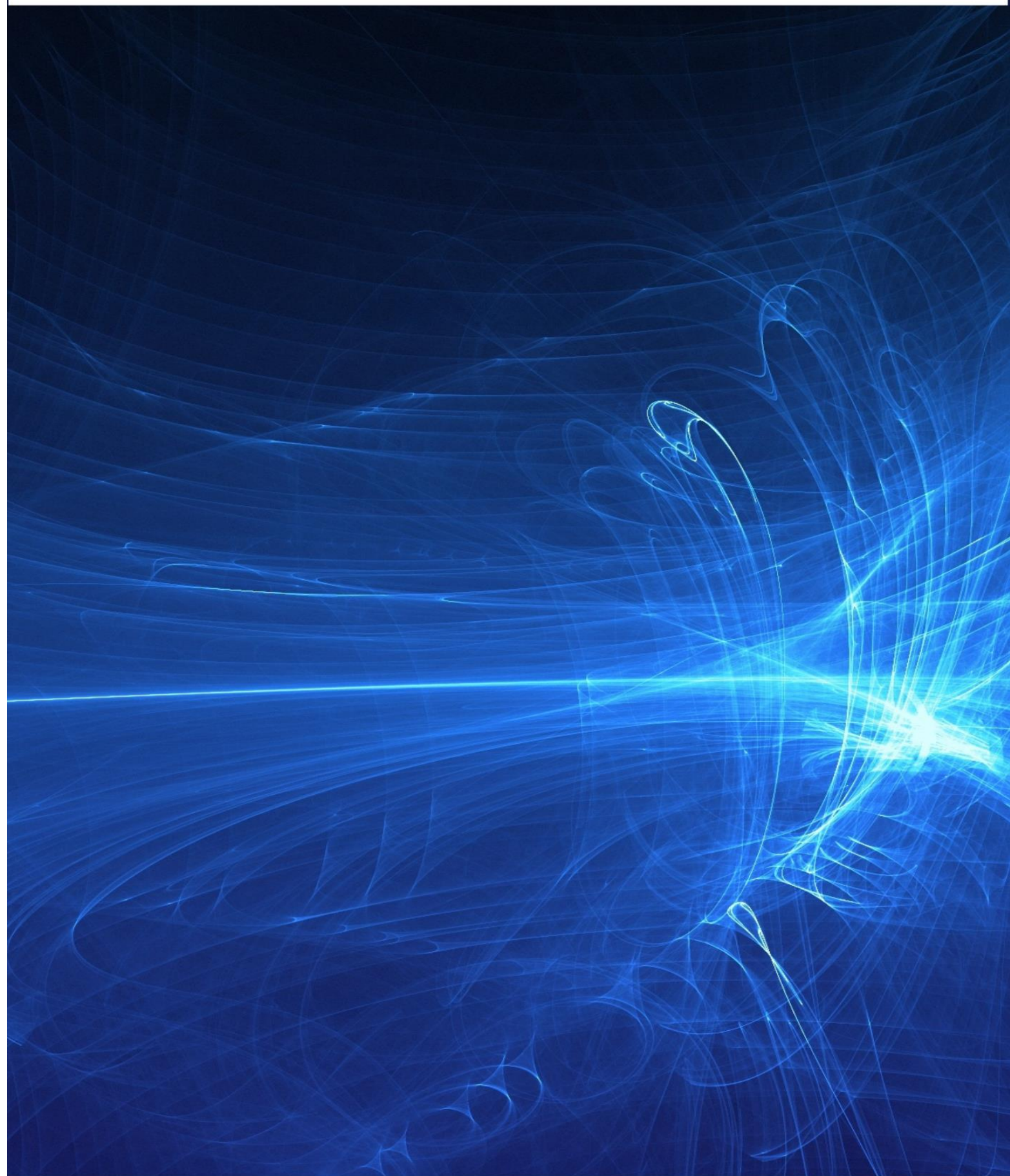
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