

DIGITAL HUMANITIES

Advance Course in Digital Humanities & Archiving (Hybrid)

Programme Details

Eligibility	Bachelor's Degree in any discipline from a recognized University/College
Duration	One Year; Two Semesters
Credits	44 Credits (22 per semester)
Credit Equivalence	1 Credit = 15 Contact Hours and 25 Marks

Programme Overview

Digital Humanities is an interdisciplinary field integrating humanities with digital technologies to support research, documentation, preservation, interpretation and public engagement across culture, history, literature, language and society. The programme emphasizes digital literacy, archival practice, data methods, visualization, artificial intelligence, ethics and India-specific applications.

Programme Framework

Semester I

Paper Code	Course Title	Credits	Hours	Internal	External	Total
DH101	Introduction to Digital Humanities	4	60	50	50	100
DH102	Archiving and Preservation	4	60	50	50	100
DH103	Digital Literacy & Skills for Humanities	4	60	50	50	100
DH104	Introduction to Statistical Techniques	4	60	50	50	100
DH105	Basics of Data Mining	2	30	25	25	50
DH106	Data Visualization Techniques	2	30	25	25	50
DH107	Internship	2	30	25	25	50
Total		22	330	225	225	550

Semester II

Paper Code	Course Title	Credits	Hours	Internal	External	Total
DH201	Digital Data: Text, Images and Sound	4	60	50	50	100
DH202	Methods and Tools for Digital Humanities	4	60	50	50	100

Paper Code	Course Title	Credits	Hours	Internal	External	Total
DH203	Digital Humanities in an Indian Context	4	60	50	50	100
DH204	AI in Digital Humanities	4	60	50	50	100
DH205	Laws and Ethics in Digital Humanities	4	60	50	50	100
DH206	Digital Humanities Project	2	30	25	25	50
Total		22	330	225	225	550

Programme Objectives

1. Develop interdisciplinary understanding of humanities and digital technologies.
2. Develop digital research, analytical, documentation and data-handling skills.
3. Introduce digital tools and methods for cultural, literary, historical and archival studies.
4. Develop competencies in digitisation, digital archiving, preservation and cultural-heritage documentation.
5. Strengthen critical understanding of digital media, technology, algorithms and society.
6. Develop ethical, legal and responsible practices in the creation, management and dissemination of digital knowledge.
7. Prepare learners for academic, research and professional opportunities in Digital Humanities and allied sectors.

Programme Outcomes

8. Explain concepts, scope and interdisciplinary foundations of Digital Humanities.
9. Apply appropriate digital tools and methods to humanities research, documentation and interpretation.
10. Analyse literary, cultural, historical and archival data using digital and computational techniques.
11. Create and manage basic digital archives, datasets, metadata records and digital documentation projects.
12. Use data visualization, text analysis, AI-enabled tools and digital media responsibly.
13. Critically evaluate the impact of technology, algorithms, platforms and digital infrastructures on culture and society.
14. Demonstrate research, communication, project-management and professional skills in academic and applied Digital Humanities settings.

Transactional Strategies

The curriculum is delivered through a blended learning approach combining face-to-face interaction with digital learning experiences. It incorporates interactive online sessions, digital assignments, guided practical activities, supervised project work, field-based studies, digital research exercises and experiential learning activities.

Members of Digital Humanities BOS:

- 1) Dr. Juhi Deshmukh, Chairperson
- 2) Dr. Vishram Dhole, Member
- 3) Dr. Akanksha Kashikar, Member
- 4) Prof. Maya Dodd, Member
- 5) Prof. Alpana Vaidya, Member

DH101: Introduction to Digital Humanities

Credits	4	Contact Hours	60
Internal Marks	50	External Marks	50

Total Marks: 100

Course Objectives

- 1) To provide an interdisciplinary understanding of Digital Humanities.
- 2) To critically engage with digital methods, tools and theories in humanities research.
- 3) To develop analytical and methodological competencies in digital scholarship.
- 4) To examine ethical, epistemological and socio-political implications of digital knowledge production.

Course Outcomes

- 1) Critically analyse the theoretical foundations and debates within Digital Humanities.
- 2) Apply digital tools and methods to textual, cultural and data-oriented humanities research.
- 3) Evaluate digital archives, datasets and platforms using appropriate scholarly frameworks.
- 4) Address ethical, legal, inclusivity and responsible-use concerns in digital research environments.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Theoretical Foundations of Digital Humanities • Emergence and evolution of Digital Humanities. • Key debates: methodological and theoretical approaches to Digital Humanities. • Digital Humanities databases and resources; theory-led and tool-based approaches; Digital Humanities in Indian academia. • Interdisciplinary approaches and the epistemology of digital knowledge; Global and Global South perspectives with Indian context.	15
Unit 2	Digital Methods and Textual Analysis • Text encoding and TEI concepts; OCR and its challenges. • Corpus creation and management. • Digital editions and print editions: similarities, differences and scholarly implications. • Distant reading and algorithmic criticism.	15
Unit 3	Data, Visualization and Digital Cultures • Humanities data: structure, metadata and standards. • Introduction to network analysis. • Corpus creation and management for humanities research. • Digital cultures, platform studies and algorithmic bias.	15
Unit 4	Digital Archives, Ethics and Applications • Digital archiving, curation and preservation. • Open access, copyright, Creative Commons and data governance.	15

Unit	Unit Title and Content	Hours
	• Ethics of digital research: privacy, surveillance, consent and bias. • Digital exhibits, dataset analysis, text mining and cultural analytics.	

Essential Readings

- Dodd, M. & Menon, N. (eds.). Practices of Digital Humanities in India: Learning by Doing.
- Cohen, H., Jana, U. & Gurney, M. (eds.). Digital Humanities in the India Rim.
- Zaidi, N. & Pue, S. (eds.). Literary Cultures and Digital Humanities in India — “Digital Cultures in India: Digitality and its Discontents” (Maya Dodd).
- Gardiner, E. & Musto, R. G. The Digital Humanities: A Primer for Students and Scholars.
- Schreibman, S., Siemens, R. & Unsworth, J. (eds.). A Companion to Digital Humanities.

DH102: Introduction to Archiving and Preservation

Credits	4	Contact Hours	60
Internal Marks	50	External Marks	50

Total Marks: 100

Course Objectives

- 1) To develop specialized knowledge of archival science in relation to Digital Humanities.
- 2) To examine preservation as a technical, material and policy-driven process.
- 3) To train students in standards, protocols and professional archival practices.
- 4) To analyse institutional, legal and governance frameworks of archives.
- 5) To build competencies in appraisal, conservation planning and archival management.

Course Outcomes

- 1) Demonstrate understanding of archival theory, principles and record-lifecycle models.
- 2) Apply archival principles and metadata standards to arrangement, description and documentation.
- 3) Evaluate preservation strategies for diverse archival materials and digital formats.
- 4) Analyse institutional, legal and governance frameworks governing archival access and preservation.
- 5) Design basic archival management and preservation plans for selected collections.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Archival Theory and Record Lifecycle • Nature and purpose of archives. • Record lifecycle models: creation, appraisal, retention and disposal. • Provenance and original-order principles. • Institutional and community archives.	15
Unit 2	Archival Standards and Description • Arrangement and description practices. • Finding aids and catalogues. • Metadata standards: Dublin Core and ISAD(G) — conceptual understanding. • Records-management systems and documentation protocols.	15
Unit 3	Preservation Science and Conservation • Material-specific preservation: paper, palm-leaf manuscripts and photographs. • Preventive conservation: temperature, humidity and storage. • Conservation ethics and limits of restoration. • Risk management and disaster preparedness in archives.	15
Unit 4	Governance, Policy and Applied Archival Practice • Archival laws, policies and institutional governance. • Access, classification and security protocols. • Intellectual property, copyright and restricted collections.	15

Unit	Unit Title and Content	Hours
	• Applied component: records-retention schedule, preservation plan and policy analysis report.	

Essential Readings

- Dublin Core Metadata Initiative. Dublin Core Metadata Terms.
- International Council on Archives. ISAD(G): General International Standard Archival Description.
- Relevant archival policy, preservation and institutional guidelines used by the host archive or institution.
- Selected case materials on manuscript, photographic and community-archive preservation.

DH103: Digital Literacy & Skills for Humanities

Credits	4	Contact Hours	60
Internal Marks	50	External Marks	50

Total Marks: 100

Course Objectives

- 1) To build critical understanding of digital environments in the humanities.
- 2) To equip students with practical skills for handling digital texts, data and media.
- 3) To enable students to evaluate, create and manage digital knowledge resources.
- 4) To prepare students for entry-level work in Digital Humanities and archiving.

Course Outcomes

- 1) Demonstrate critical and functional digital literacy relevant to humanities scholarship.
- 2) Locate, evaluate, organise and manage digital information, texts, data, media and research resources using appropriate tools and formats.
- 3) Apply digital writing, publishing, citation, reference-management, multimedia and collaborative tools for academic and professional communication.
- 4) Critically evaluate and responsibly use digital and AI-enabled resources, recognising credibility, bias, misinformation, privacy, copyright, ethics and the limitations of AI-generated content.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Digital Literacy and the Digital Information Ecosystem • Tracing literacy from oral and mass-mediated cultures to digital cultures. • Functional and critical aspects of digital literacy. • Indian context: digital divide, language diversity and access inequalities. • Internet, web, databases and digital repositories; interfaces, algorithms, platforms and datafication. • Search-engine politics, misinformation, disinformation and legal and ethical aspects of information access.	15
Unit 2	Visual, Audio and Multimedia Literacy; The AI Turn • Images, videos and audio as cultural texts. • Technical dimensions: editing, effects, compression and file formats. • Images, videos and Generative AI. • Ethical use of multimedia: copyright, attribution and consent. • Large Language Models; data, algorithms, training and application; Indian linguistic and data issues; prompt literacy and evaluation of AI content.	15
Unit 3	Digital Information Search, Data and Content Management • Academic repositories: Google Scholar, JSTOR, Shodh Ganga and open archives. • Evaluating digital sources for credibility, bias and misinformation. • Referencing, citation and avoiding plagiarism; Zotero and Mendeley; annotated bibliographies.	15

Unit	Unit Title and Content	Hours
	• Types of digital data and file formats; folder structures, naming conventions, backups, cloud tools and collaborative environments.	
Unit 4	Digital Writing, Publishing and Communication • Writing for digital environments: structure, hypertext and multimodality. • Plain-text and Markdown writing; WordPress or GitHub Pages. • Writing abstracts for non-specialist audiences. • Introduction to podcast/audio formats for oral scholarship. • Integrating digital writing, publishing and communication skills in a humanities mini-task.	15

Essential Readings

- Gardiner, E. & Musto, R. G. The Digital Humanities: A Primer for Students and Scholars.
- Schreibman, S., Siemens, R. & Unsworth, J. (eds.). A Companion to Digital Humanities.
- Chaudhuri, S. (ed.). Humanities in the Digital Age.
- Kumar, D. (ed.). Technology and the Indian Society.
- Wiggins, C. & Jones, M. How Data Happened?
- O'Neil, C. Weapons of Math Destruction.
- D'Ignazio, C. & Klein, L. F. Data Feminism.

DH104: Introduction to Statistical Techniques

Credits	4	Contact Hours	60
Internal Marks	50	External Marks	50

Total Marks: 100

Course Objectives

- 1) To introduce students from non-quantitative backgrounds to foundational concepts of statistics.
- 2) To build competence in organising, summarising and interpreting data.
- 3) To familiarise students with probability, sampling and basic inferential techniques.
- 4) To equip students to apply statistical reasoning to humanities, cultural and archival data.

Course Outcomes

- 1) Organise and summarise raw data using appropriate descriptive measures.
- 2) Distinguish between types and levels of data relevant to humanities and archival work.
- 3) Explain basic concepts of probability and commonly used distributions.
- 4) Interpret the results of simple statistical tests applied to humanities-related datasets.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Introduction to Statistics and Data • Meaning, scope and importance of statistics in Digital Humanities. • Types of data: qualitative, quantitative, categorical and continuous. • Levels of measurement: nominal, ordinal, interval and ratio. • Data-collection methods: surveys, archival records, metadata and field data. • Presentation of data: tables, frequency distributions, diagrams and graphs.	15
Unit 2	Descriptive Statistics • Measures of central tendency: mean, median and mode. • Measures of dispersion: range, variance, standard deviation and coefficient of variation. • Skewness and kurtosis: conceptual understanding. • Correlation: concept, Karl Pearson and Spearman's rank correlation. • Introduction to simple linear regression.	15
Unit 3	Probability and Distributions • Basic concepts of probability: events, sample space, addition and multiplication rules. • Conditional probability and Bayes' Theorem with humanities-oriented examples. • Random variables: discrete and continuous. • Binomial and Poisson distributions. • Normal distribution and its properties; sampling and sampling distributions.	15
Unit 4	Statistical Inference and Applications to Humanities Data • Hypothesis testing: null and alternative hypotheses; Type I and Type II errors. • Introduction to t-test and chi-square test: concepts and use-cases.	15

Unit	Unit Title and Content	Hours
	• Frequency distributions, relative frequencies and corpus statistics. • Zipf's Law and Heaps' Law in linguistic and historical text analysis. • Sampling techniques in surveys and archival/heritage studies. • Reading and interpreting statistical output from spreadsheets/software; case studies from library, museum, census and archival datasets.	

Essential Readings

- James, G., Witten, D., Hastie, T. & Tibshirani, R. An Introduction to Statistical Learning. Springer.
- Diez, D., Çetinkaya-Rundel, M. & Barr, C. OpenIntro Statistics.
- Agresti, A. & Franklin, C. Statistics: The Art and Science of Learning from Data. Pearson.
- Drucker, J. Graphesis: Visual Forms of Knowledge Production. Harvard University Press.
- Gupta, S. C. Fundamentals of Statistics. Himalaya Publishing House.
- Moore, D. S., Notz, W. I. & Fligner, M. A. The Basic Practice of Statistics.

DH105: Basics of Data Mining

Credits	2	Contact Hours	30
Internal Marks	25	External Marks	25

Total Marks: 50

Course Objectives

- 1) To introduce the concept, process and applications of data mining.
- 2) To familiarise students with common data-mining techniques used on textual and structured humanities data.
- 3) To build hands-on skills in preparing and mining small archival and humanities datasets.

Course Outcomes

- 1) Describe the data-mining process and its relevance to humanities and archival research.
- 2) Prepare a raw dataset for mining through appropriate cleaning and transformation.
- 3) Apply basic clustering, classification and text-mining techniques to sample datasets.
- 4) Discuss ethical considerations involved in mining archival and cultural-heritage data.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Introduction to Data Mining • Concept, need and scope of data mining in humanities and archival domains. • Knowledge Discovery in Databases (KDD) process. • Data-mining tasks: classification, clustering, association and anomaly detection. • Applications: digitised manuscripts, catalogues and oral-history archives.	8
Unit 2	Data Preprocessing • Data cleaning: missing values, duplicates and inconsistencies. • Data transformation: normalisation, discretisation and encoding categorical data. • Data reduction and sampling for large archival collections. • Introduction to metadata structuring for mining readiness.	7
Unit 3	Core Mining Techniques • Clustering: concept and simple methods such as k-means. • Classification: concept, decision trees and naïve Bayes. • Association-rule mining: concept and simple examples. • Evaluating mining results for accuracy and relevance to research questions.	8
Unit 4	Text Mining for Humanities and Archives • Basics of text mining: tokenisation, keyword extraction and frequency analysis. • Introduction to topic modelling and text clustering. • Mining metadata and catalogue records for pattern discovery. • Ethical and copyright considerations in mining archival and heritage data.	7

Essential Readings

- Han, J., Kamber, M. & Pei, J. Data Mining: Concepts and Techniques. Morgan Kaufmann.

- Tan, P.-N., Steinbach, M. & Kumar, V. Introduction to Data Mining. Pearson.
- Jockers, M. L. Text Analysis with R for Students of Literature. Springer.
- James, G., Witten, D., Hastie, T. & Tibshirani, R. An Introduction to Statistical Learning. Springer.

DH106: Data Visualization Techniques

Credits	2	Contact Hours	30
Internal Marks	25	External Marks	25

Total Marks: 50

Course Objectives

- 1) To introduce the principles of effective data visualization.
- 2) To develop practical skills in using visualization tools for humanities and archival data.
- 3) To enable students to design visual narratives such as timelines, maps and networks from cultural data.

Course Outcomes

- 1) Apply core principles of visual encoding to choose appropriate chart types.
- 2) Use at least one spreadsheet-based and one dedicated visualization tool.
- 3) Design timelines, maps or network visualizations from humanities and archival data.
- 4) Critically evaluate visualizations for clarity, accuracy and ethical representation.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Principles of Data Visualization • Role of visualization in humanities research and public communication. • Visual encoding: position, colour, size and shape. • Choosing appropriate charts: bar, line, pie, scatter and histogram. • Common pitfalls such as misleading scales. • Gestalt principles.	8
Unit 2	Tools for Visualization • Visualization using spreadsheet tools such as Excel/Google Sheets. • Open-source/free visualization tools such as Tableau Public and Datawrapper. • Overview of programming-based visualization using Python or R. • Selecting tools appropriate to project scale and technical skill.	7
Unit 3	Visualizing Humanities and Archival Data • Timelines for historical and biographical data. • Geospatial/map-based visualization for heritage and cultural sites. • Network graphs for correspondence, correlations and relationships; Gephi for historical network maps. • Textual visualization: word clouds and frequency plots.	8
Unit 4	Designing a Visualization Project • Planning a visualization project: audience, purpose and data story. • Building a simple interactive dashboard. • Presenting and critiquing visualizations. • Ethics and accuracy in representing archival and cultural data.	7

Essential Readings

- Few, S. Show Me the Numbers: Designing Tables and Graphs to Enlighten. Analytics Press.
- Tufte, E. R. The Visual Display of Quantitative Information. Graphics Press.
- Knaflitz, C. N. Storytelling with Data: A Data Visualization Guide for Business Professionals. Wiley.
- Drucker, J. & Nowviskie, B. Speculative Computing: Aesthetic Provocations in Humanities Computing.
- Murray, S. I. Interactive Data Visualization for the Web.
- Wilke, C. O. Fundamentals of Data Visualization.

DH107: Internship

Credits	2	Contact Hours	30
Internal Marks	25	External Marks	25

Total Marks: 50

Course Objectives

- 1) To provide students with practical and field-based exposure to applications of Digital Humanities.
- 2) To enable students to apply concepts and skills acquired through the curriculum in real-world settings.
- 3) To develop practical competencies in digital archiving, digitisation, documentation, digital preservation and cultural heritage.
- 4) To familiarise students with professional practices followed by museums, archives, libraries, cultural institutions, NGOs, research organisations, industries and individual professionals.
- 5) To develop documentation, communication, teamwork, project-management, ethical-practice and digital-collaboration skills.
- 6) To encourage experiential learning through internships, workshops, field visits and approved online projects.

Course Outcomes

- 1) Demonstrate understanding of professional practices and ethical considerations in Digital Humanities.
- 2) Apply basic Digital Humanities concepts and techniques in authentic field-based or professional contexts.
- 3) Demonstrate practical skills in digital documentation, digitisation, archiving, preservation and/or heritage-related activities.
- 4) Develop professional competencies including communication, teamwork, documentation, time management and project execution.
- 5) Document, present and critically reflect upon learning and outcomes gained through the internship experience.

Nature and Duration of Internship

Students shall undertake the internship during the winter vacation/summer vacation, as prescribed by the Department. The internship shall ordinarily be of a minimum duration of 40 working days. The internship may be undertaken through one activity or a combination of the activities listed below, subject to prior approval of the Course Coordinator/Department.

Internship Report: Suggested Format

- Title Page
- Certificate/Proof of Internship
- Acknowledgement
- Introduction to the Organisation/Institution
- Objectives of the Internship

- Nature and Scope of Work
- Activities Undertaken
- Digital Humanities Skills/Tools Used
- Work Samples/Portfolio, wherever applicable
- Learning Outcomes and Skills Acquired
- Challenges Encountered and Solutions Adopted
- Reflection on the Internship Experience
- Conclusion
- References, if applicable
- Annexures/Evidence of Work

Assessment Criteria

- Internal Assessment – 25 Marks:
Internship Logbook/Work Diary (5);
Regularity, Participation and Professional Conduct (5);
Internship Supervisor/Mentor Evaluation (5);
Internship Report/Portfolio (5);
Presentation of Work/Progress (5).
- External Assessment – 25 Marks: Final Internship Report/Portfolio (10); Presentation of Internship Work (5); Viva Voce (10).
- Grand Total: 50 Marks.

Essential Readings

- Internship/placement guidelines issued by the Department or host institution.
- Relevant documentation, metadata, preservation, copyright and ethical guidelines applicable to the host organisation.
- Approved Digital Humanities project documentation and tool manuals relevant to the internship.

SEMESTER II

DH201: Digital Data: Text, Images and Sound

Credits	4	Contact Hours	60
Internal Marks	50	External Marks	50

Total Marks: 100

Course Objectives

- 1) To develop an understanding of the historical emergence, typologies and technical formats of digital data relevant to text, image and sound in the humanities.
- 2) To develop introductory practical skills in locating, collecting, organising, scraping and handling digital data using accessible tools.
- 3) To develop critical and ethical awareness of ownership, bias, privacy, representation and data governance in the collection and use of digital data, particularly in Indian and South Asian Digital Humanities contexts.

Course Outcomes

- 1) Explain the historical development, typologies and technical foundations of digital data and their relevance to text, image and sound in humanities.
- 2) Apply introductory digital-data skills to locate, collect, organise, scrape, clean and manage textual, visual, audio and multimodal datasets using appropriate tools and formats.
- 3) Critically evaluate ethical and epistemic issues related to ownership, privacy, consent, bias, representation and data governance in Digital Humanities research, with reference to Indian and South Asian contexts.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	From Analogue to Digital: A History of Data • The pre-digital archive: manuscripts, print, photographic and sound recording as early “data” practices. • Binary encoding, the rise of computing and the conceptual shift from information to data. • Key moments: punch cards, ASCII/Unicode, personal computer, internet and smartphone as data-generating devices. • Digitisation versus born-digital data and implications for archives and historians.	8
Unit 2	Types and Sources of Digital Data • Structured, semi-structured and unstructured data; textual, visual, audio and multimodal data. • Sources: institutional archives, social media, sensors/devices, administrative/government data and born-digital creative works. • Public, proprietary and open data; data as infrastructure. • Indian data ecosystems: Digital India, Open Government Data Platform India, Bhashini and National Digital Library of India.	8

Unit	Unit Title and Content	Hours
Unit 3	File Formats and Technical Foundations •Text formats: TXT, XML, JSON and CSV; markup and structured text. •Image formats: JPEG, PNG and TIFF; compression, resolution and colour-depth basics. •Audio/video formats: WAV, MP3 and MP4; sampling rate, bit rate and codecs in brief. •Metadata, file-naming conventions and interoperability; why formats matter for preservation and access.	8
Unit 4	Data Scraping: Techniques and Tools •Data scraping; APIs versus web scraping; ethical and legal boundaries including terms of service, copyright and robots.txt. •Introductory tools: spreadsheets, browser extensions, no-code scraping tools and a light introduction to Python/BeautifulSoup. •Scraping text, images and social-media data: practical considerations and limitations. •Data cleaning and organisation from raw scrape to usable dataset.	8
Unit 5	Ethics, Bias and Politics of Digital Data •Privacy, consent and surveillance in data collection. •Bias in datasets: whose words, images and sounds are counted and whose are absent. •Data colonialism and questions of ownership, including language data, indigenous knowledge and oral archives. •Data-protection frameworks: India's Digital Personal Data Protection Act, 2023 and global comparators such as GDPR.	8
Unit 6	Images and Sound in Digital Humanities Practice •Digitised visual archives: manuscripts, art, photography and cartography; British Library Endangered Archives Programme and Indian museum digitisation projects. •Computational approaches to images: metadata tagging, basic image analysis and visual culture at scale. •Sound archives and oral history: digitised music, oral traditions and endangered languages; ARCE and Sangeet Natak Akademi archives. •Case studies of image- and sound-based Digital Humanities projects in India and South Asia.	10
Unit 7	Synthesis: Data, Culture and the Digital Humanist •Reviewing the data lifecycle from source to scrape to archive to interpretation. •The humanist's role in a data-saturated environment: critical, not merely technical, engagement. •Emerging directions: AI, machine learning and the next phase of data in the humanities. •Student presentations/short project: a small data-collection and reflection exercise.	10

Essential Readings

- Manovich, L. Cultural Analytics. MIT Press, 2020.
- Drucker, J. “Humanities Approaches to Graphical Display.” Digital Humanities Quarterly, 2011.
- Kitchin, R. The Data Revolution: Big Data, Open Data, Data Infrastructures and Their Consequences. Sage, 2014.
- Presner, T. & Schnapp, J. The Digital Humanities Manifesto 2.0.
- Noble, S. U. Algorithms of Oppression. NYU Press, 2018.
- Couldry, N. & Mejias, U. A. The Costs of Connection: How Data Is Colonizing Human Life. Stanford University Press, 2019.
- Bhashini Mission; Open Government Data Platform India; National Digital Library of India; Ministry of Electronics and Information Technology material on the Digital Personal Data Protection Act, 2023.
- British Library Endangered Archives Programme; ARCE; Google Arts & Culture India collections; Sarai Reader archives.

DH202: Methods and Tools for Digital Humanities

Credits	4	Contact Hours	60
Internal Marks	50	External Marks	50

Total Marks: 100

Course Objectives

- 1) To develop an understanding of Digital Humanities methods and tools, with particular reference to the Indian Digital Humanities landscape.
- 2) To develop introductory practical skills in digital archiving, metadata, digitisation, text encoding, computational text analysis, data visualization, GIS, network analysis, digital storytelling and digital pedagogy.
- 3) To develop the ability to critically evaluate and transparently document digital methods, tools, workflows, ethical considerations and contextual constraints in Digital Humanities research.

Course Outcomes

- 1) Explain the role and application of major Digital Humanities methods and tools in the Indian context.
- 2) Apply introductory methods and tools for digital archiving, metadata creation, digitisation, text encoding, computational text analysis, data visualization, GIS, network analysis, digital storytelling and digital pedagogy.
- 3) Design and present a basic Digital Humanities project plan identifying appropriate data, tools, workflows and ethical considerations.
- 4) Document and critically reflect on tools, methods, versions, limitations, ethical decisions and Indian-context constraints in a Digital Humanities workflow.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Digital Humanities Methods, Archiving, Metadata and Digitisation • DH, methods and the Indian landscape: what “methods and tools” mean in DH; India-specific DH projects and challenges. • Digital archiving and metadata in India; from box-files to metadata schemas; drafting a simple metadata form. • Digitisation workflows and Indian-language scripts: scanning, OCR and critique of image-to-text output on an Indian-language page. • Text encoding and markup: TEI basics; XML/TEI-Lite and guided markup of a short Indian-language-in-translation text.	15
Unit 2	Computational Text Analysis, Data Visualization, GIS and Network Analysis • Computational text analysis: word counts, frequencies and basic NLP; use of web-based text analysers such as Voyant or AntConc-style demonstrations. • Data visualization using Indian-case datasets; building simple charts from small CSV datasets. • Mapping and GIS for Indian spatial humanities: cultural heritage, public history and map-first project workflows.	15

Unit	Unit Title and Content	Hours
	• Network analysis for Indian media and cultural studies; hashtags, relationships and introductory network diagrams/Gephi workflows.	
Unit 3	Digital Storytelling, Pedagogy, AI-Assisted Tools and Dashboards • Digital storytelling and blogging; public history and Indian examples; writing a short digital-story blog post. • Digital pedagogy and DH in Indian classrooms; designing a one-week DH task or classroom archive. • AI-assisted DH tools in India: ChatGPT, translation and analysis assistants; prompt-engineering exercise for an Indian-language task. • Tableau/basic dashboards for humanities data; dashboard wireframing with users, filters and views.	15
Unit 4	Ethics, Project Workshops, Tool Integration and Method Transparency • Ethics, consent and metadata design; human participants, labour, DEI and ethical dimensions of data production and digitisation. • Indian-case DH project workshops: research goal, data, tools and ethics note; cultural-heritage archive examples. • Tool-mosaic lab integrating workflows such as OCR → TEI → Voyant → Gephi → Tableau. • Student presentations and tool-protocol reflections; documentation of tools, versions, limitations and Indian-context constraints.	15

Essential Readings

- Dodd, M. & Menon, N. (eds.). Practices of Digital Humanities in India: Learning by Doing.
- Cohen, H., Jana, U. & Gurney, M. (eds.). Digital Humanities in the India Rim.
- Centre for Internet and Society (CIS), Digital Humanities in India?
- Center for Digital Humanities, Pune. DH: Methods and Tools — selected Indian-adapted methodological materials.
- Selected Digital Humanities project documentation and tool manuals relevant to the practical components.

DH203: Digital Humanities in an Indian Context

Credits	4	Contact Hours	60
Internal Marks	50	External Marks	50

Total Marks: 100

Course Objectives

- 1) To introduce the concepts, scope, evolution and significance of Digital Humanities with specific reference to the Indian context.
- 2) To develop practical skills in digital archiving, digitisation, digital storytelling, text analysis, visualisation and digital media.
- 3) To enable students to explore applications of Digital Humanities in Indian languages, literature, cultural heritage, public history and digital cultures.
- 4) To develop critical understanding of ethical, legal, social and cultural issues associated with Digital Humanities and enable students to design context-sensitive DH projects.

Course Outcomes

- 1) Explain the concepts, scope, evolution and major areas of Digital Humanities with specific reference to India.
- 2) Apply basic digital tools and methods for digitisation, archival development, text analysis, digital storytelling, visualisation and cultural-heritage documentation.
- 3) Develop and interpret digital projects involving Indian languages, literature, media, cultural heritage, public history and marginalised communities.
- 4) Critically evaluate Digital Humanities projects in relation to accessibility, inclusivity, privacy, consent, ethics, data protection and cultural representation.
- 5) Design a basic Digital Humanities project using appropriate data sources, digital tools and ethical frameworks relevant to the Indian context.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Foundations of Digital Humanities and Digital Infrastructures in India • Definitions, history, scope, key debates and the computational turn; emerging institutional landscape in India. • Digital archives, libraries and repositories in India; digitisation, cataloguing, metadata and preservation of cultural/textual resources. • Digital platforms and infrastructures; scanning, OCR, repositories, blogging and digital storytelling; accessibility, navigability and inclusivity. • Digital storytelling and public history; digital pedagogy, community memory and digital commons; local-history and community-based narratives.	15
Unit 2	Digital Texts, Literature, Culture and Heritage • Digital archives of Indian cultural heritage: museums, galleries, temple-art archives, tribal-art databases and documentation of local cultural practices. • Digital writing and electronic literature: born-digital texts, digital poetry, interactive fiction and hypertext.	15

Unit	Unit Title and Content	Hours
	• Digital Humanities and Indian literature: text analysis, digital editions, Indian-language texts, corpora and digital study of literary/knowledge texts. • Digital media and cultures in India: social media, platform cultures, influencer culture, memes, hashtags, remix practices and everyday digitality.	
Unit 3	Identity, Visualization, Religion and Digital Cultures • Gender and subaltern studies; representation of marginalised voices; feminist and queer archives; community-centred archiving. • Visualization, mapping and spatial humanities: GIS, historical mapping, networks and cultural/social data. • Digital Humanities and religion: classical/religious texts, digital temples, ritual-on-web, digital Bhakti archives and interactive religious heritage. • AI and Digital Humanities tools in India: Generative AI, translation tools, ChatGPT and prompt engineering for Indian-language and humanities tasks.	15
Unit 4	Digital Pedagogy, Ethics, Project Development and Futures of DH • Digital pedagogy and Digital Humanities in Indian classrooms; MOOCs, blended learning and DH-enabled teaching modules. • Ethics, law and responsible DH: privacy, consent, indigenous data, DEI and Digital Personal Data Protection Act, 2023. • Designing a Digital Humanities project: problem, scope, Indian-specific data sources, tools, metadata, ethics and project planning. • Future of DH in India: presentation, peer review and critical discussion of commercialization, surveillance, extractive archiving, community participation and responsible DH.	15

Essential Readings

- Dodd, M. & Menon, N. (eds.). Practices of Digital Humanities in India: Learning by Doing.
- Cohen, H., Jana, U. & Gurney, M. (eds.). Digital Humanities in the India Rim.
- Digital Humanities in India? — CIS-India report on DH practice in Indian higher education.
- Center for Digital Humanities, Pune. DH: Methods and Tools — selected Indian-adapted methodological materials.
- National Digital Library of India; Open Government Data Platform India; Bhashini; British Library Endangered Archives Programme; ARCE; Sarai Reader archives — selected case-study materials.

DH204: AI in Digital Humanities

Credits	4	Contact Hours	60
Internal Marks	50	External Marks	50

Total Marks: 100

Course Objectives

- 1) To introduce the concepts, applications and emerging role of Artificial Intelligence in Digital Humanities.
- 2) To develop practical skills in using AI tools for text, language, archival, cultural and humanities research.
- 3) To enable students to critically evaluate ethical, legal, cultural and social implications of AI in humanities scholarship.
- 4) To develop the ability to design responsible and context-sensitive AI-enabled Digital Humanities projects.

Course Outcomes

- 1) Explain fundamental concepts of Artificial Intelligence and their relevance to Digital Humanities.
- 2) Apply appropriate AI tools for text analysis, translation, OCR, transcription, archival research and cultural-heritage applications.
- 3) Design and evaluate AI-assisted humanities workflows involving language, archives, audiovisual materials, visualization and spatial data.
- 4) Critically evaluate AI applications with respect to bias, privacy, consent, authorship, cultural representation, knowledge sovereignty and relevant Indian legal and ethical frameworks.
- 5) Develop a basic, ethically responsible AI-enabled Digital Humanities project suited to an Indian humanities or cultural context.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Foundations of AI in Digital Humanities • Digital Humanities: concept, scope, evolution and computational turn; role and applications of AI in humanities research, with Indian context. • Fundamentals of AI and Machine Learning; supervised and unsupervised learning; NLP, Computer Vision, Generative AI and Large Language Models. • No-code and low-code AI tools; prompt engineering for summarisation, translation, tagging, classification and information extraction. • AI-assisted research and academic writing; verification, reliability, plagiarism, authorship and academic integrity.	15
Unit 2	AI for Language, Text, Archives and Cultural Heritage • AI and Indian-language text processing; multilingual corpora, NLP, OCR and digitisation of historical documents; challenges across Indian scripts. • AI-assisted text and literary analysis: classification, thematic/sentiment analysis, topic modelling, keyword extraction and Named Entity Recognition.	15

Unit	Unit Title and Content	Hours
	• AI for audiovisual heritage: speech-to-text, transcription, metadata generation, tagging and search; oral histories and audio/video archives. • AI in libraries and information science: intelligent cataloguing, metadata generation, semantic search, discovery/recommendation and AI-assisted preservation.	
Unit 3	Ethics, Data, Privacy and Knowledge Sovereignty • AI ethics: fairness, transparency, explainability, accountability and trust; bias related to language, caste, gender, region and culture. • Data ethics, privacy and consent; personal data, community-generated data and oral histories; Digital Personal Data Protection Act, 2023. • AI, surveillance and state power; AI and the Indian judiciary; rights-based approaches and platform regulation. • Indigenous knowledge and decolonial DH; indigenous data sovereignty, feminist/community-led archiving, cultural ownership and ethical metadata design.	15
Unit 4	AI Applications, Governance and Future of Digital Humanities • AI-assisted visualization and spatial humanities; GIS, historical mapping, Named Entity Recognition, network analysis and visual analytics. • AI in journalism, data journalism and public history; automated content generation, digital storytelling, deepfakes, synthetic media and AI-generated historical reconstructions. • AI labour, human–AI collaboration, automation, authorship and attribution; roles of curators, developers, performers and community knowledge-holders. • AI governance and policy in India; responsible AI-DH project design, risk assessment, bias, privacy, consent, intellectual property, safeguards and redlines.	15

Essential Readings

- Noble, S. U. Algorithms of Oppression. NYU Press, 2018.
- D'Ignazio, C. & Klein, L. F. Data Feminism.
- Selected documentation and policy materials on Artificial Intelligence, responsible AI and digital governance in India.
- Ministry of Electronics and Information Technology material on the Digital Personal Data Protection Act, 2023.
- Selected documentation and case studies on Indian-language AI, OCR, cultural-heritage digitisation and responsible AI.

DH205: Laws and Ethics in Digital Humanities

Credits	4	Contact Hours	60
Internal Marks	50	External Marks	50

Total Marks: 100

Course Objectives

- 1) To introduce key legal frameworks governing digital content and archives.
- 2) To develop ethical judgment in handling cultural, personal and sensitive data.
- 3) To understand tensions between access, ownership and control in digital knowledge.

Course Outcomes

- 1) Explain major legal concepts governing digital content, archives, copyright, authorship, access and ownership.
- 2) Apply basic principles of copyright, Creative Commons, open access, privacy and data protection to Digital Humanities work.
- 3) Evaluate ethical issues involving oral histories, community archives, vulnerable groups, cultural knowledge and digital collections.
- 4) Critically analyse algorithmic bias, platform power, digital inequality and the ethical use of social media and digital platforms as archives.

Course Content

Unit	Unit Title and Content	Hours
Unit 1	Legal Foundations and Intellectual Property in Digital Content • Basics of law in the digital domain: jurisdiction, ownership and liability. • Overview of the Copyright Act and amendments. • Authorship, originality, duration of copyright and public domain. • Fair dealing provisions in India for education, research and criticism. • Copyright, copyleft, open access and Creative Commons licensing.	15
Unit 2	Access, Open Knowledge, Privacy and Data Protection • Open access movement and academic publishing. • Proprietary databases and public knowledge. • Personal data and sensitive data in digital archives. • Key features of the Digital Personal Data Protection Act, 2023. • Consent, anonymization, ethical data collection and surveillance concerns in digital platforms and archives.	15
Unit 3	Ethics of Digital Humanities and Archiving • Ethical handling of oral histories, community archives and vulnerable groups. • Representation, bias and exclusion in digital collections. • Cultural sensitivity concerning sacred, indigenous and restricted knowledge. • Ethics of digitisation: what should not be digitised or made public. • Balancing access, ownership, community participation and responsible stewardship.	15

Unit	Unit Title and Content	Hours
Unit 4	Platform Power, Algorithms and Digital Inequality • Role of Big Tech in shaping access to knowledge. • Algorithmic bias and visibility of cultural content. • Digital divide in India: language, caste, region and access. • Ethics of using social media as an archive. • Integrated case analysis of law, ethics, platform governance and responsible Digital Humanities practice.	15

Essential Readings

- Copyright Act, 1957 (as amended) — selected provisions relevant to education, research and digital content.
- Creative Commons licensing resources and open-access guidance.
- Digital Personal Data Protection Act, 2023 — selected provisions relevant to research and digital archives.
- Noble, S. U. Algorithms of Oppression. NYU Press, 2018.
- Couldry, N. & Mejias, U. A. The Costs of Connection: How Data Is Colonizing Human Life. Stanford University Press, 2019.
- Relevant institutional codes of ethics and archival/community-archive guidelines.

DH206: Digital Humanities Project

Credits	2	Contact Hours	30
Internal Marks	25	External Marks	25

Total Marks: 50

Course Objectives

- 1) To enable students to integrate concepts, methods and tools acquired across the Digital Humanities programme into an applied project.
- 2) To develop skills in problem identification, data selection, tool selection, workflow planning, documentation and ethical decision-making.
- 3) To provide experience in presenting and defending a Digital Humanities project and reflecting on its limitations and possibilities.

Course Outcomes

- 1) Formulate a clearly defined Digital Humanities problem or research question.
- 2) Select appropriate data sources, digital tools, methods, metadata and ethical safeguards for a small-scale project.
- 3) Produce and document a basic Digital Humanities project or prototype with a transparent workflow.
- 4) Present the project and critically reflect on its methods, limitations, ethical considerations and potential applications.

Course Content

Sr. No.	Course Content	Hours
1	Identification and Formulation of the Project	5
2	Literature and Digital Resource Review	5
3	Research Design and Methodological Planning	6
4	Project Development and Documentation Development of the project/prototype; data collection or curation, tool implementation, workflow documentation and maintenance of project records.	7
5	Ethical, Legal and Cultural Considerations	3

Sr. No.	Course Content	Hours
	attribution and responsible use of digital content; issues of representation, accessibility, cultural sensitivity and community participation; responsible use of AI and digital tools; documentation of ethical and methodological decisions.	
6	Project Report, Presentation and Reflection Preparation of the Research Project Proposal/Project Report in the prescribed academic format and latest APA format, wherever applicable; organisation of the report including introduction, definitions, rationale, significance, literature review, methodology, proposed analysis, outcomes and references; preparation of project presentation and demonstration; presentation and viva voce; critical reflection on learning, methodological choices, challenges, limitations, outcomes and future scope.	4
	Total	30