Introduction to Digital Humanities (English Literature)

Where stories meet statistics, and creativity meets code

Course Dates: January 26 – February 13, 2026
Duration: 3 Weeks | Global Online Cohort
Audience: Students, researchers, and professionals in data science and analytics, literature, history, media, linguistics, and cultural studies.

Course Overview

Introduction to Digital Humanities (English Literature) is where literature meets technology. From *The Iliad* to *Harry Potter*, from Shakespeare to Chimamanda Ngozi Adichie, this course shows how stories across centuries can be decoded using data. You'll learn to mine text, visualize emotions, and uncover hidden patterns in words using tools like Python, Tableau, and Voyant. It's a hands-on, creative space for digital explorers who want to read beyond the page—combining code, culture, and curiosity to tell new stories from old texts.

Program Outcomes

- **Code & Analyze**: Use Python, Pandas, Matplotlib, and Seaborn to explore humanities datasets.
- **Clean & Transform**: Prepare textual, historical, and multimedia data for analysis.
- **Discover Patterns**: Apply statistics and machine learning to find trends, topics, and sentiment.
- **Visualize Insights**: Build dashboards in Tableau / Power BI for storytelling and research visualization.
- **Think Ethically**: Practice transparency, cultural sensitivity, and responsible communication.

Marketable Skills

- Python Programming & Data Wrangling
- Data Visualization with Tableau and Power BI
- Statistical Analysis and Machine Learning Basics
- Digital Storytelling and Dashboard Design
- Cultural Data Interpretation and Ethical Analysis
- Cross-disciplinary Collaboration and Presentation Skills

Learning Outcomes (COs & Bloom's Levels)

CO	Description	Level
CO1	Define the interdisciplinary nature of Data Science & Digital Humanities.	K1–K2
CO2	Develop Python programs for data cleaning and visualization.	K3
CO3	Apply statistics to interpret humanities datasets.	K4
CO4	Build and evaluate ML models for sentiment / theme analysis.	K5
CO5	Create dashboards for research storytelling.	K6
CO6	Demonstrate ethical interpretation and collaboration.	K5–K6

Day-wise Snapshot

Sl. No.	Day	Date	Topic	Sub Topics
1	Day 1	Jan 26, 2026	Introduction to Data Science & Digital Humanities	Overview, lifecycle, DH scope, tools, applications
2	Day 2	Jan 27, 2026	Python Basics & Data Structures	Data types, Pandas/Numpy basics, data import/export
3	Day 3	Jan 28, 2026	Data Cleaning & Transformation	Missing data, encoding, feature engineering for text
4	Day 4	Jan 29, 2026	Data Visualization I (Texts & Trends)	Matplotlib, Seaborn, basic plots, frequency charts
5	Day 5	Jan 30, 2026	Data Visualization II & Storytelling	Heatmaps, correlation plots, visual narratives
6	Day 6	Feb 2, 2026	Descriptive & Inferential Statistics in Humanities Data	Mean, SD, distributions, probability, word stats
7	Day 7	Feb 3, 2026	Hypothesis Testing & ML Introduction	t-tests, ANOVA, ML pipeline, evaluation metrics
8	Day 8	Feb 4, 2026	Supervised Learning (Text Analysis)	Regression, classification, sentiment analysis
9	Day 9	Feb 5, 2026	Unsupervised Learning (Topic Modelling)	K-Means, PCA, LDA, dimensionality reduction
10	Day 10	Feb 6, 2026	Ethics in AI & Digital Humanities	Bias, fairness, privacy, authorship ethics
11	Day 11	Feb 9, 2026	Data Engineering & Big Data for Cultural Archives	ETL, SQL, Spark, data lakes, metadata handling
12	Day 12	Feb 10, 2026	Dashboards (Tableau, Power BI)	Visualization of DH datasets, KPI storytelling
13	13–15	Feb 11–13, 2026	Capstone Project & Presentation	End-to-end DH data storytelling and visualization

Assessment Breakdown

Component	Description	Weight
Daily Quizzes & Labs	Concept checks & short code tasks	20%
Mini Projects	Text cleaning & ML applications	25%
Visualization Project	Tableau / Power BI storytelling	20%
Capstone Project	Full end-to-end DH analysis + presentation	30%
Participation	Reflection & peer engagement	5%

Gamified Learning Journey

Game Theme: "Data Humanist Quest — Master the Code, Read the Culture"

Realm / Week	Theme & Goal	Key Quests & Challenges	Badges / Titles	XP & Rewards
Realm 1 – The Foundation Frontier*(Week 1: Jan 26 – Jan 30)*	**Theme:** *Master the Code, Read the Culture.* **Goal:** Build core coding skills, clean datasets, and visualize cultural text.	**Quest 1:** The Setup Saga (Python setup & Jupyter run) **Quest 2:** The Data Archivist (Data cleaning) **Quest 3:** Visual Alchemy I (Word clouds & plots)Mini Boss: Wrangling the Words (Poetry dataset project)	Script Novice Text Tamer Plot Crafter Data Wrangler	100–300 XP+10% XP Bonus Unlock: *Statistics Toolkit*
Realm 2 – The Insight Citadel*(Week 2: Feb 2 – Feb 6)*	**Theme:** *Decode the Numbers, Reveal the Narratives.* **Goal:** Use statistics and ML to identify sentiment, style, and cultural trends.	**Quest 4:** Probability Trials (Descriptive & inferential stats) **Quest 5:** Hypothesis Scrolls (Author style analysis) **Quest 6:** Machine Awakening I (Sentiment ML models) **Quest 7:** Unsupervised Secrets (Topic modeling)Mini Boss: Ethics Duel (AI bias debate)	Stat Sleuth Inference Investigator Pattern Finder Cluster Commander Guardian of Fair Data	150–350 XP Unlock: *Model Builder Toolkit + XP Store*
Realm 3 – The Visualization Vault*(Week 3: Feb 9 – Feb 12)*	**Theme:** *Engineer the Flow, Tell the Human Story.* **Goal:** Create dashboards and	**Quest 8:** Pipeline Paragon (ETL workflows)Quest 9: Dashboard Architect (Tableau / Power BI dashboards)	Data Engineer's Key Insight Illuminator Data Narrator Data Champion Crown	200–400 XP Unlock: *Digital Humanist Certificate*

	digital storytelling projects.	**Quest 10:** Storyteller's Arena (Data storytelling)Final Boss: Capstone Showdown (Full DH project)		*Badge*
Completion Levels	—	**Level 1:** 500 XP — "Data Explorer" **Level 2:** 1000 XP — "Insight Architect" **Level 3:** 2000 XP — "Digital Humanist Champion"	Bonus Power-Ups: "Quick Thinker", "Peer Mentor", "Capstone Hero"	Final Rewards & Global Certificate

Global Certification Alignment

Certification / Course	Core Skills Developed	Career & Research Roles	Relevance for Humanities & English Students (Digital Humanities Focus)
AWS Data Analytics – Specialty (Advanced)*Amazon Web Services*	• Cloud data collection & storage • ETL workflows (Extract–Transform–Load) • Dashboard creation using cloud tools • Data ethics & security	• Research Data Assistant • NGO Data Coordinator • Educational Data Analyst • Digital Humanities Researcher	• Enables handling of large text or media datasets (archives, corpora) • Supports computational analysis in literature & culture • Builds ethical, data-driven research skills
AWS Cloud Practitioner (Foundation-Level)	• Basics of cloud & data infrastructure • Digital ecosystem awareness	• Entry-Level Data Assistant • Digital Project Coordinator	• Introduces cloud foundations behind digital archives • Prepares for managing online literary & cultural projects
Tableau Desktop Specialist*Salesforce / Tableau*	• Data cleaning & visualization • Interactive dashboard design • Storytelling through visuals	• Data Visualization Assistant • Media / Communication Analyst	• Facilitates literary & linguistic trend visualization • Supports digital storytelling for exhibitions & publications
Power BI Analyst*Microsoft*	• Data storytelling & dashboard integration • Merging Excel, survey & visual data	• Business Intelligence Intern • Content / Data Analyst	• Combines quantitative & qualitative insights • Enhances visual presentation for humanities research
Microdegree in	• Data wrangling &	• Entry-Level Data	• Trains students to "read data

| Data Science & Analytics *Madras Christian College (MCC)* | Python basics
• Statistics & ML foundations
• Dashboard design & ethics | Researcher
• Digital Content Analyst
• Academic Research Assistant | like text"
• Supports text mining & cultural analytics
• Integrates critical thinking with digital literacy |

Join the Global Cohort

Unlock the future of reading, research, and creativity. Discover how data can tell human stories—from Shakespeare to social media.

#DecodeTheFuture | #DigitalHumanist | #DataStorytelling