
INTRODUCTION TO DIGITAL HUMANITIES (ENGLISH LITERATURE)

Where stories meet statistics, and creativity meets code

Overall Course Mapping

Course Duration: Jan 26 – Feb 13, 2026

Introduction to Digital Humanities (English Literature) explores how digital tools and computational thinking can deepen our understanding of literature, language, and culture across time and traditions. This course invites students to engage with diverse texts—from *The Iliad* and *The Mahabharata* to Shakespeare’s plays, Dickens’s novels, and contemporary global literatures—through methods such as text mining, sentiment analysis, and cultural data visualization. By merging the interpretive richness of the humanities with the precision of data analytics, students learn to trace linguistic patterns, thematic evolutions, and cultural networks that connect texts and societies across centuries. Hands-on work with tools like Python, Tableau, and Voyant enables learners to visualize narratives, examine authorship, and reinterpret the literary canon in digital form, preparing them to become innovative researchers and storytellers in the age of digital scholarship.

PROGRAMME OUTCOMES

Upon successful completion of this programme, learners will be able to:

1. **PO1:** Apply essential programming knowledge in Python and relevant data science tools to analyze and visualize datasets drawn from literary, linguistic, cultural, and social research contexts.
2. **PO2:** Perform data preprocessing, cleaning, and transformation of textual, historical, and multimedia humanities datasets to prepare them for meaningful analytical interpretation.
3. **PO3:** Employ statistical, computational, and machine learning techniques to identify patterns, trends, and sentiment insights within humanities-based data (such as literature corpora, archival texts, or social discourse).
4. **PO4:** Design and evaluate interactive dashboards and visualizations that enable data storytelling and digital scholarship, translating complex analyses into accessible narratives for research and public engagement.
5. **PO5:** Demonstrate ethical awareness, interdisciplinary collaboration, and responsible communication in presenting analytical outcomes, ensuring cultural sensitivity, transparency, and integrity in data-driven humanities research.

COURSE OBJECTIVES

1. Introduce the fundamental principles, workflows, and interdisciplinary applications of data science and analytics within the context of Digital Humanities research, including literary, linguistic, and cultural data interpretation.
2. Develop proficiency in Python programming and data manipulation using libraries such as Pandas, Matplotlib, and Seaborn to analyze textual, visual, and historical datasets relevant to humanities research.
3. Apply descriptive and inferential statistical methods to support analytical reasoning and quantitative interpretation of humanities-based datasets, such as word frequencies, sentiment trends, and discourse analysis.
4. Build, evaluate, and interpret machine learning models (supervised and unsupervised) to identify patterns, topics, and semantic relationships in large textual or cultural corpora.
5. Integrate advanced data tools (SQL, Tableau, Power BI) to design ETL workflows and dynamic dashboards for digital storytelling, cultural analytics, and research visualization in humanities contexts.

COURSE OUTCOMES

Course Outcome (CO)	Description	Level (K1–K6)
CO1	Define the key concepts, scope, and interdisciplinary nature of data science and Digital Humanities, identifying how computational methods enhance humanistic inquiry.	K1–K2
CO2	Develop Python programs to acquire, clean, transform, and visualize literary, linguistic, or cultural data, demonstrating effective data handling and preparation skills.	K3
CO3	Analyze humanities-based datasets using descriptive and inferential statistics to interpret patterns, correlations, and trends in texts or cultural materials.	K4
CO4	Design, train, and evaluate regression, classification, and clustering models to extract semantic, thematic, or sentiment patterns from humanities data.	K5
CO5	Create interactive dashboards integrating multiple data sources to communicate research insights and digital narratives effectively.	K6
CO6	Demonstrate ethical interpretation, interdisciplinary collaboration, and responsible communication of data-driven humanities research outcomes.	K5–K6

SUMMARY TABLE: DAILY MAPPING WITH COURSE OUTCOME AND BLOOM'S LEVELS

Sl. No.	Day	Date	Topic	Sub Topics	Mapped CO	Bloom's Level (K)
1	Day 1	Jan 26, 2026	Introduction to Data Science & Digital Humanities	Overview, lifecycle, DH scope, tools, applications	CO1	K1–K2
2	Day 2	Jan 27, 2026	Python Basics & Data Structures	Data types, Pandas/Numpy basics, data import/export	CO2	K2–K3
3	Day 3	Jan 28, 2026	Data Cleaning & Transformation	Missing data, encoding, feature engineering for text	CO2	K3
4	Day 4	Jan 29, 2026	Data Visualization I (Texts & Trends)	Matplotlib, Seaborn, basic plots, frequency charts	CO2	K3
5	Day 5	Jan 30, 2026	Data Visualization II & Storytelling	Heatmaps, correlation plots, visual narratives	CO2–CO3	K3–K4
6	Day 6	Feb 2, 2026	Descriptive & Inferential Statistics in Humanities Data	Mean, SD, distributions, probability, word stats	CO3	K4
7	Day 7	Feb 3, 2026	Hypothesis Testing & ML Introduction	t-tests, ANOVA, ML pipeline, evaluation metrics	CO3–CO4	K4–K5
8	Day 8	Feb 4, 2026	Supervised Learning (Text Analysis)	Regression, classification, sentiment analysis	CO4	K5
9	Day 9	Feb 5, 2026	Unsupervised Learning (Topic Modelling)	K-Means, PCA, LDA, dimensionality reduction	CO4	K5
10	Day 10	Feb 6, 2026	Ethics in AI & Digital Humanities	Bias, fairness, privacy, authorship ethics	CO6	K5
11	Day 11	Feb 9, 2026	Data Engineering & Big Data for Cultural Archives	ETL, SQL, Spark, data lakes, metadata handling	CO5	K6

12	Day 12	Feb 10, 2026	Dashboards (Tableau, Power BI)	Visualization of DH datasets, KPI storytelling	CO5	K6
13	13–15	Feb 11–13, 2026	Capstone Project & Presentation	End-to-end DH data storytelling and visualization	CO6	K6

SUMMARY ALIGNMENT WITH BLOOM'S DOMAINS

- **K1–K2:** Understanding fundamental concepts and interdisciplinary definitions (CO1).
- **K3:** Applying tools, programming, and libraries for textual and cultural data (CO2).
- **K4:** Analyzing data through statistical and linguistic modeling (CO3).
- **K5:** Evaluating ML models, bias, and interpretative accuracy (CO4, CO6).
- **K6:** Creating dashboards, digital exhibits, and research narratives (CO5, CO6).

Detailed Lesson Plan

Week 1: Foundations & Data Handling — Exploring Humanities Data

Day 1 — Monday, January 26, 2026

Topic: *Introduction to Data Science and Digital Humanities*

Learning Objectives:

- Understand course goals, structure, and how data science supports Digital Humanities (DH) research in text, culture, and history.
- Set up Python and Jupyter Notebook environments for hands-on coding.
- Explore real-world DH applications—digital archives, text mining, authorship analysis, and visualization of cultural data.

Pre-Learning Materials:

- Article: “What is Data Science?” – IBM Blog.
- Article: “What is Digital Humanities?” – Stanford Humanities Center.
- YouTube: “Intro to Jupyter Notebooks” by Corey Schafer.

Topic Breakdown:

- The interdisciplinary bridge between computer science and the humanities.
- Data Science lifecycle and its adaptation for *textual and cultural data*: acquisition → cleaning → modeling → visualization.
- Introduction to tools: Python, Jupyter, NLTK, Voyant Tools.
- DH Case Studies: The *Google Books Ngram Viewer*, *Mapping the Republic of Letters* (Stanford).

Activities:

- Icebreaker: “What counts as data in the humanities?”
- “Jupyter Bootcamp” — students run basic code, import sample literary text data (Shakespeare corpus).

Assessment:

- Coding warm-up quiz.
- Reflection note: *How can data illuminate literature or history?*

Day 2 — Tuesday, January 27, 2026

Topic: *Python Basics & Data Structures for Textual Analysis*

Learning Objectives:

- Recognize Python core data types and structures used in DH (lists, sets, dictionaries).
- Handle text files and metadata (CSV, JSON) in Pandas.
- Perform indexing, slicing, and conditional operations on cultural datasets.

Topic Breakdown:

- Data-centric Python libraries: Pandas, NumPy, Matplotlib.
- Working with text and metadata (e.g., author, publication date, genre).
- Parsing text-based data into analyzable formats.

Activities:

- Load and inspect a *Project Gutenberg* dataset (e.g., Dickens novels).
- Count word frequencies, identify top recurring words.
- Peer discussion: *How does data structure affect meaning in text analysis?*

Assessment:

- Mini-quiz on Pandas functions.

- Code review of text import and summary notebook.

Day 3 — Wednesday, January 28, 2026

Topic: *Data Cleaning and Transformation for Humanities Datasets*

Learning Objectives:

- Detect and handle missing or inconsistent text data.
- Perform feature engineering on humanities data (e.g., metadata categories, sentiment tags).
- Build a basic text-cleaning pipeline (tokenization, stopwords removal, lemmatization).

Topic Breakdown:

- Cleaning textual data using Pandas, Regex, and NLTK.
- Encoding and normalizing text (case, punctuation, spacing).
- Creating derived variables (e.g., text length, sentiment polarity).

Activities:

- Mini-project: “Cleaning 19th-Century Prose” — prepare a DH dataset for analysis.
- Peer review of cleaned data scripts.

Assessment:

- Data-cleaning notebook submission and short reflection on data bias in historical texts.

Day 4 — Thursday, January 29, 2026

Topic: *Data Visualization I — Exploring Text and Culture*

Learning Objectives:

- Build visualizations to understand text and cultural data patterns.
- Use Matplotlib and Seaborn for word frequency, sentiment, and thematic plots.
- Understand visual interpretation in DH storytelling.

Topic Breakdown:

- Visualization as argument: transforming quantitative patterns into qualitative insights.
- Count plots, histograms, and frequency distributions for word and topic trends.
- Introduction to Word Clouds and N-gram graphs.

Activities:

- Create word clouds from *Frankenstein* or *Pride and Prejudice*.
- Group interpretation: What do visual trends reveal about language and tone?

Assessment:

- Screenshot submission of graphs with explanatory captions.

Day 5 — Friday, January 30, 2026

Topic: *Data Visualization II & Storytelling for Digital Humanities*

Learning Objectives:

- Generate advanced visualizations (heatmaps, pair plots, sentiment graphs).
- Build DH storytelling narratives using visualized evidence.
- Apply design principles (clarity, minimalism, context).

Topic Breakdown:

- Visual correlation of character networks, thematic clusters, or genre shifts.
- Using Seaborn to explore sentiment vs. time trends.
- Introduction to narrative visualization in DH exhibits.

Activities:

- Mini-Project: “Visualizing Character Sentiment Across Chapters.”
- Peer feedback on clarity and interpretive strength.

Assessment:

- Presentation + peer evaluation.

Week 2: Statistics & Machine Learning — Quantitative Reading of Culture

Day 6 — Monday, February 2, 2026

Topic: *Descriptive and Inferential Statistics in Digital Humanities*

Learning Objectives:

- Summarize linguistic and cultural data using descriptive statistics.
- Explore probability and distribution in text analysis.
- Understand Central Limit Theorem for word and sentiment samples.

Activities:

- Compute mean word length, sentiment averages, frequency dispersion.

- Probability simulation using Shakespeare sonnets dataset.

Assessment:

- Notebook quiz + interpretation exercise on statistical patterns in language.

Day 7 — Tuesday, February 3, 2026

Topic: *Hypothesis Testing and Introduction to Machine Learning for Humanities Data*

Learning Objectives:

- Conduct hypothesis tests to compare literary trends (e.g., author style differences).
- Understand ML pipeline and data preparation for DH datasets.
- Explore accuracy metrics for cultural data prediction.

Activities:

- Perform t-test comparing average sentence lengths between two authors.
- Build simple regression predicting text sentiment from word frequency.

Assessment:

- Statistical report with interpretation: *Do authors differ significantly in tone?*

Day 8 — Wednesday, February 4, 2026

Topic: *Supervised Learning — Sentiment and Authorship Analysis*

Learning Objectives:

- Train models for regression and classification on text sentiment or authorship data.
- Evaluate overfitting/underfitting on textual datasets.

Activities:

- Use logistic regression for author prediction.
- Sentiment classification of reviews or poems.

Assessment:

- Train/test accuracy quiz.
- Interpretation of classification metrics in humanities terms.

Day 9 — Thursday, February 5, 2026

Topic: *Unsupervised Learning — Topic Modeling and Clustering*

Learning Objectives:

- Apply clustering and PCA to uncover hidden patterns in texts.

- Perform topic modeling (Latent Dirichlet Allocation).

Activities:

- Cluster 19th-century novels by vocabulary use.
- Visualize topic distribution across historical periods.

Assessment:

- Reflection on interpretive limits of unsupervised algorithms in humanities.

Day 10 — Friday, February 6, 2026

Topic: *Data Ethics and Critical Digital Humanities*

Learning Objectives:

- Understand ethical data practices in cultural analytics.
- Discuss privacy, consent, and bias in algorithmic interpretation of human experience.
- Engage with frameworks like **UNESCO AI Ethics** and **FAIR Data Principles**.

Activities:

- Debate: *Should AI rewrite lost literature?*
- Write an ethics reflection on digital archives.

Assessment:

- Reflective essay submission.

Week 3: Advanced Tools & Capstone — Telling Stories with Data

Day 11 — Monday, February 9, 2026

Topic: *Data Engineering for Digital Archives*

Learning Objectives:

- Understand ETL (Extract, Transform, Load) in cultural data workflows.
- Integrate SQL with Pandas for metadata querying.
- Explore big data frameworks for large text repositories.

Activities:

- Build ETL workflow for a DH corpus (e.g., digitized newspapers).
- Query historical metadata using SQL joins.

Assessment:

- ETL report submission and reflection on data provenance.

Day 12 — Tuesday, February 10, 2026

Topic: *Dashboards for Humanities Visualization (Tableau/Power BI)*

Learning Objectives:

- Create interactive dashboards for storytelling using cultural or literary data.
- Design KPI visualizations (e.g., gender distribution, theme evolution).

Activities:

- Dashboard design workshop — “*Mapping Literary Landscapes.*”
- Peer review of dashboards for narrative coherence.

Assessment:

- Dashboard submission with research question explanation.

Days 13–15 — February 11–13, 2026

Topic: *Capstone Project & Presentation — Cultural Data Storytelling*

Learning Objectives:

- Execute full analytic cycle on a humanities dataset.
- Combine statistical, ML, and visual storytelling tools.
- Communicate insights to both data and humanities audiences.

Activities:

- Teams design DH projects (e.g., *Emotion Analysis in Romantic Poetry*, *Mapping Colonial Networks*).
- Present digital narratives integrating text analysis, visuals, and ethical interpretation.

Assessment:

- Grading based on originality, clarity, interpretive insight, and presentation quality.

Summative Assessment and Evaluation

Evaluation Component	Description	Weight
Daily Quizzes & Labs	Quick checks on concepts and text-analysis code	20%
Mini Projects	Text-cleaning and ML-based DH applications	25%
Visualization Project	Tableau/Power BI dashboard for humanities storytelling	20%
Capstone Project	Full DH analysis + presentation	30%

Participation	Engagement and reflection	5%
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Grading Rubric

- **Excellent (90–100%)** – Deep interdisciplinary insight, ethical awareness, innovative use of data for cultural interpretation.
- **Good (75–89%)** – Solid application, clear analysis, coherent storytelling.
- **Satisfactory (60–74%)** – Meets expectations, minimal interpretation depth.
- **Below 60%** – Needs more critical integration between data and human context.

Classroom Management Plans & Strategies

- **Clear Expectations:** Begin each session with an overview that highlights not only coding goals but also the interpretive focus — for example, how data analysis reveals patterns in literature, language, or culture.
- **Engagement Tools:** Use live polls, Q&A, and interactive text-mining or visualization demos. Tools like Voyant, Google Ngram Viewer, and word-frequency dashboards connect computation with critical inquiry.
- **Support System:** Weekly progress tracking with dual mentorship — one technical mentor (for Python and analytics) and one humanities mentor (for data interpretation and narrative framing).
- **Motivation:** Gamified rewards (badges, certificates, feature showcases) include Digital Humanist titles such as “Text Miner,” “Cultural Analyst,” or “Data Storyteller.”
- **Community:** Encourage collaboration through Digital Humanities labs and breakout groups where students co-analyze texts, visual archives, or social data. Peer problem-solving promotes both technical fluency and interpretive empathy.
- **Flexibility:** Provide catch-up sessions for students struggling with coding or theory integration. Offer optional sessions on “Digital Humanities Tools for Non-Coders” (e.g., Voyant Tools, Gephi).

Weekly Learning Milestones

Week 1 – Foundations & Data Handling (Jan 26 – Jan 30)

Weekly Focus: Build core technical foundations and learn how data analysis intersects with textual and cultural interpretation. Students gain fluency in Python, Jupyter Notebook, and the fundamentals of exploratory text analysis.

Milestones:

- Install Python/R and master Jupyter Notebook operations.
- Apply Python data types and data structures to textual data (e.g., word lists, frequency tables).
- Read, write, and manipulate text-based and tabular data using Pandas DataFrames.
- Identify, clean, and transform literary or linguistic corpora by addressing missing or duplicate text records.
- Create and interpret basic visualizations (word clouds, frequency plots, sentiment histograms).
- Complete *Mini Project 1* – “Data Wrangling Challenge in Literary Texts” demonstrating a full cleaning and visualization workflow.

Competency Goal:

Students can load, clean, and visualize datasets in Python while beginning to connect data structures with interpretive insights from the humanities.

Week 2 – Statistics & Machine Learning Basics (Feb 2 – Feb 6)

Weekly Focus: Introduce quantitative reasoning, prediction, and pattern detection as tools for reading at scale. Students apply machine learning to explore authorship, theme clustering, and stylistic trends in cultural data.

Milestones:

- Perform descriptive statistical analysis (word/sentence length, sentiment averages).
- Understand probabilistic distributions in language data (word frequency, Zipf’s law).
- Conduct inferential tests — t tests, chi square, and ANOVA — on stylistic or thematic features.
- Build and evaluate regression and classification models to predict sentiment or author style.
- Execute ML workflows (data split, training, validation) on humanities datasets.
- Implement unsupervised K Means clustering or PCA for thematic grouping.
- Reflect on ethical representation of cultural data through the “AI and Bias in Humanities” discussion.

Competency Goal:

Students can use statistical and machine learning approaches for cultural analytics while practicing interpretive awareness and ethical analysis.

Week 3 – Advanced Analytics & Visualization Tools (Feb 9 – Feb 12)

Weekly Focus: Integrate professional tools (Tableau, Power BI, SQL, Spark) for managing and presenting Digital Humanities visualizations. Students design dashboards and data stories that transform raw data into cultural insight.

Milestones:

- Understand ETL (Extract Transform Load) concepts and apply them to digital archives or text repositories.
- Use SQL with Pandas to query metadata from literature or historical datasets.

- Apply cloud and big data principles (AWS S3, Spark, BigQuery) for large corpus management.
- Design dynamic dashboards in Tableau or Power BI for narrative visualization of cultural trends.
- Craft visual storytelling with evidence-based insights linking data to human experience.
- Finalize Capstone Project Proposal — define research question, dataset, and visual storytelling plan for *Digital Humanities Showcase* presentations.

Competency Goal:

By February 12, students will demonstrate full-stack analytics proficiency, from data engineering and modeling to ethical digital storytelling for humanities audiences.

Weekly Learning Milestones in a Gamified Framework

This gamified learning design motivates students to see their growth not just as coders, but as **Digital Humanists**— bridging data and meaning.

Students progress through three themed *realms*, earning XP, badges, and power-ups tied to both technical mastery and interpretive creativity.

Game Title: "Data Humanist Quest — From Coder to Cultural Analyst"

Realm 1 – The Foundation Frontier (Week 1 – Jan 26 – Jan 30)

Theme: “Master the Code, Read the Culture.”

Goal: Build foundational coding skills and prepare clean datasets for text and cultural analysis.

Quest	Skill/Concept	DH Badge	XP
Quest 1: <i>The Setup Saga</i>	Install Python/R, configure Jupyter, run first text script	<i>Script Novice</i>	100
Quest 2: <i>The Data Archivist</i>	Clean and preprocess a literary corpus	<i>Text Tamer</i>	150
Quest 3: <i>Visual Alchemy I</i>	Build visualizations (word clouds, histograms)	<i>Plot Crafter</i>	200
Mini Boss Challenge: <i>Wrangling the Words</i>	Clean & visualize a poetry dataset end-to-end	<i>Data Wrangler Medal</i>	300

Milestone Unlock: *Level 1 — Foundation Frontier Complete*

XP Bonus + 10% and unlock *Statistics Toolkit* power-up.

Realm 2 – The Insight Citadel (Week 2 – Feb 2 – Feb 6)

Theme: “Decode the Numbers, Reveal the Narratives.”

Goal: Use statistics and ML to detect literary and cultural patterns.

Quest	Skill/Concept	DH Badge	XP
Quest 4: <i>The Probability Trials</i>	Apply descriptive & inferential stats to text data	<i>Stat Sleuth</i>	200
Quest 5: <i>The Hypothesis Scrolls</i>	Compare author styles (t-test/ANOVA)	<i>Inference Investigator</i>	250
Quest 6: <i>Machine Awakening I</i>	Train regression/classification models on sentiment data	<i>Pattern Finder</i>	300
Quest 7: <i>Unsupervised Secrets</i>	Discover topics via K-Means/LDA	<i>Cluster Commander</i>	350
Mini Boss Battle: <i>Ethics Duel</i>	Debate AI bias in cultural data	<i>Guardian of Fair Data</i>	150

Milestone Unlock: *Level 2 — Insight Architect Unlocked*

Power-ups: *Model Builder’s Toolkit (Scikit-Learn)* + XP Store Access.

Realm 3 – The Visualization Vault (Week 3 – Feb 9 – Feb 12)

Theme: “Engineer the Flow, Tell the Human Story.”

Goal: Build dashboards and present humanities-based data narratives.

Quest	Skill/Concept	DH Badge	XP
Quest 8: <i>Pipeline Paragon</i>	Design ETL workflow for digital archives	<i>Data Engineer’s Key</i>	250
Quest 9: <i>Dashboard Architect</i>	Build interactive DH dashboards (Tableau/Power BI)	<i>Insight Illuminator</i>	300
Quest 10: <i>The Storyteller’s Arena</i>	Present data-driven humanities stories	<i>Data Narrator</i>	200
Final Boss Battle: <i>Capstone Showdown</i>	Present full Digital Humanities project	<i>Data Champion Crown</i>	400

Milestone Unlock: *Level 3 — Digital Humanist Champion*

Students earn a “**Digital Humanist Certificate Badge**” for portfolios or LinkedIn.

Reward System at Course Completion

Completion Level	Reward
Level 1: 500 XP	“Data Explorer” digital badge
Level 2: 1000 XP	“Insight Architect” certification token
Level 3: 2000 XP	“Digital Humanist Champion” medal
Bonus Power-Ups	“Quick Thinker” (fast quiz bonus), “Peer Mentor” (collaboration reward), “Capstone Hero” (top project score)

Global Certifications and Career Path Alignment

Certification / Course Link	Core Skills Developed	Career & Research Roles It Supports	Relevance for Humanities & English Students (Digital Humanities Focus)
AWS Data Analytics – Specialty (Advanced) (Amazon Web Services)	• Collecting and storing data in the cloud (securely) • Understanding data pipelines (ETL: Extract, Transform, Load) • Building analytical dashboards using cloud tools • Data ethics and responsible usage	• Research Data Assistant • NGO Data Coordinator • Educational Data Analyst • Digital Humanities Researcher	• Equips students to handle large textual, linguistic, or media datasets (e.g., digitized archives, survey data, corpus linguistics) • Supports computational analysis in literature, history, and cultural studies • Strengthens ethical research methodology in handling sensitive humanities data
AWS Cloud Practitioner (Foundation-level alternative)	• Cloud basics, data storage, and digital infrastructure awareness • Understanding the global digital ecosystem	• Entry-level Data Assistant • Digital Project Coordinator	• Introduces the digital “infrastructure” behind humanities research tools and online archives • Prepares students to work with cloud-based digital collections or collaborative projects in English, history, or media studies
Tableau Desktop Specialist (Salesforce / Tableau)	• Data cleaning and visualization • Designing interactive dashboards • Telling visual stories with data • Presenting research insights clearly	• Data Visualisation Assistant • Communication or Marketing Analyst • Media Research Assistant	• Allows students to create visualizations of literary trends, linguistic corpora, or survey responses • Supports narrative-driven data storytelling for digital humanities projects, exhibitions, or publications
Power BI Analyst (Microsoft)	• Data storytelling through visuals • Integrating Excel, survey data, and visual dashboards	• Business Intelligence Intern • Content Data Analyst	• Builds skills to interpret and present humanities data visually • Enables students to combine quantitative and qualitative research for presentations,

			digital projects, and academic publications
Microdegree in Data Science & Analytics (MCC)	• Data wrangling (cleaning and organizing data) • Python basics (reading and analysing datasets) • Statistics for beginners • Machine learning fundamentals • Dashboard design & ethics	• Entry-level Data Researcher • Digital Content Analyst • Academic Research Assistant • Graduate pursuing further study in data journalism, communication, or digital humanities	• Trains students to “read data like text,” spotting patterns and narratives in humanities datasets • Supports text mining, sentiment analysis, and cultural analytics • Integrates critical thinking with digital literacy for research in literature, media, and history

Proposed Budget (Total: USD 1800)

Item	Description	Amount (USD)
1. Coordinator Remuneration	Course design, coordination, evaluation supervision	250
2. Professor of Practice	Expert in interdisciplinary DH applications	300
3. Resource Persons from Industry	Sessions on AI ethics, cultural analytics, digital publishing	250
4. Resource Person from Department of Computer Science / MCA (MCC)	Technical workshops on ML, visualization, and coding support	200
5. Institutional Overhead (30%)	Administrative, logistical, and facility costs	540
6. Digital Humanities Laboratory	Equipment, lab setup, and maintenance	150
7. Software Purchase	Licenses for Tableau, Power BI, text-mining tools	110
Total		1800

Course Schedule & Faculty Allocation

Sl. No.	Day & Date	Topic	Handled by
1	Day 1 – Jan 26, 2026	Introduction to Digital Humanities: The intersection of Literature, Data, and Culture	Course Coordinator (English)
2	Day 2 – Jan 27, 2026	Python Basics & Text Data Structures for Literature	Faculty – Department of Computer Science (MCC)
3	Day 3 – Jan 28, 2026	Data Cleaning & Transformation for Literary Corpora	Professor of Practice (DH/AI Specialist)
4	Day 4 – Jan 29, 2026	Data Visualization I: Texts & Trends in Literature	Course Coordinator (English)
5	Day 5 – Jan 30, 2026	Data Visualization II: Storytelling through Literature Data	Industry Resource Person (Digital Publishing)
6	Day 6 – Feb 2, 2026	Descriptive & Inferential Statistics in Literary Studies	Professor of Practice (Data Science)
7	Day 7 – Feb 3, 2026	Hypothesis Testing & ML Introduction in Cultural Data	Computer Science Faculty (MCC)
8	Day 8 – Feb 4, 2026	Supervised Learning: Sentiment and Authorship Analysis	Industry Resource Person (AI in Humanities)
9	Day 9 – Feb 5, 2026	Unsupervised Learning: Topic Modelling in Literary Texts	Professor of Practice (Cultural Analytics)
10	Day 10 – Feb 6, 2026	Ethics in AI & Digital Humanities	Course Coordinator (English)
11	Day 11 – Feb 9, 2026	Data Engineering & Big Data for Cultural Archives	Computer Science Faculty (MCC)
12	Day 12 – Feb 10, 2026	Dashboards for Humanities Visualization (Tableau/Power BI)	Industry Resource Person (Data Visualization Expert)
13	Feb 11–13, 2026	Capstone Project & Presentation: Digital Storytelling in English Literature	Course Coordinator (English) + All Resource Persons