

Humanities Analytics (BHA Concentration)

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BHA Humanities Analytics Concentration

(81 units minimum)

The human experience that is traditionally at the core of a humanities education is being dramatically transformed by the emergence of big data, digital platforms, computational thinking, and digital connectivity. Spurred by such developments, the concentration in Humanities Analytics (HumAn), offered by the Department of English, trains students in the processes involved in analyzing, digitizing, quantifying and visualizing different types of humanities and cultural phenomena, including printed books, manuscripts, historical records, art, music and film. The HumAn concentration trains students to work with cultural objects (like texts, film, historical records, etc.) but also to turn words and images into data; to move from one cultural object (like a Victorian novel, for instance) to a corpus consisting of tens of thousands of other novels published in the same period, and to combine close reading with distant reading (aggregating and analyzing massive amounts of data) for maximum insight and accuracy.

Students will develop a broad technical understanding of state-of-the-art computer-assisted methods for humanistic study, such as: social network analysis, text analysis and data mining, topic modeling, classification techniques and visualization. Students will also investigate the histories and historical contexts of such methods, learning to consider their applicability in specific domains. Finally, students will learn to turn a critical eye on the corpora and infrastructures that increasingly underpin humanistic research.

Prerequisites

	Units
15-110 Principles of Computing	10
or 15-112 Fundamentals of Programming and Computer Science	
or 15-104 Introduction to Computing for Creative Practice	
or 76-388 Coding for Humanists	
or 88-300 Programming and Data Analysis for Social Scientists	

Required Courses (3 courses, 27 units)

76-275 Introduction to Critical Writing	9
76-380 Methods in Humanities Analytics	9
76-429 Introduction to Computational Humanities	9

Core Courses (2 courses, 18 units)

Choose two core courses from the following list:

76-314 Data Stories	9
76-425 Rhetoric, Science, and the Public Sphere	9
88-275 Bubbles: Data Science for Human Minds	9

Electives (4 courses, 36 units minimum)

Choose four courses from the following categories. One course must come from List A, two from List B, and the fourth in consultation with your Humanities Analytics advisor.

List A: One elective course relevant to digital and analytics methods (at least 9 units):

05-391 Designing Human Centered Software	12
05-434/11-344 Machine Learning in Practice	12
11-411 Natural Language Processing	12
11-441/741 Machine Learning with Graphs (Course is very mathematical, and is therefore appropriate only to students with such a preparation.)	9
16-223 IDEATe Portal: Creative Kinetic Systems	10
16-385 Computer Vision	12
17-450 Crafting Software	12
17-562 Computer and AI Law	9
36-202 Methods for Statistics & Data Science	9
36-204 Discovering the Data Universe	3
36-226 Introduction to Statistical Inference	9
36-311 Statistical Analysis of Networks	9
36-315 Statistical Graphics and Visualization	9
36-350 Statistical Computing	9
36-462 Special Topics: Statistical Machine Learning	9

62-150 IDEATe Portal: Introduction to Media Synthesis and Analysis	10
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List B: Two elective courses relevant to broad humanities expertise (at least 18 units):

76-210 Banned Books	9
76-245 Shakespeare: Tragedies & Histories	9
76-247 Shakespeare: Comedies and Romances	9
76-325 Intertextuality	9
76-339 Topics in Film and Media	9
76-373 Argument	9
76-476 Rhetoric of Science	9
79-175 Moneyball Nation: Data in American Life	9
79-200 Introduction to Historical Research & Writing	9
79-234 Technology and Society	9
80-180 Introduction to Linguistics	9
80-280 Linguistic Analysis	9
80-381 Meaning in Language	9
80-383 Language in Use	9
82-282 Interpreting Global Texts & Cultures	9
82-283 Language Diversity & Cultural Identity	9
82-383 Second Language Acquisition: Theories and Research	9
82-480 Translation Technologies	9

Note: Additional courses not on List A or List B may also be approved as electives; new courses are added every semester so please speak with Humanities Analytics advisor.