Washington University in St.Louis

Data Science in the Humanities

In response to increasing graduate involvement in the Humanities Digital Workshop (HDW) and its associated faculty-led projects, we offer a Graduate Certificate in Data Science in the Humanities (DASH), which combines traditional humanities inquiry with computational methods and analysis. All graduate students in the humanities, regardless of their home PhD program, are welcome to pursue this certificate. A data-driven approach can complement and enrich any humanities field, and the certificate features appreciable cross-disciplinary engagement. Recent HDW projects have been supervised by faculty in fields as diverse as History; Music; German; Jewish, Islamic and Middle Eastern Studies; East Asian Languages and Cultures; American studies; Philosophy-Neuroscience-Psychology; Women, Gender, and Sexuality Studies; and English. Our goals are to enrich the analytic skills that students can bring to bear on research in their home disciplines and to enable them to contribute thoughtfully and resourcefully in other disciplines of the humanities.

The curriculum is designed to enable students to think critically about digital culture and media and to apply emerging computational techniques to the study of the humanities. It combines training in data management, statistics, text analysis, geospatial analysis, digital prosopography, data visualization, and information design with courses that reflect critically on digital culture, algorithmic mediation, and forms of new media. The curriculum will acquaint PhD students with new techniques and methodologies and foster an awareness of their theoretical implications.

This certificate program is distinguished by its emphasis on collaborative research and pedagogical development. Students will participate on a faculty project in the HDW; most students fulfill this requirement through the HDW summer workshop, an eight-week program that pairs faculty with a small group of graduate and undergraduate fellows. The collaborative environment, combined with weekly project meetings and skills workshops, makes these immersive summer programs an unusual counterpoint to traditional graduate education. The DASH certificate also requires the 3-unit course IPH 590 Digital Humanities in the Classroom, ensuring that pedagogical development accompanies more traditional courses.

Application

Students interested in pursuing the DASH graduate certificate should contact the program director (jfloewen@wustl.edu?subject=DASH%20Grad%20Certificate). PhD students in good standing should apply before the end of their second year. Master's students are not eligible. Applicants should write a letter detailing their interest in data science or digital humanities as well as any relevant background; their letter should be supplemented by a letter of support from the director of graduate studies of their home doctoral program. In order to receive the DASH graduate certificate, students must fulfill all of the PhD requirements of their home department. The certificate is granted to the student upon completion of the PhD.

Contact: Joseph F. Loewenstein
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Faculty

Participating Faculty

Ama Bemma Adwetewa-Badu (https://artsci.wustl.edu/faculty-staff/ama-bemma-adwetewa-badu/)
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PhD, Cornell University

Jami Ake (https://iph.wustl.edu/people/jami-ake/)
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Assistant Professor of East Asian Languages and Cultures and of Film and Media Studies
PhD, University of California, Berkley

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Professor of German
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Associate Professor of French and of Global Studies
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Senior Lecturer of Mathematics
PhD, University of Chicago

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Professor of History and American Culture Studies
PhD, University of Virginia

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Assistant Director, Humanities Digital Workshop

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Assistant Professor of History
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Anika Walke (https://history.wustl.edu/people/anika-walke/)
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Georgie W. Lewis Career Development Professor

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Danielle Williams (https://iph.wustl.edu/people/danielle-williams/)
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Shirl Yang (https://iph.wustl.edu/people/shirl-yang/)
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PhD, University of Chicago

Degree Requirements

Graduate Certificate in Data Science in the Humanities

15 units are required to complete the DASH graduate certificate. Most students are able to count 6 units dually between the requirements of the certificate and the doctoral degree requirements. Students should consult with their doctoral advisor and the DASH graduate certificate advisor to determine which courses may be applied to both degrees.

To obtain the required 15 units, students must take the following:

DASH Core (at least 3 units and up to 7 units)

- IPH 530 Data Manipulation for the Humanities (1 unit)
- IPH 531 Statistics for Humanities Scholars: Data Science for the Humanities (3 units)
- IPH 532 Programming for Text Analysis (3 units)

Research via Internship (at least 2 units and up to 6 units)

- IPH 599 Internship in Digital Humanities (1-6 units)
  - This course may be repeated for up to 6 credits. Students intern on a faculty Digital Humanities research project through the Humanities Digital Workshop either during the academic year or in the summer.

DASH Pedagogy (3 units)

- IPH 590 Digital Humanities in the Classroom (3 units)
  - This requirement includes assisting in a course from the DASH core (see "Course Descriptions") or in IPH 3123 Introduction to Digital Humanities.

Electives:

If students do not earn the necessary 15 units within the courses listed above, the following electives may be taken to achieve 15 units:

Code	Title	Units
CSE 501N	Introduction to Computer Science	3
CSE 502N	Data Structures and Algorithms	3
Drama 506	Topics in Contemporary Arts Practice Research	3
E Lit 5110	Topics in Literature: The Novel and Globalization	3
Film 5425	Seminar in Video Games:Video Games, Gender and Sexuality	3
History 5887	Advanced Seminar: DIgital Frontiers in History	3
IPH 525	Humanities by the Numbers: Essential Readings in Digital Humanities	3