

How One University Is Reimagining a Humanities Ph.D. Program

By Kathryn Palmer | September 24, 2025

Carnegie Mellon is turning its literary and cultural studies Ph.D. program into one focused on computational cultural studies. The reframe comes as many humanities graduate programs face an uncertain future.



Carnegie Mellon University is tapping its strengths in computer and data science to reframe one of its humanities doctoral programs in hopes of preparing graduates to navigate an increasingly tough job market.

Starting next fall, the English department at the Pittsburgh-based institution will offer a Ph.D. in computational cultural studies, which it says is the first program of its kind in the country. The program will replace the traditional literary and cultural studies program and will train students to use computational methodologies to produce historical, theoretical and cultural scholarship.

Christopher Warren, head of CMU's English Department, said creating the program — which has already received dozens of applications — was like “combining peanut butter and chocolate” in an era marked by the integration of computer algorithms into nearly every aspect of daily life.

“Students frequently do best on the job market when they have the winds of the institutions at their backs,” he said. “Carnegie Mellon’s broader reputation in artificial intelligence and data science was the kind of thing people expected from our Ph.D. students anyway, though it hadn’t been baked into our curriculum.

So, we really wanted to lean into the reputation that the university already had and support students to make the most out of the full environment here.”

Students in the program will still take standard literature and cultural studies courses, but they’ll also be required to take two computation-focused courses — one in the English Department and one from an outside department — and complete a series of projects guided by computational experts.

Warren’s own work has employed machine learning and generative artificial intelligence to investigate the history of the free press and

social networks, but using computers to examine the past isn't the only approach students can take. They could also use computational methods to study the internet and digital culture and make sense of how contemporary algorithms are changing the human condition.

Regardless of the focus of their research, "no student will be able to leave the program without a strong grounding in using computers to ask and answer humanities questions," Warren said. "This is a change from a more traditional model of doctoral studies that tends to be more atomistic and individualistic, and instead starts from the assumption that folks are going to have to work together to ask and answer the most interesting questions of the moment."

But that doesn't mean the English Department is abandoning the current program's core focus on literature and culture.

"There's a common misconception that this is pushing us to sell out to computational studies, but it's not," Richard Scheines, dean of CMU's College of Humanities and Social Sciences, said. "It's just seeing if there's interesting tools that we can apply to some of the questions humanists are asking, but get much more robust answers from the data than we've had before."

Humanities at an Inflection Point

CMU's development of the interdisciplinary program comes at a nationwide inflection point for the humanities disciplines.

Over the past decade, humanities enrollments have declined, more and more tenure-track professors have been replaced by adjuncts, and budget cuts have forced many programs across the country to downsize or close altogether.

In 2023, West Virginia University eliminated numerous faculty positions and humanities programs, including all of its foreign language degree programs. In 2024, Boston University suspended admissions to its humanities and social sciences doctoral programs. And last month,

the University of Chicago paused new Ph.D. student admissions for the 2026–27 academic year across all arts and humanities departments except for philosophy and one program in the music department.

The share of humanities doctorate recipients with definite employment at the time of graduation dropped from 63 percent to 47 percent between 1990 and 2020, according to data from the American Academy of Arts & Sciences. In 2024, the group also found that only about 30 percent of English and history department chairs were optimistic about the future of their disciplines at their institutions.

And that was before President Donald Trump took office in January. Over the past nine months, his administration has slashed federal funding for humanities research and terminated thousands of grant projects that don't align with its conservative ideologies.

All of these changes mean there are fewer opportunities for humanities Ph.D.s to work in academia. Preparing doctoral students for jobs outside academe is something CMU is trying to address, both with the creation of its new computational cultural studies Ph.D. program and with a computational humanities certificate program that's open to all Ph.D. students.

"I don't know exactly where those jobs will be, but we've talked to a lot of companies who say they want people who know a little bit about computation and data but [also] have skills in communication, research and storytelling," Scheines said. "We need to be more explicit that the skills that we're teaching either directly or indirectly through the humanities and social sciences are crucial to people being great employees."

Paula Krebs, executive director of the Modern Language Association, said she expects graduates of the program will be in great demand — and not just at tech companies, many of which already employ humanists.

"All industries have the need to come to terms with their technology to figure out how it works in relation

to their product, service, customer base and constituents," she said. "As technology becomes more and more integrated into how we do business and interact with each other, there's a need for people who have skills in cultural and computational analysis. These graduates will be the translators, who enable companies to make ethical decisions and keep people in mind as they're making their technological choices."

Although some humanists may resist the idea of combining disciplines, Krebs said more and more are coming around to the idea that an interdisciplinary approach — such as the one guiding CMU's new program — is a useful way forward for humanities Ph.D. programs weathering turbulent times.

But CMU is far from the only institution working to chart a viable path.

Last month, the MLA, the American Historical Association, the Society of Biblical Literature and the American Council of Learned Societies launched the Doctoral Futures Initiative. Over the next three years, those academic societies will work with institutional leaders, faculty and current and recent doctoral students to reimagine humanities Ph.D. programs in an effort to help graduates thrive and attract more undergraduates to the field.

Part of that will involve fostering a broader public understanding of the value in studying the humanities, which are often criticized by students, parents and some politicians for not putting students on a clear path toward a particular job.

"We're thinking about how we can distribute historical thinking skills as widely as possible across as many sectors of industry as possible," said Matt Villeneuve, an assistant professor of history at the University of Wisconsin at Madison and member of the Doctoral Futures postdegree pathways subcommittee. "Because we believe that historical thinking skills are good for individuals and society. So why would we not want to deploy them as far and wide as possible?"