

## COMPUTATIONAL STUDIES OF CULTURE AND SOCIETY

<https://www.uvm.edu/ccp>

### OVERVIEW

Computational Studies of Culture and Society (CSCS) is an interdisciplinary doctoral program housed in the Graduate College, with a core curriculum offered through the College of Arts and Sciences and the College of Engineering and Mathematical Sciences, and drawing from faculty expertise across the university. The program responds to the growing demand for trained data scientists who understand and can solve complex, data-rich problems through a lens of critical engagement with the human experience. This program grounds students in the theories and methods of the arts, humanities, and social sciences alongside training in complex systems, preparing critical thinkers to engage with large-scale social problems using the tools of computational analysis. CSCS is designed for inquisitive and interdisciplinary thinkers who desire a doctoral program that will connect their computational aptitude with their curiosity for critical approaches in the humanities and social sciences. The CSCS Program provides a rich interdisciplinary grounding for such students seeking diverse careers in publicly-engaged fields and emphasizes critical analysis of power and social structures. It aims to train students who will apply their skills towards impactful, socially-engaged career trajectories in academia, industry, non-profit organizations, government, and beyond.

### DEGREES

Computational Studies of Culture and Society Ph. D.

### FACULTY

**Bose, Pablo Shiladitya**; Associate Professor, Department of Geography and Geosciences; PHD, York University  
**Cheney, Nicholas A.**; Research Assistant Professor, Department of Computer Science; PHD, Cornell University  
**Cope, Meghan S.**; Professor, Department of Geography and Geosciences; PHD, University of Colorado Boulder  
**Danforth, Chris**; Associate Professor, Department of Mathematics and Statistics; PHD, University of Maryland College Park  
**Dodds, Peter Sheridan**; Professor, Department of Computer Science; PHD, Massachusetts Institute of Technology  
**Eberhardt, Maeve**; Assistant Professor, Department of Romance Languages and Linguistics; PHD, University of Pittsburgh  
**Escaja, Tina Fernandez**; Professor, Department of Romance Languages and Linguistics; PHD, University of Pennsylvania  
**Gramling, Robert**; Associate Professor, Department of Family Medicine; MD, Dartmouth Medical School; DSC, Boston University  
**Harp, Randall**; Associate Professor, Department of Philosophy; PHD, Stanford University  
**Hébert-Dufresne, Laurent**; Associate Professor, Department of Computer Science; PHD, Université Laval, Québec, Canada  
**Kozelka, Ellen**; Assistant Professor, Department of Anthropology; PHD, University of California, San Diego

**Lovato, Juniper**; Research Assistant Professor, Department of Computer Science; PHD, University of Vermont  
**Mays, Kate**; Assistant Professor, Department of Community Development and Applied Economics; PHD, Boston University  
**McGowan, Abigail S.**; Associate Professor, Department of History; PHD, University of Pennsylvania  
**Nelson, Ingrid L.**; Assistant Professor, Department of Geography and Geosciences, PHD; University of Oregon  
**Zhang, Sam**; Assistant Professor, Department of Mathematics and Statistics; PHD, University of Colorado - Boulder

### Courses

#### CSCS 5990. Special Topics. 1-18 Credits.

See Schedule of Courses for specific titles.

#### CSCS 5991. Internship. 1-18 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### CSCS 5993. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### CSCS 5994. Teaching Assistantship. 1-3 Credits.

Student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion.

#### CSCS 5995. Graduate Independent Research. 1-18 Credits.

Student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### CSCS 6110. Ethics in Computational Hum. 3 Credits.

Introduces contemporary ethical and epistemological issues surrounding data, technology, and computational tools in modern society.

#### CSCS 6200. Qualitative Methods in CSCS. 3 Credits.

Covers various qualitative research techniques, as well as their relative strengths and weaknesses, appropriate applications, mixed-methods applications, and qualitative data analysis. Through readings and exploratory assignments, students develop critical thinking regarding the production of knowledge, the role of the researcher, and power and positionality. Students will identify evidentiary needs, collect, and analyze qualitative data.

#### CSCS 6391. Master's Thesis Research. 1-18 Credits.

Research for Master's Thesis.

#### CSCS 6990. Special Topics. 1-18 Credits.

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**CSCS 7010. Computational Hu&SocScI. 3 Credits.**

First of a two-semester sequence. Case studies cover computational approaches in humanities and social sciences as presented by faculty across the disciplines. Field trips to industry, non-profit and public sector sites highlight computational approaches in their day-to-day working contexts. Individual and paired assignments introduce ethical questions and epistemological debates.

**CSCS 7020. Computational Hu&SocScII. 3 Credits.**

Second of a two-semester sequence. Case studies cover computational approaches in humanities and social sciences as presented by faculty across the disciplines. Field trips to industry, non-profit and public sector sites highlight computational approaches in their day-to-day working contexts. Individual and paired assignments introduce ethical questions and epistemological debates.

**CSCS 7100. CSCS Professional Seminar. 3 Credits.**

Seminar honing an array of skill sets for successful completion of doctoral education and early career building in academia and beyond. Students practice professional writing and oral communication; learn about the peer-review process; gain skills for networking and presenting their work for public engagement; and develop a professional portfolio.

**CSCS 7491. Doctoral Dissertation Research. 1-18 Credits.**

Research for Doctoral Dissertation.

**CSCS 7990. Special Topics. 1-18 Credits.**

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**CSCS 7991. Internship. 1-18 Credits.**

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