GEORGE MASON UNIVERSITY

Interdisciplinary Studies

ACCELERATED MASTERS DEGREE

COMPUTATIONAL SOCIAL SCIENCE

Merging social science with computer programming and modeling

Program Highlights

Computational Social Science (CSS) is an interdisciplinary field in which current social science questions are investigated with modern computational tools. Mason's program was the first CSS MA in the world and continues to advance the study of social science through computational methods (e.g., agent-based modeling, social network analysis, and big data).

While some computer knowledge is useful, students in the CSS program are not expected to be programmers. A background in one of the social sciences, computer science, or engineering and undergraduate courses in these and related areas are preferred.

Besides taking introductory classes in theories and practices of social, geo-social, economic, and network modeling, you will have the opportunity to work one-on-one with faculty on your project or thesis of interest.

Graduates have gone on to pursue doctorates at Mason and top research universities. Others have pursued careers in government or the private sector, in organizations such as:

- the U.S. Army
- MapR Technologies
- CACI
- Logistics Management Institute
- DARPA
- Ninja Analytics, Inc.

For the most up-to-date accelerated masters application and degree requirements visit:
mais.gmu.edu/prospective/for-undergraduates

website: mais.gmu.edu
email: mais@gmu.edu

Degree Requirements - 36 Total Credits

CSS 600 Introduction to Computational Social Science - 3 Credits

CSS 605 Object-Oriented Modeling in Social Science - 3 Credits

CSS 610 Agent-based Modeling and Simulation - 3 Credits

Core Electives - 9 Credits

- The electives, chosen from a list, provide an understanding of the technical foundations and current work in at least two subfields of computational social science.

Research Course - 3 Credits

Electives - 9-12 Credits

- Electives credits are chosen from any Mason master's-level courses in computational social science, social science, computer science, computational science and informatics, statistics, or other quantitative methods.

MAIS 793 Integrated Learning Experience - 3 Credits

Capstone Project or Thesis (Optional) - 3 Credits

Accelerated Masters Classes

Advanced Standing Courses

Up to 12 credits, with a minimum grade of B in each; courses listed are 3 credits unless otherwise noted

CSS 600 Introduction to Computational Social Science
CSS 605 Object-Oriented Modeling in Social Science
CSS 610 Agent-based Modeling and Simulation
CSS 620 Origins of Social Complexity

Reserve Graduate Credit Courses

Up to 6 credits, taken while an undergraduate, and will only apply to the graduate degree program

CSS 600 Introduction to Computational Social Science
CSS 605 Object-Oriented Modeling in Social Science
CSS 610 Agent-based Modeling and Simulation
CSS 620 Origins of Social Complexity
CSS 625 Complexity Theory in the Social Sciences
CSS 645 Spatial Agent-Based Models of Human-Environment Interactions
CSS 692 Social Network Analysis

MAIS: A Master's With A Mission

The Interdisciplinary Studies (MAIS) program in the College of Humanities & Social Sciences consists of multiple established degree paths that exist in partnership with academic units and faculty across the University. It offers a home for students with broad academic interests who seek a master's degree to help them to create a better world. While their degree paths may vary dramatically, our students share a desire to address critical problems facing the world today.

Available Degree Paths

Computational Social Science - Energy and Sustainability
Individualized Studies - Religious Studies - Social Entrepreneurship
Social Justice and Human Rights - War and the Military in Society
Women and Gender Studies