REGIONAL SCIENCE (GRADUATE FIELD)

Program Website (http://aap.cornell.edu/academics/crp/graduate/regional-science)

Field Description

The Ph.D. program is designed to provide students with a thorough understanding of regional, interregional, location, and conflict theory in the context of physical and policy spaces and the framework of existing economic, social, and political systems. Students master techniques of analysis of urban-regional systems as they relate to public and private decision making, with heavy emphasis on mathematical models and quantitative methods. Students are fully exposed to the existing and newly developing social science theory that directly relates to the multidisciplinary approach of regional science.

Course offerings focus on the socioeconomic aspects of the physical environment and on the spatial and conflict aspects of socioeconomic systems. Students may ask any member of the Graduate Faculty to serve on their special committee. The chairperson must be a member of the field of regional science.

Applicants to the master's degree program who have an appropriate and strong background in quantitative methods and economics may, with a very focused program of study, be able to complete their coursework in the minimum two semesters. Applicants lacking this background, or those seeking a more broadly based education in regional science, should expect to spend up to four semesters in residence for the master's degree.

Data and Statistics

- Research Master's Program Statistics (https://gradschool.cornell.edu/about/program-metrics-assessments-and-outcomes/research-masters-program-statistics/?SelectGradField=92)
- Doctoral Program Statistics (https://gradschool.cornell.edu/about/program-metrics-assessments-and-outcomes/doctoral-program-statistics/?SelectGradField=92)

Degree Programs

- Regional Science (MS) (https://catalog.cornell.edu/programs/regional-science-ms/)
- Regional Science (PhD) (https://catalog.cornell.edu/programs/regional-science-phd/)

Concentrations by Subject

Regional Science

- environmental studies
- international spatial problems
- location theory
- multiregional economic analysis
- peace science
- planning methods
- urban and regional economics

Faculty

Jenny Carson Aker (https://cals.cornell.edu/people/jenny-aker)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: urban and regional economics
- **Research Interests**: Development and agricultural economics

C. Lindsay Anderson (http://cals.cornell.edu/c-lindsay-anderson)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies
- **Research Interests**: renewable energy integration, bioenergy production, system simulation and optimization

Arnab Basu (http://dyson.cornell.edu/people/profiles/basu.php)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: international spatial problems; multiregional economic analysis; planning methods; urban and regional economics
- **Research Interests**: Development Economics, International Trade and Labor Economics

Kaushik Basu (http://economics.cornell.edu/kaushik-basu)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: urban and regional economics

Andrew Reid Bell (https://cals.cornell.edu/people/andrew-reid-bell)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies; international spatial problems
- **Research Interests**: Water and irrigation management and governance, natural resource management, human-environment problem solving, migration and mobility, agent-based modeling, behavioral experiments and games

Nancy Brooks (http://aap.cornell.edu/people/nancy-brooks)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: urban and regional economics
- **Research Interests**: environmental economics; public economics

John Carruthers (http://aap.cornell.edu/people/john-carruthers)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies; international spatial problems; multiregional economic analysis; planning methods; urban and regional economics
- **Research Interests**: urban and regional economics, sustainable urban development, environmental quality of life, economic geography, geospatial and economical analysis

Suzanne Lanyi Charles (http://aap.cornell.edu/people/suzanne-lanyi-charles)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: urban and regional economics
- **Research Interests**: residential redevelopment, neighborhood change, gentrification, suburban development/redevelopment

Ho Yan (Nancy) Chau (http://dyson.cornell.edu/people/profiles/chau.php)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: international spatial problems; multiregional economic analysis; urban and regional economics
- **Research Interests**: international development; public affairs

Ricardo Alvarez Daziano (http://www.cee.cornell.edu/faculty-directory/ricardo-daziano)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies; planning methods; urban and regional economics
- **Research Interests**: Microeconometrics for transportation data analysis; adoption of technological innovation and sustainable energy.

Brian Dillon (http://dyson.cornell.edu/faculty-research/faculty/bmd28/)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: multiregional economic analysis; urban and regional economics
- **Research Interests**: development economics, agricultural economics, and applied economics

Kieran P. Donaghy (http://aap.cornell.edu/people/kieran-donaghy)

- **Campus**: Ithaca - (Graduate School Professor)
- **Concentrations**: *Regional Science*: environmental studies; international spatial problems; location theory; multiregional economic analysis; planning methods; urban and regional economics
- **Research Interests**: urban and regional modeling; dynamic game theory; transportation modeling; continuous-time econometrics

H. Oliver Gao (http://www.engineering.cornell.edu/faculty-directory/h-oliver-gao)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies
- **Research Interests**: infrastructure, systems, environment, and public health

Raymond Richard Geddes (http://www.human.cornell.edu/people/rrg24)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: urban and regional economics
- **Research Interests**: Infrastructure funding and financing, public-private partnerships, corporate governance, public utility regulation, postal and delivery economics, economics of women's property rights, antitrust law and economics

Carla P Gomes (http://infosci.cornell.edu/content/gomes)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: multiregional economic analysis; planning methods
- **Research Interests**: applied economics and quantitative analysis

Mario Herrero Acosta (http://cals.cornell.edu/mario-herrero)

- **Campus:** Ithaca
- **Concentrations:** *Regional Science:* environmental studies
- **Research Interests:** climate mitigation and adaption, agri-food and livestock systems, sustainability and environmental analyses

Sanjiv (Ravi) Kanbur (http://dyson.cornell.edu/people/profiles/kanbur.php)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: international spatial problems; multiregional economic analysis
- **Research Interests**: economic development; income distribution

Nicholas Klein (http://aap.cornell.edu/people/nicholas-j-klein?department=15)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: planning methods
- **Research Interests**: planning methods and transportation planning

Chuan Liao (http://cals.cornell.edu/chuan-liao)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies; international spatial problems
- **Research Interests**: Agriculture and Rural development, Food Security, Africa, Economic Development

Madison Lore (http://aap.cornell.edu/people/madison-lore/)

- **Campus:** Ithaca
- **Concentrations:** *Regional Science:* environmental studies; planning methods
- **Research Interests:** urban analytics, sustainability, infrastructure planning, social policy, machine learning

Jennifer S. Minner (http://aap.cornell.edu/people/jennifer-minner)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: planning methods
- **Research Interests**: land use planning methods, participatory and analytical geographic information systems, scenario planning, conservation and sustainable adaption of the built environment, mega events

Steven A. Osofsky (http://www.vet.cornell.edu/research/faculty/steven-osofsky)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Regional Science*: environmental studies
- **Research Interests**: wildlife health, conservation; one health; planetary health; biodiversity, sustainable agriculture & conservation; rural development; science policy; conservation of free ranging wildlife; system resilience

Eleonora Patacchini (http://economics.cornell.edu/eleonora-patacchini)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: urban and regional economics
- **Research Interests**: regional and urban economics, labour economics, political economy, social networks and financial networks, economics of ethnic minorities, integration patterns in Europe, economics of culture and institutions, crime, gender, economics of education,

computational economics, policy evaluation, experimental and behavioral economics in the labour market

Patrick M. Reed (http://www.cee.cornell.edu/faculty-directory/patrick-michael-reed)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies; planning methods
- **Research Interests**: water resources, decision making under uncertainty, multi-objective programming, infrastructure planning

David G Rossiter (http://www.css.cornell.edu/faculty/dgr2/)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Regional Science*: environmental studies
- **Research Interests**: spatial statistics, soil-landscape relations, soil survey interpretations

Stephan J. Schmidt (http://aap.cornell.edu/people/stephan-schmidt)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies; international spatial problems
- **Research Interests**: environmental studies and international spatial problems

David B Shmoys (http://infosci.cornell.edu/content/shmoys)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: location theory; planning methods; urban and regional economics
- **Research Interests**: data-driven decision making and data science more generally, especially in context of the issues of urban mobility

Richard C. Stedman (https://cals.cornell.edu/richard-c-stedman)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies; location theory
- **Research Interests**: Sense of place, community well being, energy transitions, environmental conflict

Kurt B. Waldman (https://cals.cornell.edu/people/kurt-waldman)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: environmental studies; international spatial problems
- **Research Interests**: Judgment and decision making related to climate adaptation, food security and environmental sustainability

Mildred Elaine Warner (http://aap.cornell.edu/people/mildred-warner)

- **Campus**: Ithaca
- **Concentrations**: *Regional Science*: planning methods; urban and regional economics
- **Research Interests**: government finance and policy; economic development; privatization; spatial inequality