GEODESIGN

This interdisciplinary major is offered by the Dornsife College of Letters, Arts and Sciences, the Price School of Public Policy, and the School of Architecture. It engages students in the acquisition, analysis, and visualization of spatial information set in the context of the built environment and policy. The underlying spatial principles can be used to support sustainable planning, infrastructure management, the design of healthy communities, and address the impact of population growth on the environment.

Opportunities for Students

- **GIS Research Laboratory**: This lab seeks to develop cutting edge geographic analysis tools and to apply those tools in ways that increase our knowledge of the built and natural environments while training the next generation of geographic information scientists and promoting the utilization of geographic information science concepts and technologies throughout the academy.

- **Study Abroad**: Travel to Amsterdam to study the integration of land management, transportation systems, ecological conservation through USC Dornsife’s Problems Without Passports programs.

- **Capstone Course**: All students take four units of a capstone experience during their senior year, which requires them to use their knowledge and skills on a real project with a real client.

- **Honors Program**: Students can receive a degree by having a 3.7 GPA in department courses at the time of graduation and completing an honors research project or thesis under the guidance of a faculty member.

Notable Courses

- **SSCI 301: Maps and Spatial Reasoning** — Role of maps and spatial reasoning in the production and use of geographic information for representing and analyzing human and environmental activities and events.

- **SOCI 331: Cities** — Organization of urban society, including such topics as segregation, urban decay, local politics, residential change, and community conflict.

- **HIST 347: Urbanization in the American Experience** — The American city in interdisciplinary perspective; emphasis on growth and change in relation to architecture, urban planning, demography, and ethnic politics.

- **POSC 363: Cities and Regions in World Politics** — Cities and the rise of states; globalization and localization; federalism and decentralization; comparative politics of urban regions in developed and developing countries.
Bachelor of Science (BS) Requirements

Pre-Major Requirements*
- ECON 203: Principles of Microeconomics
- MATH 116: Mathematics for the Social Sciences

Core Requirements*
- ARCH 203: Visualizing and Experiencing the Built Environment
- ARCH 303: Principles of Spatial Design I
- ARCH 403: Principles of Spatial Design II
- PPD 227: Urban Planning and Development
- PPD 417: History of Planning and Development
- PPD 425: Designing Livable Communities
- SOCI 314: Analyzing Social Statistics
- SSCI 301: Maps and Spatial Reasoning
- SSCI 382: Principles of Geographic Information Science
- SSCI 483: Spatial Science Practicum

Major Electives (select six total)*

Group A: Built Environment (select at least two)**
- ARCH 432: People, Places, and Culture — Architecture in the Public Realm
- HIST 347: Urbanization in the American Experience
- POSC 363: Cities and Regions in World Politics
- SOCI 331: Cities

Group B: Design, Analysis, and Computation (select at least two)**
- ANTH 481: GIS for Archaeologists
- FADN 102: Design Fundamentals
- HIST 493: Quantitative Historical Analysis
- SOCI 365: Visual Sociology of the Urban City and Its Residents

Capstone Course*
- SSCI 412: GeoDesign Practicum

*This information is offered as a partial overview only. For additional information, including all major requirements, please consult the USC Catalogue or http://spatial.usc.edu/index.php/undergraduate-programs/geodesign/. Updated as of August 2015.

**This does not represent all options in this category. For a complete list, please consult the USC Catalogue.