Graduate Certificate in Geographic Information Science and Technology - GIST
PROGRAM STATEMENT 2017-18

Overview
The Graduate Certificate in Geographic Information Science and Technology (GIST) provides an academic structure for an interdisciplinary exchange of ideas around geospatial information and analysis. Geographic information science and technology, along with geostatistics and analysis of satellite imagery, have emerged as major cross-disciplinary tools used in academic research, industrial applications, and public policy analysis.

The GIST enables specialized, multidisciplinary training and research opportunities in various emerging areas of geospatial information science and technology. Certificate students will not only participate in a cutting-edge program and receive explicit recognition of specialization in GIST by virtue of the Graduate Certificate but will be well positioned to compete for the most desirable jobs in geospatial technology, both in academia and in industry.

The program is hosted by the Department of City and Regional Planning and governed jointly by the deans of the College of Environmental Design, College of Natural Resources, and College of letters and Science, Division of Social Science.

If you have any questions, please contact DCRP Graduate Student Affairs Officer, Kathleen Pera: kpera@berkeley.edu and 510-643-9440.

Eligibility
Applicants must be registered and enrolled in a UC Berkeley graduate program during the academic year. All applicants in good academic standing (GPA of 3.0 or better) are eligible to apply.

Application Process
Students must submit a GIST Application for Admission no later than ONE MONTH prior to the LAST DAY of the fall OR spring semester, and at least ONE SEMESTER PRIOR to graduation. No applications will be accepted in the student’s last semester of study.

The GIST Application for Admission signals a student’s INTEREST in the GIST, but does NOT guarantee that the certificate will be awarded and does NOT guarantee a seat in GIST-approved courses.

Completion Process
Students must submit a GIST Completion Form no later than ONE MONTH prior to the LAST DAY of the student’s FINAL semester of their graduate program. Completion of the GIST will be noted in the MEMORANDUM section of a student’s official transcript (not on the diploma).

NOTE: Students who wish to petition to SUBSTITUTE course(s) must complete a GIST Course Substitution Petition for each course BEFORE submitting their completion form. The submission of a petition does NOT guarantee that the faculty oversight committee will approve the petition.
CERTIFICATE REQUIREMENTS

1) COURSEWORK
Graduate students are required to take at least three courses, or a total of 90 hours of instruction, and earn a minimum grade of B in all certificate coursework. All coursework must be taken for a letter grade and within the timespan of their current graduate program. No coursework taken prior to the official start date of the student’s current graduate program will be accepted towards fulfilling the coursework requirement. Students will select courses from the list below; two of the three courses should be taken outside of their home department.

GIST Approved Courses
Below is the approved course list for the GIST. The courses listed in GREEN are available for SPRING 2018.
- **CIV ENG 263N** (F) – Scalable Spatial Analytics
- **CY PLAN 204C** (SP) – Introduction to GIS and City Planning
- **CY PLAN 255** (F) – Urban Planning Applications of Geographic Information Systems
- **ESPM 164** (F) – Geographic Information Systems for Environmental Science and Management
- ESPM C177/LD ARCH C177 (SP) - GIS and Environmental Spatial Data Analysis
- ESPM 210 (SP) - Spatial Data Analysis for Natural Resources
- **ESPM 244** (F/SP) - Spatial Ecology
- ESPM 271 (F) – Advanced Remote Sensing of Natural Resources
- GEOG C188/LD ARCH C188 (SP) - Geographic Information Systems
- GEOG 228 (SP) – Spatial Simulation Modeling
- GEOG 254 (F) – Topics in GIS: Seeing Geographically: Reimaging Mapping
- GEOG 282 (SP) – Advanced Remote Sensing of Natural Resources
- **GEOG 285 (SP)** – Topics in Earth System Remote Sensing
- **LD ARCH 221 (SP)** – Quantitative Methods in Environmental Planning
- **LD ARCH 289 (SP)** – Applied Remote Sensing
- PB HLTH 272A (SP) – Geographic Information Science for Public and Environmental Health
- **PUB POL 275** (F) – Spatial Data Analysis

Course Substitutions
Students who wish to petition to SUBSTITUTE course(s) must complete a GIST Course Substitution Petition for each course BEFORE submitting their completion form. The submission of a petition does NOT guarantee that the faculty oversight committee will approve the petition.

2) GEOLUNCH SEMINAR SERIES
Graduate students must complete at least one semester of the Geolunch seminar series and earn a minimum grade of B. The Geolunch is offered every fall and spring semester. Please use the information below to register for SPRING.
- Course: **ESPM 290 008 - Special Topics in Environmental Science, Policy, and Management**
3) **OPTIONAL WORKSHOPS**
Graduate students are encouraged to take at least two Geographic Innovation Facility workshops.