ESTABLISHING A B.S. IN GEODESIGN TO FOSTER INTERDISCIPLINARY COLLABORATION

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Founding Director, Spatial Sciences Institute

Visiting Professor, Chinese Academy of Sciences

Geodesign Summit
28 January, 2016
Spatial Sciences Institute

- Established 1\textsuperscript{st} July, 2010
- Rapid growth
- People
  - 15 core faculty
  - 21 faculty affiliates
  - 7 staff
- Facilities
  - Faculty & staff offices
  - Dedicated classrooms & laboratories
  - Large computing infrastructure
- Substantial research enterprise
- Full suite of academic programs
B.S. in Geodesign

USC School of Architecture

USC Price
Sol Price School of Public Policy

USC Dornsife
Dana and David Dornsife
College of Letters, Arts and Sciences
Geodesign Curriculum

- Economics | Mathematics | Sociology
  (12)

- Planning

- Spatial

- Design

- Built Environment
  - Architecture
  - History
  - Political Science
  - Policy, Planning & Development
  - Sociology
  (28)

- Design, Analysis & Computation
  - Anthropology
  - Architecture
  - Fine Arts & Design
  - History
  - Policy, Planning & Development
  - Sociology
  (36)

- Geodesign Practicum
  (4)
# Geodesign Core

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<td>ARCH 203 – Visualizing and Experiencing the Built Environment</td>
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PPD 417: HISTORY OF PLANNING AND DEVELOPMENT

PPD 227: URBAN PLANNING AND DEVELOPMENT

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Spatial Sciences Institute
SSCI 301: MAPS AND SPATIAL REASONING
Ziyu Ouyang / Understanding Place through Experience and Analysis / 2015
ARCH 403: PRINCIPLES OF SPATIAL DESIGN II

LEGEND
- R2500 - Medium Density Residential
- SMFU - Commercial/Residential Mixed Use
- IMU - Industrial/Commercial Mixed Use
- C3 - Commercial Service
- SR - Special Recreation
- CC + T - Community Center + Transportation

Axonometric Map
Developing plan and project ideas for recovery of endangered Palos Verdes blue butterfly for an external client, the Disney Conservation Fund.
**Student Response**

SSI Majors and Minors

- First major for 9 students
- 25 students changed majors
  - ANTH, ARCH, ASTE, BISC, CHEM, ENGL, ENGR, HBIO, MUSC, PHYS, PLUS, SOCI

**Scholarships & Honors**

- 2 Trustee, 3 Presidential, & 2 Dean’s Scholars
- 14 students made Dean’s List in Fall 2015
Enduring Challenges

- Planning and coordination
  - Class scheduling
  - Faculty coordination
  - **Team teaching**
  - Progressive degrees

- Facilities
  - New collaborative classroom
  - Large and diverse computing infrastructure

- Geodesign as a collaborative, socio-political process
  - Teach across several disciplines & spatiotemporal scales
  - Teach & support new workflows
  - Promote community engagement
Geodesign …

- Has the capacity to shift GIS to a whole new approach, one oriented toward collaboration, creation, imagination, experimentation, and with a view towards applying knowledge in a forward looking manner

- The GIS, itself, would then fade into background …
SSCI 350: International Geodesign

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