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

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Visiting Professor, Chinese Academy of Sciences

Geodesign Summit

28 January, 2016
Spatial Sciences Institute

- Established 1st 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
Geodesign Curriculum

- Economics | Mathematics | Sociology
- Planning
- Spatial
- Design
- Built Environment
  - Architecture
  - History
  - Political Science
  - Policy, Planning & Development
  - Sociology
- Design, Analysis & Computation
  - Anthropology
  - Architecture
  - Fine Arts & Design
  - History
  - Policy, Planning & Development
  - Sociology
- Geodesign Practicum

(12) (36) (28) (4)
# Geodesign Core

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<th>Planning</th>
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<tbody>
<tr>
<td>PPD 227 – Urban Planning and Development</td>
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<td>PPD 417 – History of Planning and Development</td>
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<td>PPD 425 – Designing Livable Communities</td>
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<td>SSCI 301 – Maps and Spatial Reasoning</td>
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<td>SSCI 382 – Principles of Geographic Information Science</td>
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<td>SSCI 483 – Spatial Science Practicum</td>
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<td>ARCH 203 – Visualizing and Experiencing the Built Environment</td>
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<td>ARCH 303 – Principles of Spatial Design I</td>
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SSCI 301: MAPS AND SPATIAL REASONING
Ziyu Ouyang / Understanding Place through Experience and Analysis / 2015

ARCH 303: PRINCIPLES OF SPATIAL DESIGN I
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

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

- Geodesign as a collaborative, socio-political process
  - Fuse 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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