

Introduction to geodesign: methods and applications.

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After an introductory seminar on geodesign methods, we will work on a geodesign multi-sessions workshop using data from a real-world strategic planning case study. For this workshop we will be using Geodesignhub (www.geodesignhub.com). The software is a digital web based collaborative planning support system (PSS). The geodesign workflow enables the application of system-thinking and real-time impact assessment, to support the rapid creation of conceptual designs to address large and complex geodesign problems, through collaborative design crowdsourcing, alternative scenarios generation, and negotiation towards consensus. It is designed to foster collaboration among planners, sector experts, and their clients, and negotiation among stakeholders, especially during the early stages of design in strategic planning. The workshop model was applied many times in research, education, and practice. The latter real-world planning applications include, among others, strategic tourism planning, metropolitan strategic planning, grass-root residents' design, urban regeneration, and climate planning, which will be presented in the program before testing the full geodesign workflow.

Keywords: Geodesign, Strategic Planning, Co-design, Negotiation, Impact Assessment

Please note: for a full learning experience for all, participants are required to attend the geodesign workshop in its full 3-sessions duration, on:

- 1) 21 January 2025 h: 16:30-18:30
- 2) 23 January 2025 h: 11:15-13:15
- 3) 23 January 2025 h: 14:15-16:15

Equipment: Please bring your laptop computer and have Google Chrome or Mozilla Firefox installed and updated.

Suggested Readings

- **Books**
 - Steinitz C (2012) A framework for Geodesign: changing geography by design. Esri press, Redlands CA
- **Paper collection**
 - Landscape and Urban Planning journal, Special Issue: Geodesign—Changing the world, changing design Edited by Steiner Frederick R., Shearer Allan W. Volume 156, Pages 1-128 (December 2016), Elsevier
- **Other papers**
 - Araújo, R.P.; Moura, A.C.M.; Nogueira, T. Creating Collaborative Environments for the Development of Slum Upgrading and Illegal Settlement Regularization Plans in Brazil: The Maria Tereza Neighborhood Case in Belo Horizonte. *International Journal of E-Planning Research (IJEPR)* 2018, 7, 25–43.
 - Campagna, M., di Cesare, E. A., Matta, A., & Serra, M. (2022). Bridging the Gap Between Strategic Environmental Assessment and Planning. 113–135. <https://doi.org/10.4018/978-1-7998-9090-4.CH006>
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 - Campagna, M. (2022). Geodesign in the Planning Practice: Lessons Learnt from Experience in Italy. *Journal of Digital Landscape Architecture*, 2022(7), 496–503. <https://doi.org/10.14627/537724048>
 - Campagna, M. (2022). Geodesign Iterations: Relevance for Planning Research, Education, and Practice. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 13379 LNCS, 181–193. https://doi.org/10.1007/978-3-031-10545-6_13
 - Campagna, M.; Di Cesare, E.A.; Cocco, C. Integrating Green-Infrastructures Design in Strategic Spatial Planning with Geodesign. *Sustainability* 2020, 12, 1820. <https://doi.org/10.3390/su12051820>
 - Cocco, C.; Jankowski, P.; Campagna, M. An Analytic Approach to Understanding Process Dynamics in Geodesign Studies. *Sustainability* 2019, 11, 4999. <https://doi.org/10.3390/su11184999>
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 - Nyerges, T.; Ballal, H.; Steinitz, C.; Canfield, T.; Roderick, M.; Ritzman, J.; Thanatemanerat, W. Geodesign dynamics for sustainable urban watershed development. *Sustainable Cities and Society* 2016, 25, 13–24.
 - Pettit, C. J., Hawken, S., Ticzon, C., Leao, S. Z., Afrooz, A. E., Lieske, S. N., ... Steinitz, C. (2019). Breaking down the silos through geodesign – Envisioning Sydney's urban future. *Environment and Planning B: Urban Analytics and City Science*, 46(8), 1387–1404. <https://doi.org/10.1177/2399808318812887>
 - Rivero, R.; Smith, A.; Ballal, H.; Steinitz, C. Promoting collaborative Geodesign in a multidisciplinary and multiscale environment: Coastal Georgia 2050, USA. *Digital Landscape Architecture* 2015, 1, 42–58.