

DATA SCIENCES AND OPERATIONS

FALL 2023

DSO 521 – *Smart City Tactics, Technologies, and Operations*

Professor

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Email

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When

Mondays – 6:30 to 9:30PM

Office

TBD

Units

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WHY TAKE THIS COURSE?

Learn to apply digital strategy, modern technologies, and organizational change to the real-world using smart cities! Whether looking to work in private sector, government, or a nonprofit, this multi-disciplinary course combines modern best practices across IT, digital strategy, data analytics, operations, organizational change, urban planning, and emerging tech with global city challenges. No programming or technical prerequisites.

COURSE OBJECTIVES

1. Define what a Smart City is, including its various technology components & integrations.
2. Apply modern digital transformation techniques to large, complex ecosystems and organizations.
3. Describe national and global Smart City use cases for modern urban challenges, such as public safety, transportation, utilities, sustainability, etc.
4. Work as a team to identify, analyze, and solve an urban problem using Smart City technologies.
5. Develop personal skills in consulting, marketing, or building tech in the global smart city industry.

KEY CONCEPTS

- Smart cities provide unparalleled tools to improve quality of life, equality, democracy, and economic prosperity.
- Smart cities transform citizen experiences through smart infrastructure, data, digital services, digital inclusion, and governance.
- More than just technology, smart cities require strategy and organizational change.
- Los Angeles is transforming itself to host the 2028 Summer Olympics.
- Smart cities spend \$124+ Billion a year globally on tech & consulting (IDC, 2020).

COURSE DESCRIPTION

This class is about the tactical planning, implementation, and digital transformation of the communities where we live, work, and play (aka the Smart City). This class will dissect the various components of Smart City technologies (infrastructure, data, digital services, etc), review Smart City technology use cases, discuss strategies for digital transformation in large ecosystems, and detail organizational change methods necessary to navigate complex political and organizational challenges. As smart city technology spending is more than \$124 Billion per year globally, this class will also cover practical opportunities for students on how to consult, market, or sell to smart cities. This interdisciplinary class is a real-world intersection of technology, digital strategy, and the world in which we live, making it applicable to multiple student industries and areas of interest. No programming or technical prerequisites required.