### **URBAN ANALYTICS**

### Overview

### PROGRAM INFORMATION

The Master of Science (M.S.) with a major in Urban Analytics program at the University of Florida is designed to equip students with a strong foundation in computing, data analysis and visualization skills for urban science. What sets our program apart is its focus on artificial intelligence with an interdisciplinary support, offering a holistic perspective that goes beyond the limitations of single-discipline urban analytics degrees.

The 36-credit, two-year degree program will offer students a variety of courses in different clusters about urban and regional planning theory (6 credits required), methods (9 credits required), data science (3 credits required), Artificial Intelligence (9 credits required) and database (3 credits required) in collaboration with departments in the College of Engineering. Incoming students will begin the program in the fall semester. Based on their terminal project topic, each student will enroll in URP 6979 for their 6 credits of master's research project.

Each student will develop a solid base of understanding for data science and AI technologies and have a strong domain knowledge in urban studies and urban planning, understand social justice and equity, become an expert in their chosen field of research, and develop the skills necessary to pursue an independent research and practice agenda in both academia and industry.

Upon completion of this degree, students will be able to think critically and apply AI and Machine Learning methodologies to complex spatial analysis and environmental, and urban planning problems, and integrate technologies with analysis.

For more information, please see our website:https://dcp.ufl.edu/urp/urban-analytics/

### **Degrees Offered**

# DEGREES OFFERED WITH A MAJOR IN URBAN Analytics

· Master of Science

#### Courses

## URBAN AND REGIONAL PLANNING DEPARTMENTAL COURSES

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URP 6271	Automation for Geospatial Modeling and Analysis	3
URP 6272	Urban Spatial Analysis	3
URP 6274	GPS for Planners: Introduction to Global Positioning System	1
URP 6275	Intermediate Planning Information Systems	3
URP 6276	Internet Geographic Information Systems	3
URP 6277	Land Use Visioning and Analysis	3
URP 6278	Web Mapping and Visualization	3
URP 6280	3D Geospatial Modeling and Visualization	3
URP 6341	Urban Planning Project	1-12
URP 6409	Sustainable Community Development	3
URP 6421	Environmental Land Use Planning and Management	3
URP 6424	Sustainable Urbanism in the Americas	3
URP 6428	Advanced Environmental Planning	3
URP 6429	Natural Resources Planning and Management	3
URP 6445	Planning for Climate Change	3
URP 6526	Health and the Built Environment	3
URP 6541	Economic Development Planning	3
URP 6542	Urban Land Economics	3
URP 6603	Development Review	3
URP 6610	International Development Planning	3
URP 6645	Sustainable Urbanism in Europe	3
URP 6646	International Perspectives in Urban and Regional Planning	3
URP 6711	Transportation and Land Use Coordination	3
URP 6716	Transportation Policy and Planning	3
URP 6743	Affordable Housing Law	3
URP 6745	Housing, Public Policy, and Planning	3
URP 6821	Transportation and Land-Use Modeling	3
URP 6855	Urban Form in Cities throughout the Americas	3
URP 6871	Planning and Design I	3
URP 6872	Planning and Design II	3
URP 6880	Defensible Space and CPTED in Urban Design	3
URP 6887	Advanced Defensible Space in Urban Design	3
URP 6905	Exploration and Directed Study	1-4
URP 6910	Supervised Research	1-5
URP 6920	Colloquium	1
URP 6931	Topical Seminar	1-4
URP 6941	Urban Planning Internship	1-3
URP 6971	Research for Master's Thesis	1-15
URP 6979	Master's Research Project	1-6

# COLLEGE OF DESIGN, CONSTRUCTION, AND PLANNING COURSES

Code	Title	Credits
DCP 6205	Ecological Issues in Sustainability and the	3
	Built Environment	
DCP 6212	Sustainable Design Issues: Ecology,	4
	Architecture, and Planning	
DCP 6217C	WELL Building Strategies (WELL Practicum)	6
DCP 6218	Developing Sustainable Projects	3
DCP 6221	Economics of Sustainability in the Built	3
	Environment	
DCP 6230	Integrated Sustainable Development Studio	6
DCP 6301	Sustainable Planning and Design Studio	6
DCP 6701	World Heritage Research and Stewardship	3
DCP 6710	History and Theory of Historic Preservation	3

DCP 6711C	Built Heritage: History and Materials Conservation I	3
DCP 6712C	Built Heritage: History and Materials Conservation II	3
DCP 6714C	Built Heritage Documentation I	3
DCP 6715	Built Heritage Documentation II	3
DCP 6716	Cultural Resource Management	3
DCP 6718	Current Topics in Historic Preservation	3
DCP 6730	Preservation Policy	3
DCP 6905	Independent Study	1-3
DCP 6931	Special Topics in Design, Construction, and Planning	1-4
DCP 6943	Cultural Resource Survey	3
DCP 6971	Research for Master's Thesis	1-9
DCP 6979	Master's Research Project	1-6
DCP 7790	Doctoral Core 1: Paradigms and Theories of Inquiry	3
DCP 7794	Doctoral Core 4: Research Assessment and Professional Preparation	1
DCP 7911	Doctoral Core 2: Foundations of Research Design and Methodologies	3
DCP 7940	Supervised Teaching	1-3
DCP 7949	Professional Internship	1-5
DCP 7979	Advanced Research	1-12
DCP 7980	Research for Doctoral Dissertation	1-15
DCP 7981	Doctoral Core 3: Academic Writing for Publication	3