URBAN DESIGN- FUTURE CITIES (MUD) (MS)

Contacts

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Program Website (https://www.jefferson.edu/academics/colleges-schools-institutes/architecture-and-the-built-environment/programs/urban-design-ms.html)

Program Description

- **STEM** designated program

The Master of Urban Design – Future Cities (MUD) educates the next generation of urban designers, architects and researchers in the development of sustainable, healthy and smart cities and communities. Focused on envisioning the future, the program spotlights pressing contemporary issues with far-reaching consequences, such as the need to develop urban resiliency and carbon neutral communities and to harness the potential of smart technologies to achieve environmental wellness on multiple scales in response to rapid urbanization and climate change. Students have the opportunity to acquire new and valuable skills and benefit from state-of-the-art research at regional and transnational levels, thereby fostering innovation, entrepreneurship, and creativity through knowledge exchange and multidisciplinary learning.

The unique focus of MUD on contemporary urban issues such as urban resiliency, carbon neutral communities, wellness, and smart technologies differentiates Jefferson's program. Collaboration with the Jefferson Institute for Smart and Heathy Cities offers students unparalleled opportunities for research and industry experience.

A focus on the unique challenges and possibilities in designing sustainable, healthy and smart cities differentiates the Master of Urban Design from similar programs. It also positions Jefferson as a leader in this emerging field, both nationally and internationally. The Institute for Smart and Healthy Cities serves as the hub and public face of the program and facilitates transdisciplinary research opportunities for students and faculty. Addressing climate change, public health, pandemics and other challenges by incorporating smart technologies into urban environments is the next frontier within the profession.

Learning Goals/Outcomes

- Develop design solutions at the neighborhood, community, and city scale for a socially equitable and sustainable future
- Construct urban design research and solutions within an ethical framework
- Evaluate urban design choices as they relate to environmental and sustainable best practices
- Create a personal approach for navigating the future of urban design in an environment that is volatile, uncertain, complex and ambiguous
- Employ ethical choices within research and testing involving human subjects.

- Investigate existing and speculative technology to address opportunities for innovation with an emphasis on solutions that are participatory and generative

Curriculum: 2 Year, 48 Credits

- Students without a formal education in architecture or a related field will be required to take additional courses (up to 23 credits) in their first semester or first year..

Course	Title	Credits
First Year		
Fall		
MUD 601	MS: Sustainable & Smrt Cities	6
GEOD 615	Adv GIS:Urbn Spctl Anlytcs 1	3
MUD 600	Modeling Urban Enviro Perf	3
	Credits	**12**
Spring		
SDN 621	MS: Resilient Cities & Comms	4
SDN 623	SC: Eco Sys for Resilnt Cities	2
GEOD 617	Adv GIS: Urb Sptial Anlytcs II	3
MUD 604	Emerg Dsgn &Tech Future Cities	3
	Credits	**12**
Second Year		
Fall		
MUD 603	MS: Towards Carbon Zero Cities	6
MUD 631	Research Methodology	3
MUD 602	Hist & Theory of Urban Design	3
	Credits	**12**
Spring		
MUD 6xx	Graduate Seminar/Focus	3
MUD 606	Master's Research Studio	6
General Elective		3
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	Credits	**15**
	Total Credits	**51**