## REQUEST FOR AUTHORIZATION TO IMPLEMENT A MASTER OF URBAN DESIGN AT UNIVERSITY OF WISCONSIN-MILWAUKEE (UW-MILWAUKEE) PREPARED BY UW-MILWAUKEE

## ABSTRACT

The University of Wisconsin-Milwaukee proposes to establish a Master of Urban Design (MUD) program. The development of the program responds to an increasing demand for urban design education from the students and the labor market. Establishing the program will provide students with high quality and diverse urban design skills that can be immediately practiced after graduation. The program will be comprised of 30 credits, which can be completed within a 12-month period. The program will reside within the School of Architecture and Urban Planning (SARUP) and jointly offered and administrated by the Department of Architecture and the Department of Urban Planning.

## **PROGRAM IDENTIFICATION**

**Institution Name** University of Wisconsin-Milwaukee

## **Title of Proposed Program**

Master of Urban Design

## **Degree/Major Designations**

Master of Urban Design

#### **Mode of Delivery**

On campus, face-to-face, online, and hybrid classes

## **Projected Enrollments and Graduates by Year Five**

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. By the end of Year 5, it is expected that a total of 25 students will have enrolled in the program and all 25 students will have graduated from the program.

#### **Table 1: Five-Year Degree Program Enrollment Projections**

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	3	4	5	6	7
Continuing Students					
Total Enrollment	3	4	5	6	7
Graduating Students	3	4	5	6	7

The anticipated average retention rate of the MUD program is high, i.e. greater than 95%. The Master's programs at SARUP have high retention rates: the rate in the last five years for the Master of Urban Planning program was 90%, and for the Master of Architecture was 92%. Because the MUD is a one-year program, the issue of year-to-year retention only rises in rare cases. In the rare cases that MUD students cannot complete the program in one year, they are expected to complete the program in the following academic year.

### **Tuition Structure**

For students enrolled in the MUD program, standard tuition and fee rates will apply. For the current academic year (2019-2020), residential tuition and segregated fees total \$6,024.93 per semester for a full-time student enrolled in (8-12 credits) per semester. Of this amount, \$5271.28 is attributable to tuition and \$753.65 is attributable to segregated fees. Nonresident tuition and segregated fees total \$12,641.17 per semester for a full-time student enrolled in (8-12 credits) per semester. Of this amount, \$11.860.52 is attributable to tuition and \$753.65 is attributable to segregated fees.

Differential tuition is charged for students enrolled in the Department of Architecture courses. The differential tuition fees are set at \$11.55 per credit for all courses at the 100-level, and \$43.00 per credit for all courses the 200- through 800-level. Differential tuition enhances the quality of education in the School of Architecture and Urban Planning.

#### **Department or Functional Equivalent**

The proposed program will reside within the School of Architecture and Urban Planning (SARUP), and it will be jointly offered and administrated by the Department of Architecture and the Department of Urban Planning.

## **College, School, or Functional Equivalent**

The proposed program will be housed within the School of Architecture and Urban Planning (SARUP)

#### **Proposed Term and Year of Implementation**

The MUD program will be implemented in August 2020, when SARUP starts to accept applications to the program. The first cohort of MUD students will start in Fall 2021.

## **DESCRIPTION OF PROGRAM**

## **Overview of the Program**

The MUD degree program is a unique, interdisciplinary program that aims to provide quality education for students to gain urban design skills with 30 credits within a 12 month period. Students are required to have a Bachelor's degree with a background in design studios in architecture, landscape architecture, design-focused urban planning, interior design, or other disciplines approved by the MUD faculty. There is no other prerequisite to be eligible to apply for the MUD program.

The program will facilitate design inquiry and experiences with real-world projects and studios. The practice-oriented curriculum is comprised of a set of urban design seminars and studios that familiarize students with the history, theory, and regulatory frameworks of urban design, explore inventive design procedures within diverse urban contexts, and develop skills to design distinct urban space types. The program builds upon academic and professional experiences of faculty and instructors to produce urban design knowledge that integrates architectural design, real estate, transportation, housing, and historic preservation.

## **Student Learning Outcomes and Program Objectives**

# Learning outcomes:

By the end of the program, students will be able to

- 1. Critically examine the history, theory, regulatory frameworks, and physical contexts of urban design.
- 2. Design for a healthy, sustainable, ecologically vibrant, and net-zero carbon future.
- 3. Recognize and design various street types and block patterns in response to multi-modal transportation systems, infrastructure, land use, and existing context.
- 4. Recognize various building typologies and their impacts on urban design.
- 5. Design a variety of public space types and programming to create a memorable and useful place for the entire community.
- 6. Produce an equitable balance between the demands of the marketplace and the needs and desires of diverse communities.
- 7. Professionally communicate design projects, using historic and theoretical concepts, through visual, oral, and written techniques to the general public and different stakeholders.

## Program objectives:

Graduates of the program will have knowledge and skills to create sustainable, equitable, and prosperous urban spaces for present and future generations in the rapidly changing urban environments. Specific skills include but not limited to: preparing design guidelines for different levels of public agencies; designing new or infilled urban neighborhoods and public spaces; planning infrastructure such as streets, pedestrian and bicycle networks, and public transit facilities; and addressing environmental concerns through ecological design.

# **Program Requirements and Curriculum**

Students are required to have a Bachelor's degree in architecture, landscape architecture, design-focused urban planning, interior design, or other disciplines approved by the MUD faculty. They need to have a background in design studios from the above disciplines and cumulative GPA of at least 3.0 (4.0 scale). All applicants are required to submit three recommendation letters and an electronic portfolio. The portfolio should show evidence of interest in design, and it should be carefully conceived, well designed, neatly prepared, and easily readable digitally. International students are required to submit test results from the TOEFL or IELTS (minimum score requirements: TOEFL: 100(iBT); IELTS: 7.0).

Table 2 illustrates the curriculum for the proposed MUD program. The program requirements are comprised of 30 credits, of which at least 12 credits are taken from the Department of Architecture and 12 credits from the Department of Urban Planning. In the 30

credits, 15 are required, and 15 credits will be taken from accepted urban design-related elective courses. Up to 6 credits can be taken from an internship or an independent study, including summer study abroad.

	<b>REQUIRED</b> (15 credits)	ELECTIVE OPTIONS (15 credits)
FALL	<ul> <li>9 Required Credits</li> <li>UP 857 Urban Design as Public</li> <li>Policy or UP 751 Urban Design and Physical Planning (alternatively offered every other year, 3 credits)</li> <li>ARCH 850 Studio – urban design related topic (6 credits)</li> </ul>	3-6 Elective Credits Choose from: UP 651 Land Use Planning Practice (3 credits) UP 662 Public Sector Influence on Real Estate (3 credits) ARCH 300 Architectural History and Theory (3 credits) ARCH 560 Intro to Historic Preservation (3 credits) ARCH 550 Building Types/Programming (3 credits) ARCH 780 The Built Environment and Real Estate Development (3 credits)
SPRING	6 Required Credits ARCH 850/UP858 Studio in Urban Design and Physical Planning (6 credits)	<ul> <li>6-9 Elective Credits</li> <li>Choose from:</li> <li>UP 692 Physical Planning and Municipal</li> <li>Engineering (3 credits)</li> <li>UP 772 Bicycle &amp; Pedestrian Transportation (3 credits)</li> <li>ARCH 302G Human Behavior (3 credits)</li> <li>ARCH 723 Fundamentals of Ecological Design (3 credits)</li> <li>ARCH 760 History of Building Technology (3 credits)</li> <li>ARCH 533 Architectural Theory: Buildings in</li> <li>Chicago (3 credits)</li> <li>ARCH 584 Urban Landscape Architecture (3 credits)</li> <li>ARCH 788 Green Building (3 credits)</li> <li>ARCH 790 3D scanning (3 credits)</li> <li>ARCH 583 VR: Visualization, Interaction and</li> <li>Collaboration (3 credits)</li> </ul>
SUMMER		<b>0-6 Elective Credits</b> Internship, independent study, study-abroad

Table 2.	Master o	f Urhan	Design	Program	Curriculum
I abic 2.	Master U	n Urban	Design	I I Ugi am	Curriculum

## Assessment of Outcomes and Objectives

At the program level, direct assessment of outcomes and objectives are conducted mainly through core course assessment, supplemented by indirect assessment of exit interviews and post-graduation surveys.

Table 3 shows the minimum assessment of each of the seven learning outcomes through the three required courses. All elective courses cover certain learning outcomes as well, and the MUD program will track the attainment of the learning outcomes in the elective courses for internal purposes. Additionally, to assess program objectives, the MUD program will conduct exit interviews for each graduating cohort and follow up in a year by post-graduation surveys to assess students' knowledge and skill preparation by the MUD program.

In the long run, once there are enough MUD graduates in the professional world, the MUD program will conduct employer surveys to address gaps between the MUD education and the professional requirements.

Table 5. As	5055110110			
			ARCH	Assessment criteria:
Learning	UP	ARCH	850/	By the end of the course, students are able to
outcome	857/751	850	UP 858	
				explain and defend his/her position in analyzing
				the history, theory, regulatory, and physical
1	$\checkmark$	$\checkmark$		contexts of urban design.
				demonstrate the application of healthy and
2				sustainable design principles.
				identify street types and block patterns and
				explain their connection with the existing
3	$\checkmark$			contexts.
				identify and visually present different building
4				typologies.
				demonstrate the consideration of diverse users in
5	$\checkmark$		$\checkmark$	designing public spaces.
				recognize market forces and social outcomes in
				order to produce an equitable balance for diverse
6	$\checkmark$			communities.
				use different tools to explain design concepts,
				and connect the concepts with historic and
7		$\checkmark$	$\checkmark$	theoretical backgrounds.

**Table 3: Assessment of Learning Outcomes** 

#### Diversity

Good urban design is critical to achieving equitable opportunities for diverse population groups. The MUD program will address issues such as affordable and desirable neighborhoods for all, equitable distribution of services and jobs, transportation systems that serve all people, healthy environments, as well as vibrant places that promote social interactions among diverse populations.

To achieve the diversity goal, the MUD learning outcomes emphasize the understanding and consideration of, and the communication and engagement with diverse communities and stakeholders (Learning Outcomes 5-7). The MUD curriculum includes a wide variety of courses that offer students opportunities and learning activities to engage in diverse communities and population groups. The core courses of UP 857 and UP 751 include a focus on diverse housing types, aging in place, inclusive neighborhood design, and the value of social gathering in public spaces. Many of the MUD elective courses address the diverse needs, values, behavioral norms,

physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of urban designers to ensure equity of access to sites, buildings, and structures.

The MUD program will be STEM-designated (with CIP Code 30.3301: Sustainability Studies). The designation will help to recruit students with varying backgrounds, particularly those interested in combining design with science.

The MUD program will actively pursue an equity in student recruitment, access, retention, and degree completion. The Department of Architecture and the Department of Urban Planning provide academic and student support by faculty and staff through activities such as mentorships, tutoring, and networking. SARUP will also provide targeted guidance for qualified diverse MUD students to apply for SARUP awards and assistantships, including Chancellor's awards, Bob Greenstreet Honorary Scholarship, Design Council Scholarship, John and Carolyn Peterson Scholarship, Lillian and Willis Leenhouts Memorial Scholarship. The Community Design Solutions (CDS), a funded design center in SARUP, can offer experiential learning opportunities in diverse communities with non-profit agencies, neighborhood organizations, and municipalities. SARUP also works with the City of Milwaukee in its Earn & Learn program, which assists young Milwaukee residents in making a successful transition into employment, and internship programs.

The MUD program will leverage existing human resources of faculty, instructional staff, and staff. While SARUP does not expect to recruit full-time faculty/staff in the short term, SARUP is devoted to equity in the recruitment of adjunct faculty in compliance with policies and procedures of UWM and SARUP.

#### **Collaborative Nature of the Program**

The MUD program is a collaborative effort between the Department of Architecture and the Department of Urban Planning.

Once the MUD program is implemented, SARUP plans to consider joint degrees between MUD and the Master of Architecture (MArch) and Master of Urban Planning (MUP). Additionally, leveraging existing memoranda of understanding with other universities, such as Chongqing University in China and Jade University in Germany, SARUP will pursue collaboration opportunities, including 4+1 or dual-degree programs, with these institutions to increase student recruitment and enrich their learning experiences. Through the MUD program, SARUP expects to strengthen connections with existing collaboration partners and expand connections with new partners.

#### **Projected Time to Degree**

Full-time students are expected to complete all degree requirements within twelve months of first enrollment. Students can start the MUD program in Fall or Spring semesters. All degree requirements must be completed within three years of first enrollment.

#### **Program Review**

The UWM Graduate Program Reviews Committee supervises a systematic and continuing review of existing graduate programs at UWM. The procedures for qualitative reviews of graduate programs at UWM are described in detail in UWM Faculty Document No. 3197.

New graduate programs undergo full-scale reviews involving external consultant site visits five years after implementation to supply the data and evaluation required by the UW System for its mandated review of new academic programs. Continuing graduate programs undergo reviews using external consultants every ten years after the initial program review. Five years after closure of the most recent program review, graduate programs are required to provide a mid-cycle status report discussing the implementation of the recommendations adopted by the Graduate Program Review Committee in the last program review.

Program reviews are conducted by an internal review team, composed of two members of the graduate faculty, and two external consultant experts in the discipline. Each program is required to submit a self-study and supplementary documentation at least six weeks prior to a site visit by the external consultants. The self-study provides the program with the opportunity to evaluate all facets of program operation and outcomes, engage in critical self-examination, and formulate curricular and research objectives, benchmarks, and milestones for the next ten years. Included in the self-study are a description and evaluation of the program, its faculty, students, curriculum, outcomes and assessment thereof; the research and scholarship environment and productivity therein; resources; and additional supplementary information.

External consultants jointly prepare a report submitted to the Graduate School within six weeks of the site visit. This report contains general conclusions about the state of the graduate program, specific recommendations for action and a statement of rationale for each, and an analysis of the program's major strengths to be maintained and weaknesses to be addressed. Programs are permitted the opportunity to respond to the consultants' report before submission to and evaluation by the Graduate Program Review Committee. The Provost, Dean and Associate Dean of the relevant School or College, and the Dean of the Graduate School then meet to discuss implementation and prioritization of the Graduate Program Review Committee's recommendations.

#### Accreditation

The MUD program does not require specialty accreditation.

#### JUSTIFICATION

#### **Rationale and Relation to Mission**

The new program will directly serve UWM's vision "through a commitment to excellence, powerful ideas, community and global engagement, and collaborative partnerships<sup>1</sup>". Specifically, the new program will strengthen UWM's community and global engagement by producing professionals who create and design urban spaces that allow such engagements.

<sup>&</sup>lt;sup>1</sup> <u>https://uwm.edu/mission/</u>

Through the program and in their professional practices, students will collaborate with diverse communities and stakeholders from the private and public sectors.

The MUD program will underpin both department's long-term pursuit of sustainable development, social justice, and economic development through designing and planning for better places. Architecture and urban planning converge in the realm of urban design.

The Department of Urban Planning specifies the vision in its strategic plan: "Planners trained at UWM will possess the skills, values, and knowledge to engage all members of their community to capitalize on the opportunity to integrate sound land use, urban design, infrastructure, and economic incentives to produce neighborhoods, cities, and regions that are sustainable, just, and prosperous"<sup>2</sup>. The MUD program is an essential component to serve the vision.

Since architecture sits at the nexus of the arts, sciences, humanities, social sciences and STEM fields, the Department of Architecture solicits input from and produces research and design investigations that respond to all of these fields. The Department does this across the full range of scales from objects to urban environments, contributing to local dialogues on growth, development, and inclusion, often in collaboration with the City of Milwaukee and other local stakeholders. The MUD program is a logical outgrowth of this longstanding focus on urbanism of the Departmental of Architecture. The MUD program will give a new level of identity to these inherent aspects of the Architecture department.

Both the departments of Architecture and Urban Planning have a long history of engagement with urban design in the Milwaukee region. The Urban Edge Prize, a bi-annual prize that brings an internationally celebrated designer working at the urban scale to SARUP for a semester as a Distinguished Visiting Critic. The CDS projects include conceptual architecture, park design, and neighborhood redevelopment across many local communities. The MUD program will leverage the Urban Edge Prize and the CDS projects to bring international and diverse groups of students and communities to SARUP.

## **Institutional Program Array**

The proposed MUD program will provide an anticipated viable option for students who are interested in design knowledge and skills that can be immediately implemented in practice. It is anticipated that the new MUD program can attract a new group of graduate students to SARUP.

SARUP currently has three Master's degree programs and a joint Master's program. The Master of Architecture (MArch) and the Master of Urban Planning (MUP) are both accredited by the respective accreditation boards. To meet the accreditation requirements, both programs need to teach a variety of courses in addition to design-related courses. Both programs require at least 2 years of graduate study for full-time students. The duration is lengthened to 3 years for MArch students without an Architecture undergraduate degree. SARUP also offers a joint MArch/MUP

 $<sup>^{2} \</sup>underline{\text{http://129.89.74.30:8080/rc/pdf/sarupwebsitedocs/up/planningaccreditationboard-department-strategic-plan-2018.pdf}$ 

program, which requires 3-4 years. SARUP has a 30-credit non-professional Master of Science in Architecture degree, but its goal is limited to scholarly studies and research.

The 30-credit 12-month STEM-designated MUD program can attract students who are interested in design but cannot invest time or resources to obtain professional degrees.

### Other Programs in the University of Wisconsin System

SARUP is the only Architecture School in the state of Wisconsin and is responsible to educate and provide new design talents for the State. There is no other undergraduate or Master's program of Urban Design in the UW system or in the State.

## Need as Suggested by Current Student Demand

For a long time, students, professionals, and faculty have expressed interest in creating a Master's degree program that focuses on design skills that are required in urban development and design practices. For example, many MUP students have expressed interests in Urban Design related courses or studios, but these courses and studios have strict capacity limit. The MUD program can expand learning opportunities for these students. In this way, MUD also helps to retain enrolled MArch or MUP students who are interested in design at the urban scale but not the full MArch/MUP joint degree option.

## Need as Suggested by Market Demand

It is expected that the U.S. labor market will see a significant growth of architectural related services and urban design-related jobs in the U.S.<sup>3</sup> According to the projection of the Bureau of Labor Statistics, employment of architects is expected to grow 8 percent from 2018 to 2028, faster than the average for all occupations<sup>4</sup>, and employment of urban and regional planners is projected to grow 11 percent from 2018 to 2028, much faster than the average for all occupations<sup>5</sup>. Such growth is driven by changes in demographics, transportation options, and the environment. Specifically, technology improvements, such as smart and connected cities, call for new design standards and practices. Aging urban infrastructure needs improvement, and the revival of urban life calls for actions to reform and re-shape existing urban environments.

Local communities have been seeking Urban Design related services from SARUP, through CDS projects or real-world experiential-learning courses such as Applied Planning Workshop. The MUD program can help SARUP to expand Urban Design capacity in serving community needs.

<sup>&</sup>lt;sup>3</sup> <u>https://www.grandviewresearch.com/industry-analysis/architectural-services-market</u>

<sup>&</sup>lt;sup>4</sup> <u>https://www.bls.gov/ooh/architecture-and-engineering/architects.htm</u>

<sup>&</sup>lt;sup>5</sup> <u>https://www.bls.gov/ooh/life-physical-and-social-science/urban-and-regional-planners.htm</u>