

**REQUEST FOR AUTHORIZATION TO IMPLEMENT A
BACHELOR OF ARCHITECTURE
AT UNIVERSITY OF WISCONSIN-MILWAUKEE
PREPARED BY UW-MILWAUKEE**

ABSTRACT

The University of Wisconsin (UW)-Milwaukee proposes to establish a Bachelor of Architecture [BArch]. The School of Architecture and Urban Planning (SARUP) is the only Architecture School in the state of Wisconsin, and therefore, it is SARUP's responsibility to educate and provide new design talents for the State. There is no duplication of the B.Arch program in the UW system. Situated in the largest city in Wisconsin, SARUP provides plenty of opportunities to serve the city and to attract diverse students who are interested in better design for their cities and communities. The Bachelor of Architecture will fill a need for a more streamlined path to an accredited degree and professional licensure. This proposal is in synch with several of the recommended initiatives in the UWM 2030 Implementation Team report.

PROGRAM IDENTIFICATION

University Name

University of Wisconsin-Milwaukee

Title of Proposed Academic Degree Program

Bachelor of Architecture

Degree Designation(s)

Bachelor's

Mode of Delivery

Single university
Face-to-face delivery

Department or Functional Equivalent

Department of Architecture

College, School, or Functional Equivalent

School of Architecture and Urban Planning

Proposed Date of Implementation

September 2023

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years. Since SARUP has an existing 4-year pre-professional Bachelor of Science in Architectural Studies (BSAS) degree, it is expected that the majority of those students will switch to the BArch. This is shown in Year 1, with 500 BSAS students expected to transfer to the BArch program. An additional 100 students are expected to stay for the 5th year to achieve the BArch rather than pursue immediate graduation with the BSAS degree. The total enrollment and graduating student projections capture these existing BSAS students to give a picture of the entirety of the BArch. The new and continuing students reflect the number of additional students the BArch will attract that otherwise would not have attended UWM for the BSAS degree. By the end of Year 5, it is expected 640 students will be enrolled in the program and 102 students will graduate. The average student retention rate is projected to be 85%, based on attrition rates from the current Bachelor of Science in Architectural Studies (BSAS) program.

Table 1: Five-Year Academic Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students (BArch)	20	25	30	30	30
Continuing Students (BArch)		15	30	30	30
Current BSAS Students Transferring to BArch	500				
Current BSAS Students Continuing for 5 th Year BArch	100				
Total Enrollment	620	625	630	635	640
Graduating Students	85	90	93	97	102

Tuition Structure

For students enrolled in Bachelor's in Architecture program, standard tuition and fee rates will apply for the first four years of the program. For the current academic year, residential tuition and segregated fees total \$4,810 per semester for a full-time student enrolled in 12-18 credits per semester. Of this amount, \$4,046 is attributable to tuition and \$764 is attributable to segregated fees. Nonresident tuition and segregated fees total \$10,742 per semester for a full-time student enrolled in 12-18 credits per semester. Of this amount, \$9,978 is attributable to tuition and \$764 is attributable to segregated fees. For a

part-time student, per credit tuition would be \$337 for a resident undergraduate student and \$831.50 for a nonresident student.

In the fifth year of the program, students will pay \$750 per semester in additional tuition to offset higher expenses. Architectural education relies on the studio model as the primary delivery method for design education. In architecture studio, one instructor teaches a group of 12-18 students through small group meetings and one on one feedback of the students' designs for buildings over 4-hour studio sessions 3 times a week. It is a high contact time low faculty to student ratio model of education that is the standard across all schools of architecture in the country. In the beginning years of the program, the faculty to student ratio in design studio is closer to 1-18. As the students move into the fifth year, they are designing buildings with more complexity that require the integration of building systems and engineering. This takes more time and more individual feedback, and the faculty student ratio must fall to 1-12 or 1-14. The requested additional tuition will support this smaller faculty to student ratio. We expect to see the increase in the amount of studio sections offered a year from 48 studio sections currently, to 65 sections with the addition of the BArch.

SARUP is considered one of nine extra-large (XL) schools by the Association of Collegiate Schools of Architecture (ACSA) defined as any school with over 600 students enrolled. This puts SARUP in a category as one of the largest schools of architecture in the country, and it will become larger with the introduction of the BArch. Two peer XL schools of architecture, New Jersey Institute of Technology J. Robert and Barbara A. Hillier College of Architecture and Design (NJIT) and California Polytechnic State University College of Architecture and Environmental Design (Cal Poly) require higher tuition or additional fees as a component of their BArch degree. NJIT requires 4th and 5th year BArch students to pay graduate tuition for graduate courses, which make up many of the courses in those years. If that model were applied to UWM, students would similarly be taking what are currently considered graduate level courses in their later years as our BArch program is being constructed around offerings currently in our BSAS and MArch degrees. Cal Poly requires College based fees for their College of Architecture which are likely the highest on their campus to support the standard model of architectural education. A regional peer institution, Iowa State University College of Design (Iowa State), requires one tuition rate in the first year of the BArch and a higher tuition rate in years two through five.

As additional points of comparison, most peer institutions offer studio courses with a faculty to student ratio of between 1-10 to 1-12. At 1-12 to 1-18 DAR will still be above that ratio with this proposal. Seven of the eight remaining ACSA XL schools also offer a BArch degree.

DESCRIPTION OF PROGRAM

Overview of the Program

Architecture is the design and description of buildings and other elements in the physical environment such as building parts, historic preservation, and places or environments of all sorts and scales for humans to inhabit or use. This proposed

undergraduate program in architecture is a five-year course of study that can be accredited. Students will complete 150 credits of coursework in the history of architecture, human behavior and environments, professional practice, digital and manual representation techniques, architecture technologies including building systems and structures, and design studios. Students will complete the minimum required number of GER credits as required by UWM and supported by the National Architectural Accrediting Board (NAAB). Graduating students will be able to sit for the state licensing exam in all fifty states. Note: our current undergraduate degree, the BSAS, is a non-terminal undergraduate degree.

Student Learning Outcomes and Program Objectives

Students who complete the BArch degree will be able to: (a) enter professional practice and design buildings or other physical elements of the built environment (b) understand how their efforts and interventions effect the built environment and the people who use it. (c) critically evaluate technical options for high performing environmental systems, passive design approaches, as well as current trends in practice. (d) demonstrate expertise in iterating multiple problem-solving options in collaborative practice. (e) clearly represent intent and expertise through drawings and other forms of visual media and in written and oral communications.

Students completing the BArch will have an accredited architectural degree (we are concurrently seeking NAAB accreditation for the BArch along with this proposal) that will allow them to complete the National Council of Architectural Registration Board's Architectural Experience Program (AXP) and sit for the Architectural Registration Exam. Completion of both AXP and ARE will lead to licensure.

Program Requirements and Curriculum

New freshman admission to the School of Architecture and Urban Planning is based on an overall assessment of both academic and non-academic qualifications. The primary review factors for admission are the strength and quality of the high school curriculum, high school class percentile, grade point average, and the ACT or SAT

Academically qualified international student applicants must have a TOEFL score of at least 79 (iBT) or IELTS score of 6.0, or may be admitted following successful completion of the Intensive English Program at UWM, as demonstrated by an appropriate TOEFL score.

Transfer students are admitted on a selective basis. Preference is given to students who have completed (or will have completed by the anticipated enrollment date) at least 24 degree credits with a cumulative grade point average of at least 2.5 (on a 4.0 scale). In addition, transfer applicants must meet the same high school English and mathematics course requirements as new freshman applicants. International transfer student applicants also must meet the minimum TOEFL requirement.

Table 2 illustrates the program curriculum for the proposed program. The program requirements are comprised of 150 credits, of which the minimum GER requirements as determined by UWM and NAAB are met and the program prerequisites in English, Math, and Physics are listed. Given that SARUP currently offers a BSAS, Masters of Architecture

(MArch), Masters of Science in Architecture (MS) and PhD in Architecture, the new BArch curriculum is made almost entirely of courses already in existence. There is only one new course being proposed, listed below as Professional Practice 3. Specific course names and numbers have been entered into CIM.

Table 2: Bachelor's in Architecture Program Curriculum
General education courses required for graduation:

Social Sciences	6 credit(s)
Humanities	6 credit(s)
Arts	3 credit(s)
Natural Sciences (with 1 Lab)	7 credit(s)
Cultural Diversity	3 credit(s)
Service Learning (Arch & Human Behavior 2)	3 credit(s)
Oral and Written Communication A (History Theory 3)	3 credit(s)
Quantitative Literacy A (Technology 1)	3 credit(s)

Program prerequisites or support courses:

English 102	3 credit(s)
Math 115	3 credit(s)
Physics 107	4 credit(s)

Academic degree program or major course requirements:

Core Studio 1	3 credit(s)
History Theory 1	3 credit(s)
Architecture Human Behavior 0	1 credit(s)
Core Studio 2	3 credit(s)
Visualization 1	3 credit(s)
Core Studio 3	6 credit(s)
Architecture & Human Behavior 1	3 credit(s)
Visualization 2	3 credit(s)
Core Studio 4	6 credit(s)
Architecture & Human Behavior 2	3 credit(s)
History Theory 2	3 credit(s)
Core Studio 5	6 credit(s)
Technology 1	3 credit(s)
Professional Practice 1	3 credit(s)
Core Studio 6	6 credit(s)
Technology 2	3 credit(s)
History Theory 3	3 credit(s)
Core Studio 7	6 credit(s)
Technology 3	3 credit(s)
Professional Practice 2	3 credit(s)
Elective Studio	6 credit(s)
Technology 4	3 credit(s)

Elective Studio	6 credit(s)
Technology 5	3 credit(s)
Elective Studio	6 credit(s)
Professional Practice 3	3 credit(s)
Architectural Electives	9 credit(s)
Electives	6 credit(s)

150 credit(s)

Assessment of Outcomes and Objectives

The program will be assessed by NAAB in the same manner as the current accredited MArch degree is assessed. Additional assessments will follow in the same manner as all UWM Assessments and Reporting which is in place for current BSAS, MArch, MS, and PhD programs in Architecture.

Diversity

The new BArch degree will advance inclusive excellence by offering students a quicker path to a professional degree which will lead to more licensed architects in Wisconsin. This will also increase access to the profession by diverse constituencies and increase the diversity of architectural professionals in the state and midwestern region.

Additionally, the new BArch degree introduces revised course content and curriculum that focus on diverse populations and perspectives including reconceiving of two Architecture and Human Behavior courses and a reworked History and Theory of Architecture curriculum that will draw upon architectures and histories from a diverse range of sources and locations in the world.

The Department of Architecture has already made great strides in the equity of student recruitment, access, retention, and degree completion. The establishment of a Diversity, Equity, and Inclusion (DEI) Committee within the Department of Architecture has led to a preliminary DEI report with a series of goals and recommendations that will be implemented over the next two years.

While recent hires in the Department of Architecture have been limited, the department is intent upon increasing the diversity and ensuring the equity of recruitment in faculty, instructional staff, and other staff. Recent hires have also brought a diversity of thought and emphasis to the curricular areas in which they contribute in addition to their research and practices.

The DEI Committee will continue to inform and support the department and its programs as we move forward with the new BArch degree.

Collaborative Nature of the Program

Courses in the Bachelor of Architecture degree will be offered to students at UW Madison and UW Platteville as a part of proposed or in place architecture minors at the

respective institutions. Select 100 level courses will also be available to Wisconsin High School students.

Projected Time to Degree

The expected time to degree is 5 years with 30 credits a year being taken by enrolled students.

Program Review

All accredited programs of Architecture are reviewed by NAAB at a time period determined by the outcome of the review. UWM's Master's of Architecture degree was previously reviewed in the Spring of 2017 and granted accreditation for the maximum allowable term of 8 years.

Accreditation

The Bachelor of Architecture degree will be subject to the accreditation requirements set forth by NAAB.

JUSTIFICATION

Rationale and Relation to Mission

Student Demand: Currently a large portion of our BSAS undergraduate students never go on to a 2-year master's program either at UWM or other institutions and therefore do not achieve a professional or accredited degree. Many do not become licensed architects despite working in a traditional architecture office environment and the consequences for the student are that they may never access the higher earning capacity that licensed architects enjoy. This tends to privilege those with the resources to sustain a long-term experiment in pursuing a career in architecture. Internal SARUP surveys have indicated substantial interest in this proposed new program. Furthermore, students wanting to earn an accredited degree stand to save a full year of graduate tuition by reducing the path to an accredited professional degree from 4 (BSAS) +2 (MArch)=6 to 5 (BArch).

Market Demand: A commissioned survey of market analysis by Hanover Research shows only 3.9% of architecture position descriptions call for a master's degree in architecture. As the only school of architecture in Wisconsin and the most affordable option in the region and much of the country for many out of state students, the expectation is that such a degree offering would have substantial interest. Communicating with prospective students and their parents will be simplified with this degree change as well. 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. According to the projection of the Bureau of Labor Statistics, employment of architects is projected to grow 8 percent from 2018 to 2028, faster than the average for all occupations, 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. 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.

Internal Department Needs: There has been a ten-year decline in MArch 2 degree enrollments which has stabilized and increased slightly over the past few years. This trend has created financial challenges that the current program array cannot address. However, the department has seen an increase in enrollment in the undergraduate program even as the rest of UWM is challenged by decreasing enrollments. The undergraduate degree is the financial backbone for the School of Architecture and Urban Planning and this proposal seeks to strengthen it further.

Program Duplication: SARUP is the only School of Architecture in the state of Wisconsin, and therefore, it is SARUP's responsibility to educate and provide new design talents for the State. There is no duplication of the B.Arch program in the UW system. Situated in the largest city in Wisconsin, SARUP provides plenty of opportunities to serve the city and to attract diverse students who are interested in better design for their cities and communities.

The Bachelor of Architecture will fill a need for a streamlined path to an accredited degree and professional licensure. This proposal is in synch with several of the recommended initiatives in the UWM 2030 Implementation Team report. See below for details.

2030 Implementation Team Report

Becoming Student Centric: Currently, architecture degree nomenclature can be challenging for non-architects to understand. This is especially true for high school students. A 5-year B.Arch degree provides a streamlined degree for those students who know immediately that they want a professional degree. This program could also dovetail nicely with the high school credit initiatives that make it possible to earn college credits for the architecture degree prior to matriculation. Our entire program also addresses this category since experiential learning is a core value of the design studio curriculum.

Revising Curriculum: Our current curriculum does not need to be radically revised since we are drawing from current undergraduate and graduate program course offerings.

Driving Inclusion and Diversity: There are only eight of African American registered architects in all of Wisconsin's history. It is our belief that this BARCH proposal makes the goal of an accredited degree and licensure more affordable and accessible and could potentially be more appealing to minority students since it shortens the time to accredited

degree. Licensure typically leads directly to better compensation and career stability, something especially important for students from under-resourced backgrounds.

Aligning UWM's academic workforce: The proposed degree addition does not change any DAR staffing needs in respect to DAR remaining understaffed to offer its existing programs at the current levels of enrollment. If enrollments continue to increase or stay at current rates, additional faculty and instructional staff may be required.

Re-assessing unit alignment: Proposed degree addition does not change SARUP's independent status or any potential unit alignments.

Refocusing Research Infrastructure: The proposal opens more opportunities for SURF grant research.

Updating Budget Model: In addition to an improved academic experience for our undergraduate students, budget is a driver behind this proposal. This degree would improve DAR's bottom line in the current budget model that rewards SCH since the additional 5th year of undergraduate curriculum would be almost entirely DAR coursework. This is based on a 10 year overall decline in the graduate program enrollments and the increasing enrollments in the undergraduate program. Additional revenue generated by the program would help to adequately staff the courses and programs improving the already robust overall student experience and outcomes.

University Program Array

UWM currently offers a pre professional 4 year Bachelor of Science in Architectural Studies degree, an accredited professional Master of Architecture Degree, a Master of Science of Architecture degree, and a PhD in Architecture. The proposed 5-year Bachelor of Architecture degree is the only type of degree in Architecture not currently offered by UWM and thus fills out the program array with all available options to students.

Other Programs in the University of Wisconsin System

There are no other accredited Programs of Architecture in the UW System.

Need as Suggested by Current Student Demand

UWM currently has over 500 students in the undergraduate BSAS degree. Nearly all of those students will move into the BArch degree. The BArch will become the primary undergraduate architecture degree, offering students a quicker path to a professional degree and architectural licensure. This transition is supported by student demand and enthusiasm for the introduction of the BArch degree. As the only School of Architecture in the state of Wisconsin, it is important for UWM to offer all degree options, especially those with the shortest time to professional degree.

Need as Suggested by Market Demand

Hanover Research prepared a market analysis report for the Bachelor of Architecture degree in January of 2021. While the report produced a range of conclusions, it is the opinion of the Department of Architecture that the research did not adequately weight the differences between the current pre professional BSAS degree, which does not meet the requirements of a professional degree as determined by NAAB, and the proposed BArch degree which is a professional degree leading directly to licensure. The 5-year BArch degree is optimal for UWM students as it produces a path to licensure in 5 years instead of the current 4 year BSAS plus 2 additional years of the MArch. An informal poll of current BSAS students suggests that nearly all will transfer into the BArch degree program, leaving the BSAS degree as an off ramp for students looking to complete their education in 4 years.

A quote from the Hanover Research report is as follows: "Given the stronger relative student demand indicators for master's-level architecture degrees over the past five years, and the fact that B.Arch/M.Arch combinations are more common than BSBA/M.Arch combinations at national institutions, a B.Arch program may fare better in coming years than the existing BSAS degree."

ADDITIONAL DOCUMENTATION TO BE SUBMITTED:

Three additional documents must be submitted along with the Request for Authorization to Implement a Degree narrative to apfa@uwsa.edu. These additional documents are:

- Cost and Revenue Projections Spreadsheet (Excel format, portrait view).
- Cost and Revenue Projections Narrative (Word format).
- University Letter of Commitment (PDF format).

Cost and Revenue Projections Spreadsheet – Additional Document #1 (Excel format, portrait view)

Please utilize the spreadsheet template located at the Academic Program Planning webpage at <https://www.wisconsin.edu/program-planning/>. The provost and chief business officer must sign the cost and revenue projections spreadsheet. The submitted document must be clean and readable. Avoid submitting scanned documents.

Cost and Revenue Projections Narrative – Additional Document #2 (Word format)

Please utilize the Word template located at the Academic Program Planning webpage at <https://www.wisconsin.edu/program-planning/>.

The Cost and Revenue Projections Narrative supports the completion and discussion of the Cost and Revenue Projections spreadsheet document. Together, the budget spreadsheet and narrative illustrate the financial sustainability of the proposed program and document how projected revenues will offset the program costs over a five-year period.

University Letter of Commitment – Additional Document #3 (PDF format)

The letter of commitment is signed by the university's provost. The letter should be addressed to the President of the UW System (copied to the Associate Vice President of Academic Programs & Faculty Advancement) and affirm that:

- The program has been designed to meet the university's definition and standards of quality and will make a meaningful contribution to the university's select mission, overall academic plan, and academic degree program array.
- There is university-wide support for the program, including university governance approval.
- The necessary financial and human resources are in place and/or have been committed to implement and sustain the program.
- Program evaluations are in place.

DRAFT

Authorization Instructions

February 1, 2021

- 1) *Page numbers in footer*
*begin on page 1 in the following format: e.g., Page **1** of **10** (right alignment)*
(use Authorization template to correct page numbering format or add missing page numbers to the document) (size 11, Open Sans, numbers in bold)
- 2) *Main heading (not header) on page 1*
all caps (size 14, Open Sans, bold) (same format as exec summaries)
- 3) *Prepared by UW-[Campus] in heading on page 1 (last line of main heading)*
all caps (size 14, Open Sans, bold) (same as above)
(be consistent in inserting this text, if not provided)
- 4) *Major headings in all caps (size 12, Open Sans, bold)*
ABSTRACT, PROGRAM IDENTIFICATION, DESCRIPTION OF PROGRAM, JUSTIFICATION
- 5) *Two blank lines precede all major headings and one blank line follows all major headings*
ABSTRACT, PROGRAM IDENTIFICATION, DESCRIPTION OF PROGRAM, JUSTIFICATION
- 6) *Sub-headings in initial caps (size 11, Open Sans, bold)*
- 7) *One blank line precedes all sub-headings and no blank line follows any sub-heading*
- 8) *PROGRAM IDENTIFICATION section (heading only, size 12, major heading, see above)*
blocked paragraphs (left alignment)
- 9) *Other sections (size 11, Open Sans, not bold)*
indented paragraphs .50" from left margin (size 11, Open Sans)
blank lines between paragraphs
- 10) *Text in numbered or bulleted list should align with text in .50" paragraph indent*
- 11) *Numbered list (like bulleted list) in the following format: 1., 2., 3., etc., with numbers (like bullets) at .25" from left margin and blocked text at .50" from left margin*
Each numbered or bulleted item should have initial cap and end with a period.
- 12) *Numbered text (within a sentence) in the following format: (1), (2), (3), etc.*
- 13) **Table 1:** (size 11, Open Sans, bold)
(table itself is size 11, Open Sans, not bold)
Graduating Students (last row)—If not visible, move line to adjust column width between first 2 columns. Align all numbers (as if adding numbers to get a total).
- 14) **Table 2:** (size 11, Open Sans, bold)
(table itself is size 11, Open Sans, not bold)
(if text in table seems too large or has too many pages, adjust to size 10)
(check for appropriate page/section breaks when completing final documents)
*Total Credits (last row) (bold), e.g., **Total Credits 120 Credits***
- 15) *JUSTIFICATION section (heading only, size 12, major heading, see above)*
text has much copying and pasting from other sources, resulting in errors:
(1) spacing errors between letters or words (turn on paragraph codes and look for small circles in text) (to fix: delete small circles or retype text), (2)

- incorrect font type or font size, (3) too much capitalization (change initial caps to lower case letters in many instances, e.g., job fields or titles, areas of study, and degree specializations).*
- 16) *Capitalization (do not overuse capital letters)*
Often it is preferable to use lower case. For example, with degree programs, capitalize if the actual name of the degree is spelled out. In other instances, use the following as guide: Legal Studies program (note: program is not capitalized). Other examples: University's mission (change to university's), state of Wisconsin
- 17) *Hyphenated words*
The following words are typically not hyphenated: nonresident, nontraditional, postsecondary, multidisciplinary, interdisciplinary
- 18) *Subjective words*
Omit the use of subjective adjectives, such as successful, robust, prudent, etc. Omit the use of "we" and "our" (use the university, the institution, its, etc.) Omit the use of "I" and "my"
- 19) *Acronyms*
Be sure to spell out words, followed by its acronym, when used the first time. Afterwards, it is acceptable to use the acronym. However, some are acceptable acronyms without spelling them out, such as GPA, GRE. United States is usually abbreviated as U.S. (with periods), also degrees, such as B.S. (with periods) for Bachelor of Science.
- 20) *For consistency, use % for percent, per credit for /credit, and Year 1 for year one. For academic years, use this format: 2020-21.*
- 21) *Dashes between words (no single hyphen, no spacing):*
e.g., dashes—no hyphen/no spacing—between words
- 22) *Text in numbered or bulleted list should align with text in paragraph indent*
indent bullet .25" from left margin
indent text in bulleted list .50" from left margin (same as paragraph indent)
- 23) *Footnotes*
consistent in formatting within a document
no end punctuation
- 24) *Except as noted above, document should be single-spaced in **size 11**, Open Sans. Any footnotes in the document should be single-spaced in **size 10**, Open Sans.*