Environmental Design

School of Architecture

The School of Architecture offers a four year Bachelor of Arts in Environmental Design undergraduate program which, when combined with our three-semester graduate program, leads to a fully accredited Master of Architecture degree. The Master of Architecture degree is a first-professional degree.

In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year term, an eight-year term with conditions, or a two-year term of continuing accreditation, or a three-year term of initial accreditation, depending on the extent of its conformance with established education standards.

Doctor of Architecture and Master of Architecture degree programs may require a non-accredited undergraduate degree in architecture for admission. However, the non-accredited degree is not, by itself, recognized as an accredited degree.

Montana State University, School of Architecture offers the following NAAB-accredited degree program:

Master of Architecture (pre-professional degree [126 credits] + 42 graduate credits)

The next scheduled NAAB-accreditation visit for Montana State University's Master of Architecture degree program will take place in 2031.

The Montana State University School of Architecture received a full 8 year accreditation standard in January 2023.

The School of Architecture seeks to prepare students for a lifelong critical engagement in the arts and science of architecture. Located in "the last best place" of the Northern Rockies, we are in an extraordinary position to engage questions regarding the relationship between the natural and built environments. As architects, we strive to play an essential and innovative role in enhancing the human condition. To that end, we teach and practice a moral, ethical and aesthetic responsibility to society and the natural world in the design of the built environment. The School of Architecture empowers students to critically engage the complexities of society and the natural environment by instilling the fundamental principles of design and inspiring a spirit of exploration and creative experimentation in shaping the built environment.

It is in our design studios that this philosophy is most clearly demonstrated. Each studio is conceived to build upon the previous studio in a manner that develops a student's mastery of the science of architecture while at the same time exposing the student to the rich diversity of our faculty's philosophical beliefs. Within a structured sequence of increasingly complex problems, emphasis is placed on teaching both an iterative design process and the visualization skills necessary to demonstrate the resultant design proposals. The science of architecture is continuously evolving and will do so over the life of every architect. We are committed to preparing our students to enter the profession with both contemporary scientific knowledge and emerging technical expertise to further this evolution while at the same time ensuring that our graduates are grounded in the fundamental drawing design thinking, investigative and communication skills that have been central to architecture throughout its history. In addition to the science of architecture, we are equally committed to ensuring that our graduates acquire a critical philosophy with which they can engage the design of the built environment.

Knowing how to build is a matter of science and technology but knowing what to build is a question of morality, ethics, and aesthetic responsibility. In this regard the faculty shares a commitment to the stewardship of our environment. This is particularly important in the Northern Rockies where our historic fabric of cities, rural communities and the natural landscape coexist in a tenuous balance. Focusing on the broad principles of creating a sustainable social, cultural, economic and physical environment we utilize the region, from its major cities to its national parks, as the canvas for our teaching, research and creative activities.

Architecture

Briefly defined, architecture is the art and science of designing buildings that provide appropriate accommodation for human activities. Professional practice requires a person with the unique combination of creative ability, technical knowledge, human understanding, and administrative skill. The undergraduate Environmental Design curriculum, which leads to the Bachelor of Arts in Environmental Design degree, prepares students to enter the graduate program in Architecture at Montana State University or serves as a basis for application to other graduate programs or for employment as a non-architect in environmental design fields. However, the Bachelor of Arts in Environmental Design degree by itself does not qualify students to become registered architects. Students wishing to become registered architects must complete the graduate program of study and receive the accredited Master of Architecture degree.

Once admitted to the Environmental Design program, and after completing their fourth year design studios, students with an acceptable academic record may apply to the Master of Architecture professional program. Specific dates for graduate applications can be obtained from the main office of the School of Architecture. The program offers a professional education as well as exposure to other academic disciplines, and provides the foundation for an internship with a practicing architect.

In most states, a graduate with a professional degree in architecture needs to complete the requirements of the Architecture Experience Program (AXP) developed by the National Council of Architectural Registration Boards (NCARB) in which students gain varied experience in an architectural office. Graduates of the Master of Architecture program are qualified to take the Architectural Registration Exam in order to obtain a professional license. A person is not authorized to practice architecture until the architectural licensing examination is passed and a license is issued. Other areas of employment open to the architecture graduate include construction, government service, industry, and education.

In addition to the college preparatory curriculum, high school students planning on enrolling in architecture are especially encouraged to take art courses such as basic design and drawing.

Students begin the undergraduate program in the fall semester because the first course of the design studio sequence is offered fall semester. Students that have completed their university core requirements or have completed a previous degree may enroll in an accelerated first year design sequence offered in the summer semester.

Admission to the Environmental Design Program

Admission to the first year of the Environmental Design Program is open. Students in the first year of the program will be assigned a major code of Pre-Environmental Design. At the end of the spring semester of the first year of the Environmental Design Program, students will undergo a substantive portfolio review to assess their preparedness for the subsequent three years of the Bachelor of Arts in Environmental Design degree program. All portfolio reviews will be undertaken by the Second Year Admissions Committee. Total enrollment in the program shall be

limited by the teaching resources and space capacities of the School of Architecture. Upon successful formal admission to the 2nd year of the program a student's major code will be changed to Environmental Design.

To continue into the second year of the environmental design program first year Pre-Environmental Design students must:

1. Have satisfactorily completed all required course work of the first year of the Environmental Design Program which includes: ARCH 121IA Intro to Design, ARCH 151RA Design Fundamentals I, ARCH 152IA Design Fundamentals II, ARCH 113 Introduction to Architecture Professional Practice and Career, ARCH 161 Introduction to Architectural Graphics, Math requirement or approved equivalent of either Precalculus (M 151Q) **or** Calculus (M 171Q) and College Physics I (PHSX 205) or Physics I with Calculus (PHSX 220) requirement or approved equivalent.
2. Be in good scholastic standing with a cumulative GPA of 2.7 or higher.
3. Have received at least a 3.0 Architecture Studio GPA (ARCH 151RA Design Fundamentals I & ARCH 152IA Design Fundamentals II)
4. Have a design portfolio that indicates creative potential. The design portfolio will be evaluated by faculty in the School of Architecture to assess a student's preparedness for the subsequent three years of the program. Transfer students from other architecture or environmental design programs must have, prior to acceptance to an advanced design year placement, an overall grade-point average of 3.0 or above and a high quality, creative portfolio.
5. Transfer students planning to attend the fall semester must submit their application and portfolio to the Environmental Design Program by May 1. Applications received after that date will be considered on a space-available basis only.

Formal Admission Process for the Environmental Design Program:

1. Application instructions and portfolio information will be provide to Pre-Environmental Design students each spring semester by approximately March 31st each year. The completed application form, plus portfolio of design and graphic work, are to be submitted to the School of Architecture by May 1.
2. First year students are required to submit a portfolio including examples of their design and graphic work.
3. An applicant who has previously undergone the portfolio review and was found to not be prepared for the subsequent years of the Environmental Design program must re-apply for the portfolio review in the regular manner.
4. Students will be notified via email regarding their formal admission status no later that June 15th each year.
5. Pre-Environmental Design students who are found to not be prepared for the subsequent years of the program have the right to meet with the School of Architecture Director for a review of their materials.

Students who are found to not be prepared for the subsequent years of the Environmental Design program may not take ARCH 253, ARCH 254, ARCH 261, or ARCH 262 or any upper division courses in the curriculum. Former students who have withdrawn after being admitted to the program must be in good scholastic standing for re-admission and will be readmitted on a space available basis only. Former students must contact the School in writing, stating their intent to return, at least two months prior to their return so that a decision can be made regarding space availability.

Architecture Residency Internship Program

This is an optional enrichment program for students who, for a short period in their education, would benefit at least as much from professional experience as academic experience. The goals of the program are those of the required architecture courses plus those which can be sought only in the office context, such as familiarization with the relationship of all aspects of professional practice.

Students must obtain their own employment in an architecture firm for a continuous period of not less than 6 months.

Students must apply to the program by June 15th of their 3rd year. The Architecture Residency Internship will take place during the Summer and Fall of the student's fourth year in Environmental Design curriculum. The Residency Internship Studio Coordinator reviews all applications and makes decisions concerning acceptance into the program. The criteria for admission are:

1. A minimum 2.75 overall cumulative grade point average and a minimum 3.0 in all architecture courses.
2. Completion of all required courses as tabulated through the third year.
3. A approved **Residency Internship Contract** signed by employing firm, Internship Coordinator, Academic Advisor and student. Complete Internship Contract must be turned in to Academic Advisor at the latest by June 15th each year for the upcoming Fall semester.

Foreign Study Program

This is an optional enrichment program which allows qualified students to participate in an intensive semester of foreign study. Students pay the additional costs of travel, lodging, and administration related to this program in addition to normal tuition and fees. The program is typically offered Summer semester, subject to funding constraints and student demand, and is organized and directed by a faculty member(s) from the School of Architecture.

The criteria for participation in the Foreign Study Program are as follows:

1. A high degree of self-motivation and self-discipline as demonstrated by performance in required course work.
2. A minimum 3.0 overall cumulative grade point average and a minimum 3.0 in all architecture courses.
3. Completion of ARCH 121IA, ARCH 322IA and ARCH 323IA.
4. Completion of all required courses as tabulated through the third year.

A program application must be submitted by December 15th of the third year of the Environmental Design program. A cash deposit will be required at this time.

Standard of Work in Architecture Courses

Any student receiving two consecutive grades of C- or lower in any design sequence course will be required to repeat the last course in which a C- or lower was received.

Financial

Costs for an architectural education are similar to, though somewhat higher than other programs in the university. An academic exposure to both rural and urban settings through class field trips, the integration of computer technology, networking, digital fabrication, printing as well as other program enhancements are an important part of an architect's education. In order to meet this need and help defer costs of the field trips, computer integration, lecture series and program enhancements, a **Program Fee** is assessed to each student in the Pre-Environmental Design, Environmental Design and Architecture programs based on major code that reflects the student's degree status in the program. For current Program Fee costs, students may contact the School of Architecture. Students are required to purchase their own personal notebook computer, which meets the specifications of the School of Architecture, during the second year of the Environmental Design undergraduate program. The computer will be an essential tool for use throughout the Professional Program.

Beyond normal tuition, fees, room, board, and supplies, an architectural student requires drawing equipment and materials for drawing and models during the school year. This can be expected to add at least another $600 per year to the cost. Inquiries for financial aid or assistance should be sent directly to the Office of Financial Aid Services at Montana State University. The School of Architecture does have a supply and material share resource room available for all students.

Curriculum in Environmental Design

Freshman Year	Credits	
	Fall	Spring
ARCH 121IA - Introduction to Design	3	
ARCH 151RA - Design Fundamentals I	4	
M 151Q - Precalculus or M 171Q - Calculus I	4	
University Core	6	
PHSX 205 - College Physics I or PHSX 220 - Physics I with Calculus		4
ARCH 152IA - Design Fundamentals II		4
ARCH 113 - Introduction to Architecture Professional Practice & Career		1
ARCH 161 - Introduction to Architectural Graphics		1
University Core		4
Year Total:	17	14
Sophomore Year	**Credits**	
	Fall	**Spring**
ARCH 253 - Architectural Design I	5	
ARCH 261 - Architectural Graphics I	3	
ARCH 322IA - World Architecture I	3	
University Core	3	
ARCH 241 - Building Construction I		3
ARCH 262 - Arch Graphics II		3
ARCH 254 - Architectural Design II		5
ARCH 323IA - World Architecture II		3
Year Total:	14	14
Junior Year	**Credits**	
	Fall	**Spring**
ARCH 331 - Environmental Controls I	4	
ARCH 363 - Architectural Graphics III	3	
ARCH 343 - Architectural Structures I	4	
ARCH 355 - Architectural Design III	5	
ARCH 332 - Environmental Controls II		4
ARCH 340 - Building Construction II		4
ARCH 344 - Architectural Structures II		4
ARCH 356 - Architectural Design IV		5
Year Total:	16	17
Senior Year	**Credits**	
	Fall	**Spring**
ARCH 431 - Leadership in Architecture (Online Course)	3	
Choose one of the Following Option Studios	5	
ARCH 414 - Architectural Study Abroad & ARCH 428 - Foreign Study History		
ARCH 450 - Community Design Center (5 credits)		
ARCH 458 - Arch Design VI (5 credits)		
ARCH 498 - Architecture Residency Design Studio (6 credits)		
University Core and Electives	9	
ARCH 413 - Professional Practice		3
ARCH 457 - Architectural Design V		5
ARCH 452 - Research Methods in Arch		3
Electives		6
Year Total:	17	17
Total Program Credits:		**126**

A minimum of 126 credits is required for graduation; 42 of these credits must be in courses numbered 300 and above.

The School of Architecture reserves the right to retain student work for exhibition and instructional purposes.

Graduate Programs

- Master of Architecture (http://catalog.montana.edu/graduate/arts-architecture/architecture/)