# **Architecture**

#### Department Information

· Department Location:

Renaissance Hall

· Department Phone:

701-231-6151

Department Email:

ndsu.ala@ndsu.edu

 Department Web Site: www.ndsu.edu/ala/ (http://www.ndsu.edu/ala/)

· Credential Offered:

B.S.Arch.

· Official Program Curriculum:

catalog.ndsu.edu/undergraduate/program-curriculum/architecture/ (http://catalog.ndsu.edu/undergraduate/program-curriculum/architecture/)

Architecture is a fine art devoted to the design of the human environment. The architect is concerned with the aesthetic, social, environmental, technological and psychological factors that influence the design of a building. Architects are involved in the success, quality and appearance of a building within the context of a community and the city. Architecture is a dynamic profession that ranges from residential houses to large-scale urban buildings. An architect can design houses, commercial buildings, museums, college science buildings, and resorts, as well as many other building types.

#### **BACKGROUND INFORMATION**

To become an architect, you must learn to make use of science and technology, and develop sensitivity for beauty in the design of space and form with material. You must develop a deep understanding of people and their surroundings. Because this work encompasses so many different fields of interest, the architect is best thought of as a professional who bridges different areas of study and blends them into a single, significant activity.

# **CAREER OPPORTUNITIES**

Architects work in architectural firms or accept positions with government, corporations or institutions. Some architects become highly specialized; others remain generalists in the profession, working on all facets of a project. Whichever path your career may follow, it is necessary to first build a firm background that includes essential architectural knowledge and skills. Architecture provides a variety of interesting positions within the discipline. One can either work for an established architecture firm or create their own business. There are three typical areas in architecture which one can focus on (or one can do all three) once they begin working. These three areas are: the design or aesthetic aspects of a project, the technical or material aspects of a project, or as the construction liaison when a project is being built. Further, architecture is a scalable profession depending on one's interests. For example, the possible areas one can work in range from small-scale residential houses to large-scale skyscrapers.

#### **ACCREDITATION**

The five-year Master of Architecture degree is fully accredited by the National Architectural Accreditation Board (NAAB). For more information see, www.naab.org/home. To become a licensed architect requires an accredited professional degree, completion of the Architectural Experience Program (AXP) and passing your state's licensing examination.

### THE PROGRAM

The architecture program is a five-year professional course of study leading to a Master of Architecture degree. This degree is nationally accredited and recognized by all state architectural licensing boards. Students receive a Bachelor of Science in Architecture, a pre-professional degree, at the end of four years. During the first year of pre-architectural studies, the curriculum addresses the understanding of the environment and our impact on nature. In addition to meeting general education and departmental requirements students take five environmental design courses (ENVD) comprised of lecture courses, a drawing course and a design fundamentals course. Beginning at the sophomore level, there is a selective admissions process where admitted students become architecture majors. We limit our studio courses to a maximum of 16 students to maintain a high level of student faculty contact. The program is a studio based model of education where students have high contact hours with their professors and learn problem solving techniques and design methodologies. The primary focus is on design thinking where students engage in individual and group projects that represent a vast array of design problems that require real-world solutions. Our primary focus is for students to learn to be great designers and leaders who engage the dynamic and emerging problems of the world with beautiful and thoughtful designs. Students will learn how to communicate their ideas through writing and public speaking in addition to traditional and new ways of thinking and communicating such as physical models, drawings, computer animation and renderings and virtual reality. The program has required field trips, a lecture series and invited outside professionals that help students focus on their own interests in architecture and create a project based on those interests.

#### **ACTIVITIES AND FACILITIES**

Activities within the department include:

- Student chapters of the American Institute of Architecture Students; Tau Sigma Delta; Freedom by Design; U.S. Green Building Council; National Organization of Minority Architects
- · Yearly career fair
- · Student-run Beaux Arts Ball with a guest speaker
- · Interaction with community projects such as eFargo
- · Studio field trips to U.S. cities
- · Visiting lecturers who speak on architecture and related topics
- Joint studio projects with the landscape architecture program
- · Semester-long term abroad
- · Summer study opportunities in Europe and North America and an International Student Exchange Program
- · Summer internship opportunities

#### Our facilities include:

- · Two remarkable buildings located in downtown Fargo: Klai Hall and Renaissance Hall
- · 3-D prototyping and printing
- · 3-D computing rendering and server farm
- · State-of-the-art computing labs
- · Computer aided laser cutters and CNC
- · Large document printers and scanners
- · Software such as GIS, CAD and 3-D rendering and modeling
- · An Architecture and Landscape Architecture Library of about 18,000 books, 70 magazine subscriptions and 36,000 slides
- · Photographic and graphic reproduction equipment
- · Individual studio spaces in the second through fifth years

# HIGH SCHOOL PREPARATION

We suggest that students take high school courses in digital drawing and animation, an art class, such as drawing from life, and math and science courses such as calculus, trigonometry and physics. If possible, we encourage high school students to take advance placement or college credit courses that could be substitutes for North Dakota State University General Education requirements.

#### TRANSFER STUDENTS

Transfer applicants are required to enter the architecture program at the first-year level. Five years of study are required for completion of the degree. Advanced standing is possible through a portfolio and transcript review process.

#### SELECTIVE ADMISSION

Approximately 64 architecture majors are selected for admission into the second year of the program. A student's eligibility is based on their overall grade point average (GPA) and their GPA for pre-architecture courses with the ENVD prefix. It is important to apply early, complete all freshman courses in the first year and maintain a solid academic record. Students must have a minimum 3.0 GPA to apply to the graduate school during the third or fourth year of the program.

#### **SPECIAL NOTICE**

Students in the second year of the program will be required to purchase a laptop computer. Information on type of computer, software, purchase, and financing arrangements will be distributed to students prior to purchase.

# Sample Program Guide

Please note this is a sample program guide and not an official curriculum. Actual student schedules for each semester will vary depending on start year, education goals, applicable transfer credit, and course availability. Once admitted, students are encouraged to work with their assigned academic advisor on a regular basis to review degree progress.

First Year				
Fall	Credits	Spring	Credits	
ENVD 101		3 ENVD 104		1
ENVD 102		1 ENVD 172		3

3

ENVD 130		3 ENGL 120		3
ENGL 110		3 COMM 110		3
ARCH 321		3 ARCH 322		3
PHYS 120		3 Gen Ed Quantitative Reasoning Requirement		3
		Gen Ed Wellness Requirement		2
		16		18
Second Year				
Fall	Credits	Spring	Credits	
ARCH 271		6 ARCH 272		6
ARCH 231		3 ARCH 232		3
ARCH 233		1 ARCH 344		3
ARCH 323		3 PSYC 111		3
Gen Ed Science & Tech Requiremen	t	3 PHIL Elective		3
		16		18
Third Year				
Fall	Credits	Spring	Credits	
ARCH 371		6 ARCH 372		6
ARCH 341		3 ARCH 450		3
ARCH 351		3 ARCH 454		3
ARCH 453		3 ARCH 461		3
Gen Ed Science & Tech Lab Requirement		1 ENGL 326 or 357		3
		16		18
Fourth Year				
Fall	Credits	Spring	Credits	
ARCH 471		6 ARCH 472 or 474		6
ARCH 443		3 SOC 110		3
ANTH 111		3 Electives		3
Gen Ed Science & Tech Requiremen	t	3 Electives		5
Electives		3		
		18		17

**Total Credits: 137**