ARCHITECTURE (BARCH), BACHELOR OF ARCHITECTURE

Dunwoody's Bachelor of Architecture is a three-year, full-time professional degree program. The program invites applications from students with related degrees from other institutions as well as recipients of the Associate in Applied Science degree in Architectural Drafting & Design. Applications for admission into year three are accepted based on transcript and portfolio review.

Upon acceptance into the Bachelor of Architecture degree program, students acquire the capacity to become leaders in the profession. During their three years in the program, students harness advanced design and building technologies as a design tool to conceive of comprehensive architectural works. Students acquire leadership skills during practice-based studios with real world projects serving under-served communities worldwide. To support these public interest design initiatives, concurrent courses include professional practice and Architectural Registration Exam preparation. Students learn to design in historical and cultural contexts through courses in history, theory, culture, service learning, community and civic engagement, and design build projects. Concurrently, students engage in Arts & Sciences courses in critical and creative thinking, research methods, and business courses in marketing, accounting, and management.

The Bachelor of Architecture degree program is accredited by the National Architectural Accrediting Board (NAAB). For more information about NAAB visit: http://naab.org/about/home (http://naab.org/about/home/)

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.

Dunwoody College of Technology, School of Design offers the following NAAB-accredited degree program:

Bachelor of Architecture: 150 Semester Credits
Year of Next Accreditation Visit: 2023

Credential Earned: BARCH
Length of Program: 3 years (6 semesters)
Classes Offered: Day; Distance Learning
Available Starts: Fall Semester
Accreditation: National Architectural Accrediting Board (NAAB)

Program Outcomes

- A.1. Professional Communication Skills: Ability to write and speak effectively and use representational media appropriate for both within the profession and with the general public.
- A.2. Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
- A.3. Investigative Skills: Ability to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.
- A.4. Architectural Design Skills: Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.
- A.5. Ordering Systems: Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.
- A.6. Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.
- A.7. History and Global Culture: Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors.
- A.8. Cultural Diversity and Social Equity: Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to sites, buildings, and structures.
- B.1. Pre-Design: Ability to prepare a comprehensive program for an architectural project, which must include an assessment of client and user needs, an inventory of spaces and their requirements, an analysis of site conditions (including existing buildings), a review of the relevant building codes and standards, including relevant sustainability requirements, and assessment of their implications for the project, and a definition of site selection and design assessment criteria.
- B.2. Site Design: Ability to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.
- B.3. Codes and Regulations: Ability to design sites, facilities, and systems that are responsive to relevant codes and regulations, and include the principles of life-safety and accessibility standards.
- B.4. Technical Documentation: Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.
- B.5. Structural Systems: Ability to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.
- B.6. Environmental Systems: Ability to demonstrate the principles of environmental systems' design, how design criteria can vary by geographic region, and the tools used for performance assessment. This demonstration must include active and passive heating and cooling, solar geometry, daylighting, natural ventilation, indoor air quality, solar systems, lighting systems, and acoustics.
- B.7. Building Envelope Systems and Assemblies: Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental

performance, aesthetics, moisture transfer, durability, and energy and material resources.

- B.8. Building Materials and Assemblies: Understanding of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse.
- B.9. Building Service Systems: Understanding of the basic principles and appropriate application and performance of building service systems, including lighting, mechanical, plumbing, electrical, communication, vertical transportation, security, and fire protection systems.
- B.10. Financial Considerations: Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.
- C.1. Research: Understanding of the theoretical and applied research methodologies and practices used during the design process.
- C.2. Integrated Evaluations and Decision-Making Design Process: Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.
- C.3. Integrative Design: Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.
- D.1. Stakeholder Roles in Architecture: Understanding of the relationships among key stakeholders in the design process— client, contractor, architect, user groups, local community—and the architect's role to reconcile stakeholder needs.
- D.2. Project Management: Understanding of the methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.
- D.3. Business Practices: Understanding of the basic principles of a firm's business practices, including financial management and business planning, marketing, organization, and entrepreneurship.
- D.4. Legal Responsibilities: Understanding of the architect's responsibility to the public and the client as determined by regulations and legal considerations involving the practice of architecture and professional service contracts.
- D.5. Professional Conduct: Understanding of the ethical issues involved in the exercise of professional judgment in architectural design and practice and understanding the role of the NCARB Rules of Conduct and the AIA Code of Ethics in defining professional conduct.
- PC.1 Career Paths: How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline's skills and knowledge.
- PC.2 Design: How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

- PC.3 Ecological Knowledge and Responsibility: How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.
- PC.4 History and Theory: How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.
- PC.5 Research and Innovation: How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.
- PC.6 Leadership and Collaboration: How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.
- PC.7 Learning and Teaching Culture: How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.
- PC.8 Social Equity and Inclusion: How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.
- SC.1 Health, Safety and Welfare in the Built Environment: How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.
- SC.2 Professional Practice: How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.
- SC.3 Regulatory Context: How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.
- SC.4 Technical Knowledge: How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.
- SC.5 Design Synthesis: How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.
- SC.6 Building Integration: How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Degree Requirements

Admitted students to Architecture (BARCH) can transfer up to 45 technical and 15 Arts & Sciences credits. A transfer evaluation is required. Not all credits may transfer into the degree program.

Code	Title	Credits
Transfer Credits:		**60**
General Requirements		
Communications Elective		3
Humanities Elective		3
Math/Science Elective		3
Social Science Elective		3
General Elective		3
Technical Requirements		
ARCH3110	City & Site	5
ARCH3120	2D Rendering	3
ARCH3130	Early Global History of Architecture	3
ARCH3140	Landscape	1
ARCH3210	Program & Society	5
ARCH3220	2D Fabrication	3
ARCH3230	Late Global History of Architecture	3
ARCH3240	Material Studies	1
ARCH4110	Research & Culture	5
ARCH4120	3D Fabrication	3
ARCH4130	Globalization & the Vernacular	3
ARCH4140	Urbanism	1
ARCH4210	Fabrication	5
ARCH4220	Moving Image & Animation	3
ARCH4230	Metropolis & Activism	3
ARCH4240	Parametric Design	1
ARCH5110	Integrative Design	5
ARCH5120	Thesis Preparation	3
ARCH5130	Systems & Envelope	3
ARCH5140	Entrepreneurship	1
ARCH5210	Thesis	8
ARCH5220	Professional Practice	3
ARCH5230	Structures	3
ARCH5240	Architectural Writing	1
Total Credits		**150**

Courses

Descriptions

ARCH3110 | City & Site | Studio (5 Credits)
Apply the fundamental and experimental approaches to a rigorous design process. Apply design thinking at a city scale, through a non-polemic, iterative, multimedia approach.

ARCH3120 | 2D Rendering | Lecture (3 Credits)
Research design thinking through 2D rendering methods. Explain the fundamentals of a design process, iteration, rigor, critical representation, and architectural communication.

ARCH3130 | Early Global History of Architecture | Lecture (3 Credits)
Research and analyze architecture of the world throughout history. Examine the relationships between culture, geography, politics, race, and the ways in which they shape the built environment.

ARCH3140 | Landscape | Seminar (1 Credit)
Explore how form can integrate with and grow from natural systems, as well as how natural systems can integrate into architectural works through legible, self-evident user interaction with processes and phenomena.

ARCH3210 | Program & Society | Studio (5 Credits)
Research client, site and regulatory conditions to create a comprehensive architectural program. Utilize space planning strategies to create form. Use iterative design processes to evolve architectural thought. Expand design thinking and visualization skills toward the development of a complex architectural condition.

ARCH3220 | 2D Fabrication | Lecture (3 Credits)
Analyze architectural order through 2D fabrication. Develop, fabricate, and present varying ordering systems through iteration, rigor, critical representation, and architectural communication.

ARCH3230 | Late Global History of Architecture | Lecture (3 Credits)
Analyze the history and current context of modern architecture globally. Identify the societies and ideas that shape architecture history and theory. Examine the relationships between culture, geography, politics, race, and the ways in which they influence architectural thought and form.

ARCH3240 | Material Studies | Seminar (1 Credit)
Investigate the value, geography, global history, ecological impact, and strength properties of conventional, novel, and experimental materiality. Develop propositional learning skills and the understanding of technology, nature and design through material.

ARCH4110 | Research & Culture | Studio (5 Credits)
Apply architectural research to design while engaging a real world client and project. Employ an inclusive and participatory design process through engagement with various community stakeholders. Examine the relationship of architecture to public process and community development.

ARCH4120 | 3D Fabrication | Lecture (3 Credits)
Apply analog and digital 3D fabrication techniques as a design and representation tool. Develop skills utilizing design thinking, ordering systems, and digital fabrication methodologies.

ARCH4130 | Globalization & the Vernacular | Lecture (3 Credits)
Identify distinctions between vernacular and formal architecture traditions around the globe. Elaborate on the tensions between the role of architecture in urban and rural landscapes, as well as the distinctions between city and country. Catalog global vs. local processes in the structure of the city and place making. Build vocabulary and make distinctions in terminology such as culture, diversity, equity, modernity, pre-modern, agricultural, rural.

ARCH4140 | Urbanism | Seminar (1 Credit)
Research and analyze ideas of urbanism and their relationship to architecture within a design process. Perform comparative analysis of the Twin Cities and other urban centers through a series of case studies.

ARCH4210 | Fabrication | Studio (5 Credits)
Design and fabricate for varying socio-economic, political, and cultural contexts through immersive learning. Acquire a depth of knowledge of varying cultures and human behaviors and how they manifest themselves architecturally. Engage in intensive, participatory, and prototyping processes.

ARCH4220 | Moving Image & Animation | Lecture (3 Credits)
Practice skills in still and moving architectural visualization as a design and representation tool. Develop new skills utilizing design thinking, story-telling, and rendering techniques.

ARCH4230 | Metropolis & Activism | Lecture (3 Credits)
Examine the structure of cities and human settlement. Analyze the bio-politics of the city through the lens of safety, equity, race, and social justice, and its effect on humanity and the environment. Explore changes in urbanism based on current cultural conditions.

ARCH4240 | Parametric Design | Seminar (1 Credit)
Analyze ideas of parametric design and their relationship to architecture and the design process. Perform exercises in varying ideas and processes of parametric design in architecture.

ARCH5110 | Integrative Design | Studio (5 Credits)
Integrate site, regulatory, and program elements to create an architectural work. Demonstrate design intent within the design and development of building systems. Demonstrate integrative design through varying forms of architectural representation.
Prerequisite(s): ARCH4210, ARCH3210, ARCH3110, And ARCH4110

ARCH5120 | Thesis Preparation | Lecture (3 Credits)
Propose topics of architectural inquiry through peer-reviewed research. Investigate physical and digital modes of representation. Utilize physical and digital modes of representation, design thinking, ordering systems, and investigative skills to develop, represent, and propose a thesis.

ARCH5130 | Systems & Envelope | Lecture (3 Credits)
Research and analyze the building envelope and its performative relationship to building systems. Discover ways in which building systems are designed to reinforce architectural thought. Analyze works of architecture with a focus on integrative thinking.

ARCH5140 | Entrepreneurship | Seminar (1 Credit)
Investigate how architectural businesses form, grow, hire, and create sustainable business plans with lasting value. Analyze real world examples of how the profession of architecture fiscally operates in foundation, operation, capital investment, asset building, and liability management.

ARCH5210 | Thesis | Studio (8 Credits)
Design, develop, and present a provocation that defends a thesis. Demonstrate the power of architecture to creatively solve cultural, environmental, technological, or other substantive problems. Individual design philosophies, processes, self-discipline, autonomy, and time management skills are rigorously developed with an emphasis on iteration and personal evolution.
Prerequisite(s): ARCH5120

ARCH5220 | Professional Practice | Lecture (3 Credits)
Analyze the role of the architect in society as a leader, collaborator, and catalyst toward a better world. Examine the ethical, social, and legal responsibilities of professional practice. Describe the role of equity, diversity, and inclusion within the profession.

ARCH5230 | Structures | Lecture (3 Credits)
Analyze the principles of building structures through quantitative and mathematical means. Examine conventional, unconventional, and emerging structural systems. Explain the relationship between structural systems and design intent.

ARCH5240 | Architectural Writing | Seminar (1 Credit)
Engage in scholarly architectural writing. Discover the means and methods of architectural writing. Gain exposure to scholarly publication opportunities. Generate works which successfully hold up to peer review. Perform peer review for other generated works.