

BACHELOR OF ARCHITECTURE

Through its deep commitment to a rigorous architectural education and its historic contributions to the legacy of modernism, the College of Architecture enjoys an unparalleled international reputation. With a pedagogy based on the synthesis of practice and research, Illinois Institute of Technology offers the professional, five-year Bachelor of Architecture (B.Arch.). Accredited by the National Architectural Accrediting Board (NAAB), this well-established degree program prepares architects to apply visual communication, design, analytical, and professional skills to provide inventive solutions to a broad range of design problems.

Drawing strength from a lineage that reaches back to the Bauhaus, the faculty and curriculum of the college are committed by way of vigorous research to the material culture of the built environment, to a sophisticated integration of technology and design, and to a deep engagement with professional practice. The college challenges students to engage with a full range of contemporary issues, including sustainability, global urbanization, material and structural advances, design/build integration, digital modeling and fabrication, and design theory and criticism. The students, faculty, and alumni foster an academic environment that is intellectually stimulating, professionally challenging, committed to innovation, and international in scope.

The profession of architecture is changing, due to forces both internal and external. Developments in technology offer architects new representational tools that change how projects are conceived. Digital fabrication tools provide architects new means of realizing their projects and suggest a future in which architects move between the studio and the shop, working side-by-side with fabricators to make their visions a reality. The college prepares students to take command of these new technologies and forge a future that embraces new modes of thinking and making.

While technology is reshaping architecture within, the profession is also being affected by external forces. Economic factors and changes in project delivery are upsetting traditional power structures within the industry, while the increasing complexity of building projects is leading toward specialization within the field and the creation of new alliances. Within this rapidly-changing environment, architects of tomorrow will have to be agile, carving their own paths through the profession and authoring their own careers. The B.Arch. degree program stresses research, analysis, and synthesis as the means to prepare students for an expanding field in which resourcefulness, critical thinking, and the ability to seize opportunity and new territories of intervention will be rewarded.

As Illinois Institute of Technology focuses on a future of global urbanism and instills in its students a profound awareness of the changing world around them, it also acknowledges what does not change, remaining true to its legacy as a place of rigorous thinking and making. Amidst new patterns of urbanization and technological advances, and against the backdrop of a changing profession, the College of Architecture is still a place where how a thing is made matters—whether it is a door, a building, or a city.

Curriculum Overview

The curriculum for the B.Arch. is organized thematically into “strands” corresponding to different areas of the curriculum: design, technology, history/theory, design communication, and professional practice. The design strand includes design studio courses as well as elective courses in design and independent studies. The technology strand covers courses in structural engineering, environmental systems, and elective courses in advanced building technology. The history/theory strand includes required and elective courses in architectural history, theory, and cultural studies. The design communication strand includes courses to develop the student’s design thinking, computation skills, drawing, writing, and verbal abilities. Professional practice courses educate students in contemporary practice and prepare them for future trends. General education courses in the humanities, social sciences, mathematics, and other disciplines define the remaining coursework.

In the first years, students are introduced to the fundamental elements of architecture and aspects of the profession. Students are given an introduction to the history and theory of architecture and guided to develop their skills of communication (verbal, graphic, and written). Intermediate years of the program continue to develop the students’ skills while engaging them with issues of contemporary architecture and urbanism in design studios and related coursework that focus on the architectural and infrastructural elements that comprise the city. The final year of the architecture program introduces students to urban design in research-based, forward-looking studios that speculate on the city of the future and related coursework on the city and global urbanism.

Design Studios

The curriculum is centered on a studio sequence of increasing complexity. Over the first four years, studio topics grow from small projects focused on basic material connections, through increasingly complex programs and building systems, to arrive at comprehensive design, encompassing the full range of architectural knowledge. The final year of the program is structured around advanced studios devoted to specialized topics.

History/Theory

The history and theory sequence of our curriculum presents the intellectual contexts within which architecture, urbanism, and landscape architecture are practiced and interpreted. These courses introduce the buildings, cities, sites, projects, texts, images, people, movements, schools, and concepts that have shaped architecture in the past and that shape architecture today. In addition to this content, the history and theory coursework also teaches methods of visual analysis, close reading, critical thinking, and effective writing.

Our goal is to provide an understanding of the complex intellectual, aesthetic, technical, and political contexts within which architecture arises. Primary source readings by architects, critics, novelists, and theorists are essential to this approach. An overriding aim of these courses is to articulate the irreducibly rich relationships between buildings, cities, and landscapes as material artifacts and the ideas that surround them.

The history and theory sequence begins with a set of core classes that provide a broad introduction to architecture and urbanism, covering examples from around the world and throughout history. These courses are built upon a core set of projects, texts, and concepts that provide our students with a foundation for their studies and careers. This core sequence is followed by advanced classes—mostly electives selected from a changing menu of seminars—that expand into more sophisticated and specialized topics in smaller class settings.

Technology

The technology curriculum provides students an understanding of the building systems and technologies impacting the design of the built environment. The sequence starts with an introduction to structural concepts and structural proportioning, followed by courses in structural systems and the elements of structure. Advanced level courses on the development of structural form and structural analysis introduce students to more sophisticated techniques.

Running parallel with this coursework is an integrated sequence of materials courses—concrete, masonry, metals, woods and plastics, and glass—intended to provide an in-depth knowledge of building materials. Building systems are taught in a two-semester course sequence and integrated into studio work in a comprehensive building design project.

Design Communication

The field of communication is entangled in the processes of design, including all modalities of media, data, and computational processes, and the entire spectrum of sensory input and output. The design communication curriculum heralds a deeply entangled hybridity of physical and digital. It circumvents the term “virtual,” to disallow the way in which it undermines the true physical and cognitive realities of the digital. We are in the beginning of an age where the built environment is constituted through an “Internet of Things.” We will increase the fluency of our students across a spectrum of languages: spoken, written, composed, constructed, and coded.

Professional Practice

The primary objective of the professional practice coursework is to instill awareness and understanding of the conceptual framework and knowledge base necessary to facilitate the transition from the university to the rapidly-evolving world of professional practice. After completing the professional practice coursework, students will be able to evaluate career options and establish a focused career path, command the knowledge required to begin their careers responsibly and effectively, and understand the processes whereby continuing learning can take place. Students will develop a sense of themselves as members of a profession, an understanding of the legal, social, and cultural responsibilities of the architect, and the potential roles of the architect in society.

Electives

In addition to design studios, courses include architectural history and theory, building technologies, structures, design technologies, design communication, and professional practice, as well as courses beyond architecture, for a well-rounded undergraduate education. Elective courses will provide some of the most valuable and memorable learning experiences in the Bachelor of Architecture program. Taken during the fourth and fifth year of studies, architecture electives allow students to diversify or concentrate their areas of knowledge.

Students may select courses in digital applications, history and theory, landscape architecture, advanced drawing, architectural photography, visual training, design/build, management, and specialized independent studies.

Advanced courses in architectural materials, construction technology, energy conscious design, and structures emphasize the interrelationship of engineering and architecture, while digitally-enriched electives will maximize readiness to use tomorrow's most sophisticated design, analysis, and presentation tools. Courses in entrepreneurship, project and construction management, and other subjects prepare students for the day-to-day practice of architecture.

Professional Degree

The undergraduate professional degree program at Illinois Institute of Technology has always been a comprehensive five-year accredited Bachelor of Architecture (B.Arch.) degree. The curriculum provides the fundamental body of knowledge required by the profession. Each design studio is team taught to horizontally integrate all courses within each year and vertically sequence learning experiences. This professional background prepares students for the last year of advanced design studios focused on spatial awareness, comprehensive building design, and the design of large building complexes.

The university has also taken a leadership role in addressing the responsibilities of professional education for the 21st century's global workplace. While technical proficiency will always be necessary, Illinois Institute of Technology recognizes that colleges must also educate students to work as part of teams, to communicate well, and to understand the economic, social, ethical, environmental, and international context of their profession. Faculty broaden the upper-level studios to resemble real-world interdisciplinary projects. This emphasis on

holistic learning, when combined with a new global vision and advanced computer and communication technology, positions Illinois Institute of Technology and the College of Architecture on the leading edge of architectural education.

Accreditation

In the United States, most state 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 U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted up to an eight-year term of accreditation, depending on the extent of its conformance with established educational standards.

The College of Architecture has two NAAB-accredited degrees: the Bachelor of Architecture and the Master of Architecture professional degree programs. Both hold eight-year terms of accreditation with the NAAB.

Academic Standards

The Bachelor of Architecture is a professional degree, accredited by NAAB. The Illinois Institute of Technology curriculum must comply with the NAAB's Conditions for Accreditation, which define minimum standards of knowledge in professional education. The college alone is responsible for maintaining professional standards, high academic quality, and the purposeful integration and sequencing of general education and prerequisite courses to meet the NAAB's criteria for student performance. These criteria encompass two levels of accomplishment: understanding and ability. In meeting these criteria, the college prepares students for the profession and its practice. Students are expected to monitor their degree progress and work closely with their academic adviser to insure they are complying with academic requirements while meeting college and university standards.

With the Office of Undergraduate Academic Affairs, the college routinely evaluates degree progress and academic standards for all architecture students. When student performance repeatedly falls below college and university academic standards, students may be placed on academic probation or dismissed. The studio sequence is the core of the curriculum. Students may continue their studio enrollment only when all prerequisite courses are satisfactorily completed.

To maintain academic and professional standards, the college may restrict or postpone a student's studio enrollment under any of the following conditions: failure of any prerequisite studio, unmet prerequisite courses (general education or support courses), university academic probation, or if a student's studio GPA falls below 2.25. Students and their advisers are notified each semester if these conditions arise.

Transfer Students

Depending on their previous studio and architecture courses, transfer students will begin their studio sequence at the college in one of the foundation studios: years one, two, or three. The last six studios must be taken at the university. Students attending a four-year university who have completed three years of coursework are discouraged from applying to the university as a B.Arch. transfer student. Transfer credit is awarded based upon an evaluation of general education courses by the Office of Undergraduate Academic Affairs.

Transfer credit for architecture courses is determined by an individual portfolio review conducted by college faculty. Portfolios must include examples of student work, official course descriptions, a course syllabus, and supporting documents. Studio placement will depend not only on previous studio work, but also upon the completion of all prerequisite courses in related subjects such as math, physics, structures, and design communications.

Visiting Students

Non-degree visiting students who wish to transfer to the university and complete a B.Arch. degree must re-apply for admission as a transfer student. Upon admission, they will follow the same requirements for studio placement and transfer credit as all transfer students. Visiting students seeking one semester of study are encouraged to apply for the fall semester only.

Change of Major to Architecture (B.Arch.)

Students admitted to the university in another major are asked to petition the College of Architecture for admission to the professional degree program. In addition to the Change of Major Form, students are required to meet with designated College of Architecture staff to initiate their application and discuss the requirements of the five-year degree. Students should have a minimum cumulative GPA of 3.00 at Illinois Institute of Technology for consideration.

Required Courses

| Code | Title | Credit Hours |
|--|--|----------------|
| Architecture Requirements | | (78) |
| ARCH 100 | Introduction to Architecture | 3 |
| ARCH 107 | Design Communication I: Introduction | 3 |
| ARCH 108 | Design Communication II: Advanced | 3 |
| ARCH 113 | Architecture Studio I: Elements | 6 |
| ARCH 114 | Architecture Studio II: Unit | 6 |
| ARCH 201 | Architecture Studio III: House | 6 |
| ARCH 202 | Architecture Studio IV: Multiple | 6 |
| ARCH 207 | Design Communications III: Analysis and Exposure | 3 |
| ARCH 215 | Site Design, Planning, and Ecology | 3 |
| ARCH 305 | Architecture Studio V: Hybrid | 6 |
| ARCH 306 | Architecture Studio VI: Hybrid | 6 |
| ARCH 413 | Architectural Practice | 3 |
| ARCH 417 | Architecture Studio VII: Synthesis | 6 |
| ARCH 418 | Architecture Studio VIII: Synthesis | 6 |
| ARCH 419 | Architecture Studio IX: Advanced | 6 |
| ARCH 420 | Architecture Studio X: Advanced | 6 |
| Building Science and Structural Requirements | | (18) |
| ARCH 230 | Systems: Structural Analysis | 3 |
| ARCH 334 | Material: Metal | 3 |
| ARCH 335 | Material: Cementitious | 3 |
| ARCH 403 | Mechanical and Electrical Building Systems for Architects I | 3 |
| ARCH 404 | Mechanical and Electrical Building Systems for Architects II | 3 |
| ARCH 482 | Material: Fibrous | 3 |
| or ARCH 483 | Material: Transparent | |
| Art and Architectural History Requirements | | (9) |
| AAH 119 | History of World Architecture I | 3 |
| AAH 120 | History of World Architecture II | 3 |
| ARCH 321 | Contemporary Architecture | 3 |
| Architectural History Elective | | (3) |
| Select three credit hours | | 3 |
| Architecture and Urbanism Requirements | | (6) |
| AURB 201 | The Metropolis | 3 |
| AURB 465 | Urbanism | 3 |
| Architecture Electives | | (15) |
| Select 15 credit hours | | 15 |
| Mathematics Requirements | | (5-6) |
| Select Math 119 and Math 122, or Math 151 ¹ | | 5-6 |
| Physics Requirement | | (4) |
| PHYS 200 | Introduction to Energy, Waves, Materials, and Forces | 4 |
| Humanities and Social Science Requirements | | (21) |
| See Illinois Tech Core Curriculum, sections B and C | | 21 |
| Interprofessional Projects (IPRO) | | (6) |
| See Illinois Tech Core Curriculum, section E | | 6 |
| Non-Architecture Elective | | (3) |
| Select three credit hours ² | | 3 |
| Total Credit Hours | | 168-169 |

- ¹ Math 119 (3 credits) and Math 122 (3 credits) are the recommended courses to meet the Mathematics requirement; however, Math 151 (5 credits) can also be taken to meet this requirement.
- ² A non-architecture elective cannot be an AAH, ARCH, AURB, LA, or CAE course.

Minors and Architecture Electives

College of Architecture students may pursue a minor in another department; however, the requirements for a minor must be met in addition to the curricular requirements for the Bachelor of Architecture degree. Requirements for architecture electives are most often met by courses offered in the College of Architecture. When deemed appropriate by an adviser or a dean, and in consultation with the Office of Undergraduate Academic Affairs, a select number of courses from other departments may serve as architecture electives. These have included ID courses or selected CAE courses related to construction management or civil and architectural engineering. Students should consult with their academic adviser early in their program of study. The following list includes some typical minors for architecture students.

- Business
- Entrepreneurship
- Psychology
- Urban Studies

Additional minors in humanities or social sciences that may be of interest:

- Policy and Ethics
- Public Policy

Minors in civil and architectural engineering:

- Building Systems Engineering
- Construction Management
- Structural Engineering

Bachelor of Architecture Curriculum

| | | Year 1 | |
|---------------------------------|--------------|---|--------------|
| Semester 1 | Credit Hours | Semester 2 | Credit Hours |
| ARCH 113 | 6 | ARCH 114 | 6 |
| ARCH 100 | 3 | ARCH 108 | 3 |
| ARCH 107 | 3 | AURB 201 | 3 |
| Math Requirement ¹ | 5 | Humanities 200+ | 3 |
| 17 | | 15 | |
| | | Year 2 | |
| Semester 1 | Credit Hours | Semester 2 | Credit Hours |
| ARCH 201 | 6 | ARCH 202 | 6 |
| ARCH 207 | 3 | ARCH 215 | 3 |
| AAH 119 | 3 | AAH 120 | 3 |
| PHYS 200 | 4 | ARCH 230 | 3 |
| | | Humanities or Social Sciences Elective | 3 |
| 16 | | 18 | |
| | | Year 3 | |
| Semester 1 | Credit Hours | Semester 2 | Credit Hours |
| ARCH 305 | 6 | ARCH 306 | 6 |
| ARCH 334 | 3 | ARCH 321 | 3 |
| ARCH 403 | 3 | ARCH 335 | 3 |
| AURB 465 | 3 | ARCH 404 | 3 |
| Social Sciences Elective | 3 | Humanities Elective (300+) | 3 |
| 18 | | 18 | |
| | | Year 4 | |
| Semester 1 | Credit Hours | Semester 2 | Credit Hours |
| ARCH 417 | 6 | ARCH 418 | 6 |
| ARCH 482 or 483 | 3 | ARCH 413 | 3 |
| Architecture Elective | 3 | I PRO Elective I | 3 |
| Architectural History Elective | 3 | Architecture Elective | 3 |
| Social Sciences Elective (300+) | 3 | Non-Architectural Elective ² | 3 |
| 18 | | 18 | |
| | | Year 5 | |
| Semester 1 | Credit Hours | Semester 2 | Credit Hours |
| ARCH 419 | 6 | ARCH 420 | 6 |
| I PRO Elective II | 3 | Architecture Elective | 3 |
| Architecture Elective | 3 | Architecture Elective | 3 |
| Social Sciences Elective (300+) | 3 | Humanities Elective (300+) | 3 |
| 15 | | 15 | |

Total Credit Hours: 168

¹ Math 119 (3 credits) AND Math 122 (3 credits) are the recommended courses to meet the Mathematics requirement; however, Math 151 (5 credits) can also be taken to meet this requirement.

² A non-architecture elective cannot be an AAH, ARCH, AURB, LA, or CAE course.

Specializations in Architecture

The global practice of architecture invites students to develop an extensive background in related areas of expertise. Within the required curriculum, students may select from studios and architecture electives to satisfy an area of specialization. Working with their academic advisers, students are encouraged to identify a specialization in their second or third year of study in order to plan the appropriate sequence of courses. Credit requirements for each specialization are met by a combination of required core courses, advanced studios, and architecture electives.

Prior approval for electives is required. The following list includes the specializations available for architecture students. Students should consult their academic advisers or the associate dean of the college for appropriate courses.

Architectural History and Theory

In addition to the required history/theory courses, including the architectural history elective, students must take three additional history/theory electives (nine credit hours).

Design/Build

In addition to a design/build studio (ARCH 417 or ARCH 418), students must take three design/build electives (nine credit hours).

Digital Design

In addition to the required design communications courses, students must take three digital design electives (nine credit hours).

Landscape Architecture

In addition to an advanced landscape architecture studio (LA 545 or LA 546), students must take three landscape architecture electives (nine credit hours).

Self-Directed Specialization

A student may propose a self-directed specialization in a relevant architectural subject. A self-directed specialization must be approved by the student's adviser and the college and must include a minimum of three architectural electives (nine credit hours) in addition to the required core/studio courses related to the specialization.

Co-Terminal, Dual Degree, and Dual Major Options

Bachelor of Architecture/Master of Engineering in Construction Engineering and Management Co-Terminal Degree

Students interested in the co-terminal degree should contact the CAEE adviser and apply through the Office of Graduate Admission. Students must have at least one full semester of undergraduate coursework remaining at the time of application.

Bachelor of Architecture/Master of Business Administration (M.B.A.)

Students interested in pursuing the Bachelor of Architecture/M.B.A. dual degree program are required to apply for admission to the graduate M.B.A. program, providing GMAT scores and all other necessary materials. Application should be made prior to the end of the seventh semester of the Bachelor of Architecture. Upon admission, students may complete up to 12 credit hours of M.B.A. courses prior to joining the program full time. Contact the Stuart School of Business for more information.

Bachelor of Architecture/Master of Engineering in Structural Engineering Dual Degree

Includes prerequisites for the Master of Engineering in Structural Engineering program. Students interested in the Bachelor of Architecture/Master of Engineering in Structural Engineering should contact the CAEE adviser as soon as possible in their studies.

Bachelor of Architecture/Master of Architectural Engineering Dual Degree

See the CAEE department for more information.

Bachelor of Architecture/Bachelor of Science in Architectural Engineering Dual Major

Students working toward a Bachelor of Architecture and B.S. in Architectural Engineering will have overlap in several classes, and eliminating classes that overlap can reduce the time it would take to complete the two degrees separately. The dual major will typically take six years. Students interested in the architectural engineering dual major should contact the CAEE adviser as soon as possible in their studies.

Study Abroad

The reality of architectural practice today is that it is global. Study abroad has a long and important history in the training of architects and the college's desire is to make this essential experience central to each of our student's education. The college provides multiple possibilities allowing for students to participate in both short-term and long-term international off-campus programs. Undergraduate students may participate in college-led, semester-long programs as part of the fifth year advanced studios or in advanced studio field work programs for several weeks. The college also maintains partner and exchange agreements with numerous foreign institutions allowing students in the fourth year to study abroad and transfer credits back into their program at the university.

All coursework taken outside of the College of Architecture must be preapproved by the Office of Undergraduate Academic Affairs and the course of study must be approved by the college's coordinator of international programs and the student's adviser. On return, the student will be asked to supply the course description, syllabus, transcript, and assignments for all coursework completed; a portfolio of studio work will also be required. All work will be reviewed by an appropriate member of the College of Architecture faculty before Illinois Institute of Technology credit is granted.

Summer and intersession programs include college-led electives and international seminars with exchange and partner institutions or project-based workshops.