

FOR
SCHOOL
COUNSELORS/
EDUCATORS

YOUR GUIDE TO

***HELPING STUDENTS
CONSIDER A CAREER
IN ARCHITECTURE.***

A resource for K-12 school
counselors and educators.

THE

BASICS

WHAT IS ARCHITECTURE?

Architecture, as a professional field of study, is the art, science, and practice of designing the built environment. The term “architecture” may also refer to the constructed elements of an environment. Built environments designed by architects impact the daily lives of much of the world’s population.

WHAT DOES AN ARCHITECT DO?

An architect is a person who designs buildings and helps facilitate their construction. On behalf of a client, they prepare drawings and documents that communicate building requirements to contractors, who construct the building.



While the requirements vary somewhat across the United States, most buildings larger than a house or barn will require the services of an architect.

In every U.S. state and territory, the title “architect” is protected by law, and a license is needed to practice architecture. This is because architects are responsible for protecting the safety of the public, which includes all the people who might use a building or go near it. To ensure public safety and compliance with building codes, architects must earn a license by meeting requirements established by the state or territory in which they plan to practice. To become an architect in most cases, a person must earn a degree in architecture, gain experience by working for a licensed architect, and demonstrate their competency by passing a national exam.

WHY ARCHITECTURE?

From the abstract planning to the finished product, architects get to shape spaces we interact with on a daily basis. Buildings create and define our experiences, help or hinder our ability to work and learn, and keep us safe. According to the National Human Activity Pattern Survey, Americans spend an average of 87 percent of their daily lives in enclosed buildings.

Architects serve the triple role of addressing issues of aesthetic beauty, functional need, and technical aspects of construction and building safety. A career in architecture offers a wonderful opportunity to combine artistic and technical skills to create the world around us.

KEY SKILLS

& CHARACTERISTICS

WHO CAN BE AN ARCHITECT?

Which students might consider a career in architecture? First, let's dispel some myths: a strength in advanced math is not required. However, most architecture programs require four years of college preparatory math for admission. Good art skills are helpful, but also not required. Ideally, students who are creative, have a propensity for critical thinking, and can follow through without giving up are well-suited for a career in architecture. Architectural education and practice require the ability to be both creative and methodical, whimsical and technical, a team leader as well as a solo thinker. A student who demonstrates well-roundedness and determination will likely succeed.

| HELPFUL CHARACTERISTICS | NOT AS IMPORTANT AS YOU MIGHT THINK |
|-------------------------|-------------------------------------|
| PROBLEM-SOLVING | MATH |
| PERSISTENCE | ART |
| SELF-MOTIVATION | DRAFTING |
| ADAPTABILITY | |
| PRECISION | |
| CREATIVITY | |
| LEADERSHIP | |
| DILIGENCE | |

THE LICENSURE PATH

Architects in the United States are granted a license to practice architecture by individual states and territories, also known as jurisdictions. There are generally three key components to earning an architecture license.

Earn a degree: Most licensing boards require a degree from a program accredited by the National Architectural Accrediting Board (NAAB) to issue a license. See “**Choosing the Right Degree**” for details.

Gain experience: The Architectural Experience Program® (AXP®) provides a framework to guide students through building competency in a broad range of areas and documenting their work. Students can start reporting experience as soon as they graduate from high school.

Pass the exam: The Architect Registration Examination® (ARE®) is a multi-part test required by all licensing boards. Candidates can take the tests in any order, at any time throughout the year.

Get licensed: Once a candidate has met all of the requirements established by the licensing board where they wish to practice, they can apply for a license and officially call themselves an architect.

To learn more about the path to earning an architecture license, visit **Destination Architect**, a video-based resource from the National Council of Architectural Registration Boards (NCARB).

ACADEMIC PREPARATION

ACADEMIC PREPARATION

Students interested in architecture should take advantage of opportunities to engage in developmental activities, as well as art, science, and math-related courses in and out of school to be college and career ready. During high school, students may be able to enroll in Advanced Placement (AP) courses, which may not only lead to college credits, but can support their preparation for the rigors of college. Encourage students to research AP course(s) accepted at the college or university of their choice.

There are also a variety of **summer programs** for middle and high school students—many of which are free.



ACADEMIC PREPARATION: ELEMENTARY SCHOOL

ACTIVITIES

- Encourage students to engage in architecture-related activities:
 - Build structures with blocks or LEGOs
 - Draw or “design” a building or house
 - Cut out buildings from old magazines to make a collage
- Invite an architect to attend your school’s career day and talk about architecture.
- When possible, have students engage in local architecture or STEM camps at schools of architecture or your **local American Institute of Architects (AIA) chapter**.

RECOMMENDED COURSEWORK

- In addition to core classes, encourage students to explore art and STEM-related activities in and out of school (afterschool, summer, etc.).

ACADEMIC PREPARATION: MIDDLE SCHOOL

ACTIVITIES

- Explore architecture with your students by following the [Study Architecture, American Houses Lesson Plan](#) and [AIA K-12 Initiatives](#).
- Invite an architect to guide architecture-related activities in the classroom focused on understanding architectural spaces and structural principles based on problem-solving.
- Encourage students to participate in an architecture career exploration program, if available at your school.

RECOMMENDED COURSEWORK

- Students can take core classes with an emphasis on college-readiness.
- If possible, encourage students to take Pre-Algebra and/or Algebra I or the equivalent by the end of eighth grade.
- Art classes that would benefit students interested in architecture include sketching, painting, photography, etc. These courses can help sharpen their presentation skills.
- If your school offers Pre-AP courses, these are also excellent opportunities for students.

ACADEMIC PREPARATION: HIGH SCHOOL

ACTIVITIES

- Encourage students to start building their design portfolios early.
- Encourage students to shadow an architect for a few days and/or visit a local architecture firm. For assistance, contact your local [AIA Chapter](#).
- Students can jump-start their architecture education by joining the American Institute of Architecture Students (AIAS) as a [high school member](#).
- Explore architecture specific scholarships at the [AIAS site](#) and the [Architects Foundation site](#).
- Invite students to attend architecture/design college fairs. (For a list of nationwide events, go to "[Helpful Resources](#).")

RECOMMENDED COURSEWORK

- Besides core classes, high school students should take electives like:
 - Studio Art*
 - Photography*
 - Drafting/technical drawing*
 - Drafting/technical drawing*
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 - Drafting/technical drawing*
- Students can also enroll in the following architecture-related AP courses:
 - AP Art History*
 - AP 2-D Art and Design*
 - Drafting/technical drawing*
 - AP 3-D Art and Design*
 - AP Drawing*
- Or even consider a Career and Technical Education (CTE) Pathway:
 - Architecture (non-construction)
 - Architecture and engineering (non-construction)

**If your school does not offer these course options, check the virtual public school in your state or dual-enrollment options at a local higher education institution.*

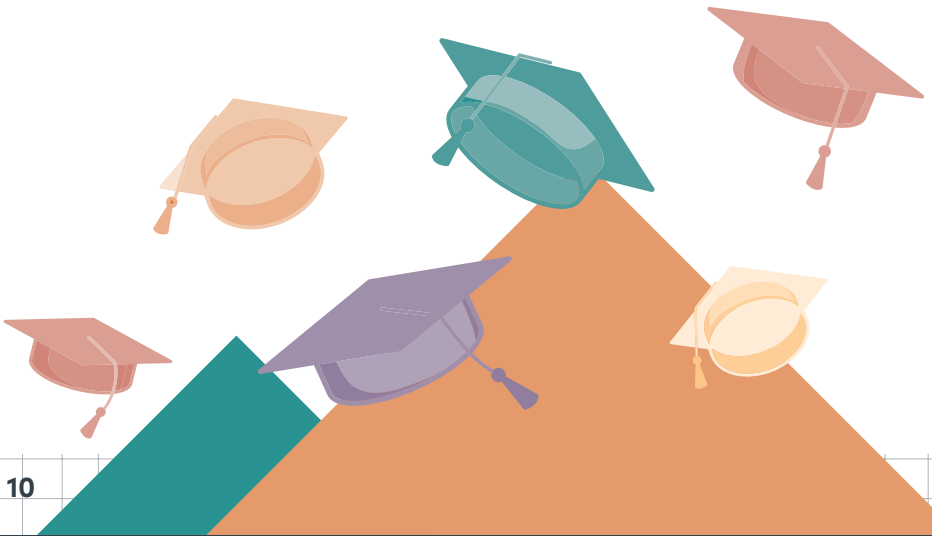
CHOOSING THE RIGHT DEGREE

UNDERSTANDING THE IMPORTANCE OF ACCREDITATION

To become an architect, a student will need to meet the specific education requirements set by the licensing board in the state or territory where they plan to practice. There are **55 architectural licensing boards** in the U.S., and most require a professional degree in architecture from a program accredited by the National Architectural Accrediting Board (NAAB). All other jurisdictions recognize degrees from NAAB-accredited programs, but do not require one. There are many paths a student can take toward meeting the education requirements—no matter who they are or where they live.

ACCREDITED ARCHITECTURE PROGRAMS

The **NAAB** reviews and accredits architecture programs to ensure that schools provide a quality education and teach what students need to know to practice independently. The NAAB accredits the following three degrees, offered at over 130 institutions.



Bachelor of Architecture (B.Arch.): This undergraduate degree is typically five years long, and is designed to help students develop a comprehensive knowledge of the discipline of architecture, as well as foundational professional knowledge and a basic understanding of related fields.

- **Master of Architecture (M.Arch.):** This two- or three-year graduate level degree is designed to help students develop a comprehensive knowledge of the discipline of architecture, as well as foundational professional knowledge and a basic understanding of related fields. The length of an M.Arch. depends on the undergraduate degree of the student. Those with a B.A. or B.S. in Architecture typically follow the 4+2 model, while those with a bachelor’s degree outside of architecture follow the 4+3 model.
- **Doctor of Architecture (D.Arch.):** Much like the M.Arch., this professional, doctorate degree is typically three or four years. Those with a B.A. or B.S. in Architecture follow the 4+3 model, while those with a bachelor’s degree outside of architecture follow the 4+4 model.

When researching college options, it is important for students to understand whether or not a program is NAAB-accredited. In many U.S. jurisdictions, a degree from a non-accredited architecture program will require additional schooling (such as an M. Arch. degree) to fulfill the education requirement. Visit the NAAB website for a full list of **accredited architecture programs**.

INTEGRATED PATH TO ARCHITECTURAL LICENSURE (IPAL)

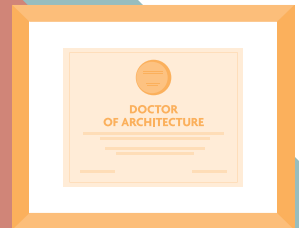
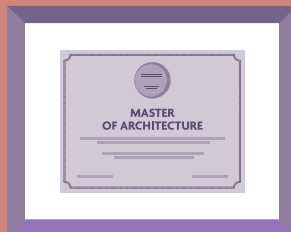
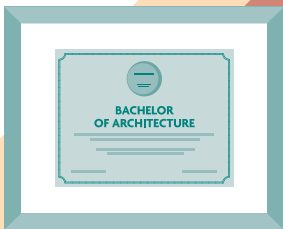
Students who are ready to jump-start their career should consider applying for an IPAL option. Offered at over 25 NAAB-accredited programs, IPAL enables college students to earn their license shortly after graduation by incorporating professional experience and the licensing exam into the curriculum. Learn more about the [IPAL option](#).

OTHER DEGREE TYPES

There are several other two- or four-year degrees that can help students get started with a career in architecture. Although these options will not satisfy the education requirements set by most licensure boards, they will enable students to work upon graduation, and can set them up to pursue a graduate degree later.

- **Associate degrees (A.A., A.S., A.A.S):** This two-year degree can be an entry point directly into the architecture workforce, or a starting point to gain some foundational skills and transfer to a B.Arch. program. If students are interested in starting with this degree, it is important to ask ahead of time about credit transfer agreements.

- **Bachelor of Arts or Science in Architecture (B.A. or B.S. in Architecture, Architectural Studies, Environmental Design, Architectural Engineering, etc.):** These four-year, pre-professional degrees are a common precursor to the NAAB-accredited M.Arch. Students will develop a comprehensive knowledge of the discipline of architecture. If they're unsure about becoming a licensed architect, one of these degrees could still encompass everything they enjoy about design and construction.
- **Master of Science (M.S. in Architecture):** This one-year or two-year graduate level degree is commonly a post-professional degree, meaning it comes after the completion of a B.Arch. or an M.Arch. It is usually research-focused and predicated on independent inquiry.

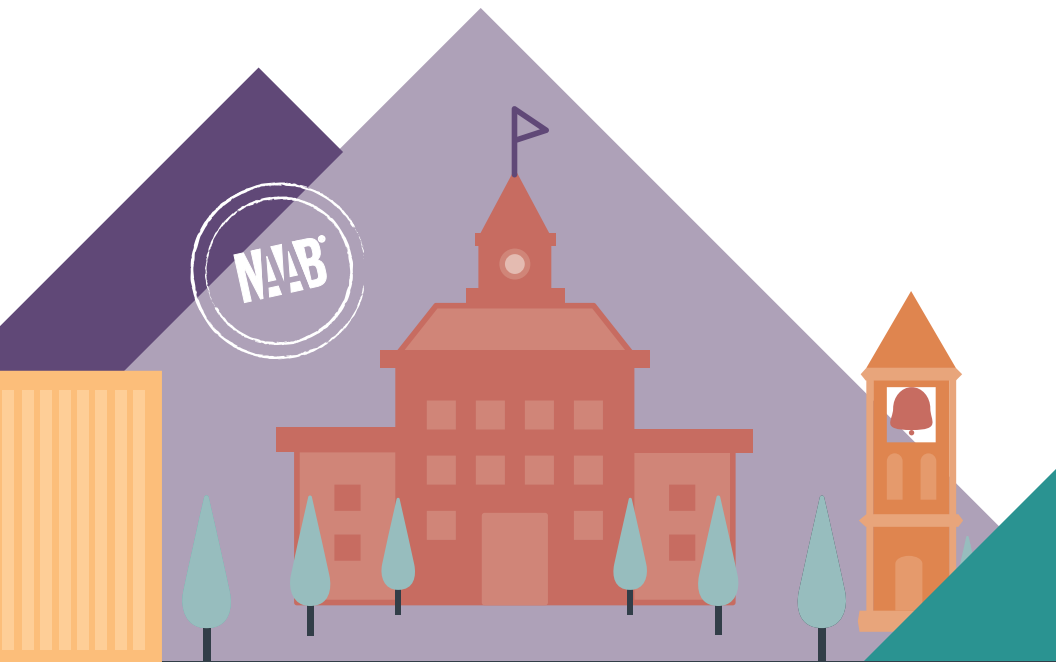


APPLYING TO

ARCHITECTURE SCHOOL

Just like any other college or university application, architecture schools typically require a standard application, SAT/ACT scores, letters of recommendation, a personal statement or essay, and official transcripts. Some schools may also request a portfolio and/or an additional essay.

StudyArchitecture.com features all of the architecture programs in the U.S. and Canada, and can help students narrow down the pool of architecture programs through an interactive quiz. Schools vary in their level of depth and breadth in the areas of art, science, technology, and business. They also have various study abroad programs with differing levels of preparation for licensure.



When visiting schools, here are a few questions prospective students might want to ask:

- Am I required to submit a portfolio along with my application?
- Are there specific computer and design software requirements?
- How much should I budget for printing and studio materials each semester/quarter?
- Is there a requirement to work in an architecture firm before graduation?
- How does the school make sure students are being nurtured both academically and personally?
- What types of scholarship funds and financial aid packages are available?
- How many architecture-specific credit hours are required to graduate?

ESTIMATED COSTS AND SALARY

The cost of becoming an architect varies based on several factors, including where students attend college, how early they start earning professional experience, and whether their firm provides licensure support.

ARCHITECTURE EDUCATION

According to the **2021 ACSA Institutional Data Report**, the median tuition per year (excluding fees, room, and meal plans) are as follows:

- Public B.Arch.
 - In-state: \$10,125 | Out-of-state: \$24,796
- Public M.Arch.
 - In-state: \$13,339 | Out-of-state: \$26,191
- Private B.Arch. and M.Arch.: \$39,982 - \$40,273

LICENSURE

The process of becoming a licensed architect is an investment in the future and a way to maximize career opportunities. Several programs offer financial aid, ranging from college scholarships to employer support for examination fees.

Typical costs associated with licensure include:

- NCARB Record fees while gaining work experience: \$270 (for a three-year period)*

- Licensing board exam application fee: \$0–\$377 (range based on licensing board and residency status)
- Architect Registration Examination (ARE): \$1,410 (six divisions)*
- Licensing board initial registration fee: \$0–\$400 (range based on licensing board and residency status)

**Explore current licensure fees on the [NCARB site](#). Keep in mind, individual licensing boards may have additional fees.*

SALARY

A common question from students is, “How much will I make as an architect?” This answer can vary based on their future position in a firm and where they will practice. In 2021, the median salary for all architects was \$80,180, according to the [U.S. Bureau of Labor Statistics](#). The median salary for recent graduates was \$54,500, according to the [AIA salary calculator](#). The AIA salary calculator includes data for full-time architectural staff employees at AIA member firms in the U.S. with three or more architectural staff employees.



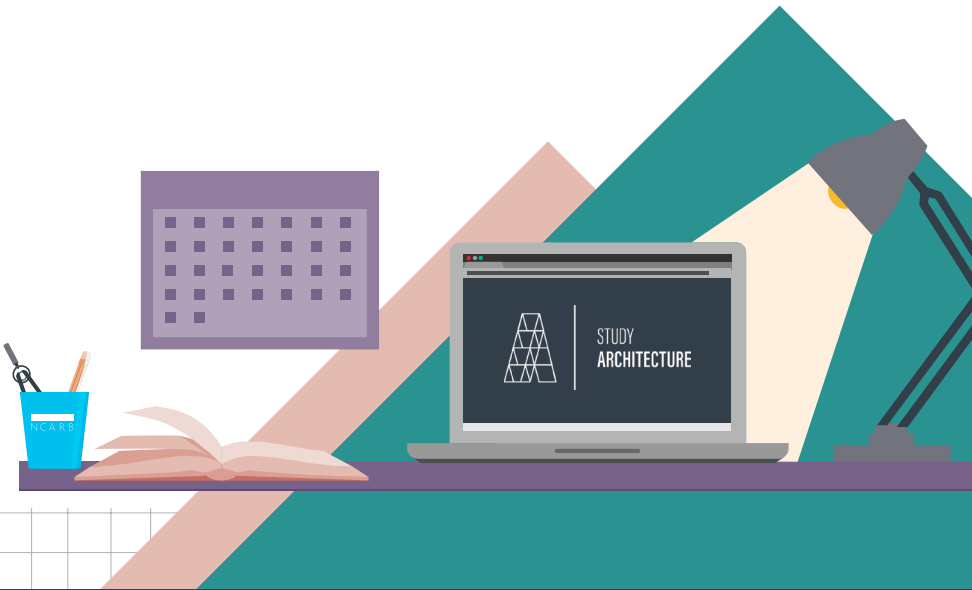
HELPFUL

RESOURCES

There are many ways to start exploring the profession. Here are some helpful resources you can share with educators, as well as students interested in pursuing a career in architecture.

- Help students understand the basics of becoming a licensed architect by sharing the information available at **Destination Architect**.
- Encourage students of all ages to learn more about the impacts of architecture and engage in design thinking activities by exploring the **AIA K-12 Initiatives**.
- Invite students to attend architecture/design college fairs. Search through a **list of events** around the country.
- Recommend that students participate in **summer programs** as a great way to test drive an architecture education. Middle and high school students can apply to NOMA's summer camp, **Project Pipeline**.
- Guide students as they research **architecture schools** and scholarships.
 - Begin exploring this list of **NAAB-accredited programs** with students interested in studying and practicing architecture.
 - Information about scholarships can be found on the **AIAS site** or the **Architects Foundation** site.

- Connect with local architects to coordinate classroom or firm visits by contacting your **local AIA chapter**, or emailing an **architect licensing advisor** in your state.
- High school students can jump-start their architecture education by joining the AIAS as a **high school member**. Reach out to a local college or **university chapter**, or start your own high school chapter by emailing **vicepresident@aias.org**.
- Additionally, students can engage with culturally relevant organizations in architecture such as the **American Indian Council of Architects and Engineers (AICAE)**, **Asian American Architects and Engineers Association (AAa/e)**, **Society of Hispanic Professional Architects (Arquitectos)**, and **World Deaf Architecture (WDA)**.



STATEMENT OF SUPPORT

This booklet was developed by six key organizations that play an important role in the architecture profession.

- **The Association of Collegiate Schools of Architecture (ACSA)**
- **The American Institute of Architects (AIA)**
- **The American Institute of Architecture Students (AIAS)**
- **The National Architectural Accrediting Board (NAAB)**
- **The National Council of Architectural Registration Boards (NCARB)**
- **The National Organization of Minority Architects (NOMA)**

Collectively, each organization leads the profession and collaborates to support those looking to build a future in the field.



Association of Collegiate
Schools of Architecture



THE AMERICAN INSTITUTE
OF ARCHITECTURE STUDENT

NAAB[®]

NCARB

the NATIONAL
ORGANIZATION
of MINORITY
ARCHITECTS