YOUR GUIDE TO

A CAREER IN ARCHITECTURE.

A resource for the next generation of architects.



WHAT IS ARCHITECTURE?

Architecture is the study and practice of designing the buildings, communities, structures, and other elements that shape the built environment. It brings together and balances artistic sensibility and scientific methodology. The term "architecture" may also refer to the constructed elements of an environment. Architecture is all around us, and architects have a big impact on our lives!

WHAT DOES AN ARCHITECT DO?

An architect is a person who designs buildings and other structures, and prepares the drawings and instructions about how to build them, known as construction documents. In the United States, most buildings larger than a house or barn require the services of an architect.

Architects usually work for clients who hire them to do their work, but they also make sure to design buildings that are safe for every person who uses the building. Because of this, architects must have a license to practice architecture issued by the state or territory in which they plan to work. Only people who have a license may call themselves architects.

To become an architect, you must earn a degree in architecture, gain experience by working for a licensed architect, and pass a national exam known as the Architect Registration Examination® (ARE®).

WHY ARCHITECTURE?

Do you enjoy helping people? Do you want to put your creativity to good use? Do you enjoy solving puzzles and thinking about how things work? Do you want to learn something new almost every day for the rest of your life? If so, you might want to become an architect! Architects get to interact with a diverse group of people in order to better understand what they need. Then, they create unique solutions, solve technical problems, and visit job sites to check on construction progress. One of the most satisfying feelings as an architect is seeing your design built and being used by the people you designed it for. Architects have the power to protect and enrich people's lives by designing the world around us.

Did you know that most Americans spend an average of 87 percent of their daily lives inside a building?* The home you grow up in, your favorite library, the school you learn in, the space your family members work in, and the museum that took your breath away all have the power to affect our lives in significant ways. Just like architects, buildings shape our experiences. They may help us live happier, learn better, and heal faster. Buildings also provide protection from natural dangers like storms and earthquakes.



KEY SKILLS

& CHARACTERISTICS

WHO CAN BE AN ARCHITECT?

Do you think a career in architecture might be right for you? You don't need to be a math genius or an exceptional artist to become an architect. While both skills are helpful, what is more important is your curiosity and persistence. Architecture education and practice will require you to be an adaptable problem-solver and hard worker as you learn the technical and creative skills needed to design safe, functional, and beautiful buildings.

LICENSURE PATH

Earn a degree: In most jurisdictions, you'll need a degree from a program accredited by the National Architectural Accrediting Board (NAAB). 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. You can start reporting experience as soon as you graduate from high school.

Pass the exam: The Architect Registration Examination® (ARE®) 5.0 is a multi-part test required by all licensing boards. You can take the tests in any order, at any time throughout the year.

Get licensed: Once you've met all of the requirements established by the licensing board where you would like to practice, you can apply for a license and officially call yourself 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).

DO ANY OF THESE CHARACTERISTICS DESCRIBE YOU?

PROBLEM-SOLVING	I like to solve problems and figure things out. I love to learn and experiment.
PERSISTENCE	I don't give up easily. I keep trying.
SELF-MOTIVATION	If I'm interested in learning or doing something, I'll make my own plans to make it happen.
ADAPTABILITY	When life gives me lemons, I make lemonade! It's just a new challenge, not a problem.
PRECISION	I like to do my best, not just "good

enough." Details matter.

Are you good at collaborating with

TEAM PLAYER AND CONTRIBUTOR

others? Are you the one who helps lead a group or team to success?

I like to daydream, build models, create art, or make music, but I can also make an action plan and stick to it to finish a project I've started.

ACADEMIC PREPARATION

If you're interested in architecture, take advantage of all opportunities to engage in architecture-related activities, as well as art, science, and math-related courses in and out of school to be college and career ready. During high school, you may be able to take Advanced Placement (AP) courses, which can sometimes count toward college credits and prepare you for the rigors of college. When the time comes, verify that your list of prospective colleges accept AP course(s), and if so, what scores are needed for credit.

Also, a variety of **summer programs** exist for middle and high school students—many of which are free.

There are many ways to start exploring the profession. Here are some helpful resources you should explore.



ACADEMIC PREPARATION: ELEMENTARY SCHOOL

ACTIVITIES

- Do you like playing with LEGOs or building in Minecraft? Practice designing famous structures or create your own designs. Share them with friends and family, or on social media.
- Do you enjoy drawing and making models? Draw structures like buildings and houses you've seen in magazines.
- Make a collage of the buildings you like—virtually or on poster board.
- When possible, engage in local architecture camps, STEM camps at schools
 of architecture, museums, art centers, or your local American Institute of
 Architects (AIA) chapter. To find a list of local STEM programs including
 those that are architecture-specific, check out The Connectory.

RECOMMENDED COURSEWORK

• Do your best in your classes! When possible, participate in art and STEM-related activities in and out of school (e.g., afterschool, summer, etc.).

ACADEMIC PREPARATION: MIDDLE SCHOOL

ACTIVITIES

- Research architecture summer programs at <u>Study Architecture</u>, a resource developed by the Association of Collegiate Schools of Architecture (ACSA).
- Interested in architecture activities and projects for you, your family, or friends? Explore the collection offered at AIA K-12 Architecture Resources.
- Participate in an architecture career exploration program, if available at your school. If not, ask how to start one!
- If your school offers afterschool programming, such as 21st Century Community Learning Centers, GEAR UP, or TRIO programming, make sure to express interest in participating.

RECOMMENDED COURSEWORK

- While in middle school, it is important to begin thinking about future college and career options.
- Take rigorous courses that will strengthen your critical thinking, communications, collaboration, and presentation skills.
- If your middle school has Pre-AP courses, these would be excellent opportunities for you.
- Consider taking art classes (e.g., sketching, painting, photography, etc.)
 that can help sharpen your presentation skills.

ACADEMIC PREPARATION: HIGH SCHOOL

ACTIVITIES

- Consider building your design portfolio early.
- Look into shadowing an architect for a few days and/or visit a local architecture firm. For assistance, contact your local AIA Chapter.
- You can jump-start your 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.
- Research architecture schools, summer programs, and nationwide college fairs at Study Architecture.

RECOMMENDED COURSEWORK

- In addition to core classes, consider taking architecture-related electives like:
 - O Studio Art*

O 3-D modeling*

O Photography*

- O Computer/graphic arts*
- O Drafting/technical drawing*
- If offered at your school, the following architecture-related AP courses are well aligned with architecture:
 - O AP Art History*

- O AP 3-D Art and Design*
- O AP 2-D Art and Design* O AP Drawing*
- Or even consider a Career and Technical Education (CTE) Pathway:
 - O Architecture (non-construction)
- O Architecture and engineering (non-construction)

^{*}If your school does not offer these course options, check the virtual public school in your state or dualenrollment options at a local higher education institution. Check with your school counselor for details.

CHOOSING THE RIGHT DEGREE

UNDERSTANDING THE IMPORTANCE OF ACCREDITATION

To become an architect, you will need to meet the specific education requirements set by the licensing board in the state or territory where you 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. Although, there are many paths you can take toward meeting the education requirements, no matter who you are or where you live.



ACCREDITED ARCHITECTURE PROGRAMS

The <u>NAAB</u> reviews and accredits architecture programs to ensure you receive a quality education and learn what you need to know to practice architecture 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
 you 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 you 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 you choose. 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 you 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)

If you are ready to jump-start your career, 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 you get started with a career in architecture. Although these options will not satisfy the education requirement set by most licensure boards, they will enable you to work upon graduation, and can set you up to pursue additional study.

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 you are interested in starting
with this degree, be sure 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, preprofessional degrees are a common precursor to the NAABaccredited M.Arch. If you decide to pursue such degrees, you will develop a comprehensive knowledge of the discipline of architecture. If you're unsure about becoming a licensed architect, one of these degrees could still encompass everything you enjoy about design and construction.
- Master of Science (M.S. in Architecture): This one-year
 or two-year graduate level degree is commonly a postprofessional 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.

A great place to start the process is **StudyArchitecture.com**. This website features all of the architecture programs in the U.S. and Canada and can help you narrow down the pool of architecture programs through an interactive quiz. Schools vary in their level of focus on 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 you 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?

Try to talk to at least one student who is currently enrolled in an architecture program, or even better, attending the school you're interested in. They'll be able to give you a comprehensive understanding of what the workload, courses, and professors are like.

ESTIMATED COSTS AND SALARY

The cost of becoming an architect varies based on several factors, including where you decide to attend college, how early you start earning professional experience, and whether your future firm provides licensure support.

ARCHITECTURE EDUCATION

According to the **2020 ACSA Institutional Data Report,** the median tuition per year (excluding fees, room, and meal plans) are as follows:

- · Public B.Arch.
 - o In-state: \$6,500 \$11,499 | Out-of-state: \$21,500 \$26,499
- · Public M.Arch.
 - o In-state: \$11,500 \$16,499 | Out-of-state: \$21,500 \$26,499
- Private B.Arch. and M.Arch.: \$41,500 \$46,500

LICENSURE

The process of becoming a licensed architect is an investment in your 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)

SALARY

You may be wondering, "How much would I make?" Your salary will vary based on your job category and where you decide to practice. In 2019, the median salary for recent graduates was \$53,000, according to the AIA. Explore in-depth salary projections based on your region, city, and state by using the AIA salary calculator.

¹The 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.



^{*}Explore current licensure fees on the <u>NCARB site</u>. Keep in mind, individual licensing boards may have additional fees.

HELPFUL RESOURCES

There are many ways to start exploring the profession. Here are some helpful resources you should explore.

- Understand the basics of becoming a licensed architect at Destination Architect.
- Learn more about the impacts of architecture and engage in design thinking activities by exploring the AIA K-12 Initiatives.
- Consider attending architecture/design college fairs. Search through a <u>list of events</u> around the country.
- Participate in <u>summer programs</u> to test drive an architecture education.
- Take time to <u>research architecture schools</u> and available scholarships.
 - Become familiar with this list of <u>NAAB-accredited</u> <u>programs</u> to get started.
- Information about scholarships can be found on the <u>AIAS</u> site, as well as the <u>Architects Foundation</u> site.
- Connect with local architects to coordinate potential firm visits by contacting your local AIA chapter, or emailing an architect licensing advisor in your state.

- When in high school, you can jump-start your architecture
 education by joining the AIAS as a high school member. If
 interested, reach out to a local college or university chapter
 or consider starting your own high school chapter by
 emailing vicepresident@aias.org.
- Additionally, you 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).
- Apply to <u>Project Pipeline</u>, NOMA's summer camp for middle and high school students.



NEED HELP OR HAVE QUESTIONS?

This booklet was developed by six key organizations that play an important role in the architecture profession. Each can provide you with additional resources and answers to questions you may still have about becoming an architect.

- 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)











