

Architect

At a Glance

Architects plan and design buildings such as homes, schools, and other structures. They also manage resources to keep projects on time and on budget.

16 Career Clusters

Architecture & Construction

Earnings

Earnings Range: 55K - 120K

Level of Education

- 4-Year College or University

Core Tasks

- Design and sketch building plans for clients
- Write instructions for contractors and builders to follow
- Coordinate the activities of people involved in the construction
- Ensure the building is finished on time and within budget
- Handle paperwork such as contracts and bills

Attributes & Abilities

- Imaginative
- Creative
- Drawing ability
- Math and computer skills
- Communication skills

Workplace

- Most work for architecture firms and building contractors
- Some are self-employed
- Work in offices and at construction sites
- The pressure to meet deadlines can be stressful
- Working hours vary greatly

Job Description

All of the buildings around you began as an architect's sketch. Architects design structures of every type, from schools to office towers to shopping malls. It's their job to make sure buildings look good. But they also have to make sure what they create is useful and safe.

An architect's design must satisfy the client's needs and wishes. It also has to result in a safe structure. To do that, architects need to be artistic but also precise. They must have a good grasp of both art and math.

Architects may start a project by drawing plans for a new building. Or they might focus on the best way to renovate an old one. These sketches may include details like:

- building materials

- mechanical parts
- electrical wiring
- structural details

Once the designs are approved, architects oversee the build. They may work closely with the construction managers and crew. They may also direct landscapers outdoors and plan with interior designers.

During projects, architects have many duties. They need to make sure their design aligns with their client's wishes. They also have to keep track of spending. Their project costs must fall within the client's budget.

Architects have to make sure construction is on schedule as well. It's important that buildings are completed on time. Architects are also liable for the safety of their buildings. Their designs have to conform to local by-laws and meet building codes. If designs fail in either of these areas, an architect might get sued.

Some architects work as consultants. They may conduct studies to see if proposed projects are possible. Or they might assess the status of older buildings. Architects may work in urban planning or interior design as well.

Architects also need to know how to run a business. They have to negotiate contracts with clients and contractors. They bill people for their services and keep track of accounts. Architects need to promote their work, too. They must attract new clients who have projects to be designed.

Working Conditions

Most architects work for architectural firms. Some work for:

- building contractors
- government agencies
- real estate companies

Other architects are self-employed.

Architects usually work in offices. Most use computers to create their designs. Often, they work with computer-aided design (CAD) software. But some architects still work on large drafting tables. They draw designs using pencils, rulers, and paper.

Many architects work with contractors on construction sites. They make sure the build goes according to plan. Working on site can be dangerous. Everyone must wear safety gear, such as hard hats and steel-toed boots.

Architects work under deadlines. This can be stressful if there are unexpected delays. It also means that their working hours can vary quite a bit. Some architects work about 35 to 40 hours a week. Others may sometimes work over 70 hours a week.

Architects who are self-employed set their own schedules. Their hours depend on how much business they get and how many hours they want to work. In a large firm, hours depend on how much work senior architects assign to their staff.

Earnings

Most architects work full time, but there is a huge range in income. They can make anywhere from about \$35,000 to \$300,000 a year. Income depends on many factors, such as their company, type of work, and location.

Architects must spend about 3 years as interns before they can be licensed. Interns generally earn between \$35,000 and \$60,000 a year. Interns' salaries depend on the position and their experience.

After their training period, most architects earn between \$50,000 and \$125,000 a year. The median annual income for all architects is about \$76,000. Principal architects or partners in successful firms tend to earn the highest salaries. They can make as much as \$300,000 a year.

However, all architect salaries depend on the economy. That's because most architects are paid by the project. If there is a downturn in construction, that means less work and lower earnings.

Architects who work for large firms usually receive benefits. These benefits may include health care, dental insurance, and paid sick days and holidays. Their company may offer a retirement plan. Those who work for small firms or are self-employed usually provide their own benefits.

Massachusetts Wages

Occupation: Architects, Except Landscape and Naval

Level of Experience	Hourly	Annual
Entry Wage	\$32.52	\$67,630
Median Wage	\$39.36	\$81,860
Experienced Wage	\$50.32	\$104,660

Source: U.S. Department of Labor, Bureau of Labor Statistics <http://www.bls.gov>

Massachusetts Outlook

Occupation: Architects, Except Landscape and Naval

Employment

2014	4,390
2024	4,700

Change

Number	310
Percentage	7.1

Annual Average Openings

Total	Growth	Replacement
100	--	--

Source: Projections Central <http://www.projectionscentral.com>

Education

What you need to become a licensed or registered architect depends on your state. You need to get the right mix of education and work experience. You must also pass a professional exam.

There are different ways to get the right education. Most architects complete a 5-year Bachelor of Architecture program. You can enter a bachelor program right out of high school. It's the most direct route into this career.

Some schools offer a 2-year Master of Architecture program. You must have a bachelor's degree in a subject related to architecture to apply. You can also apply to a 3 or 4-year master's program if you have a degree in another area. Architecture programs may include courses in:

- math
- architectural design, history, and theory
- professional practice
- science

Most programs also provide design experience in a studio. Here, you can apply the concepts you learn in class.

The program requirements depend on where you apply. It's best to contact individual schools for details. Once you're out of school, you must work for at least 3 years as an intern. During this time, you are supervised by a licensed architect. This gives you enough work experience to get licensed yourself.

Finally, you must pass a series of exams. These are known as the Architect Registration Examination (ARE). Many states require architects to take keep taking courses to keep their licenses. Many architects get certified by the National Council of Architectural Registration Boards (NCARB). You don't have to do this, but it may give you an edge when applying for jobs.

Related College Programs

- Architecture
- Architectural and Building Sciences/Technology
- Environmental Design/Architecture
- Interior Architecture
- Architectural History and Criticism, General
- Architectural Engineering
- Architectural Technology/Technician

Other Suggested Qualifications

Architects need to be imaginative, creative, and able to draw well. They should be comfortable with math and computers, especially computer-aided design and drafting (CADD) programs. Good oral and written communication skills are also important. To maintain their licenses, architects in many states must take continuing education courses. Many architects also choose to seek voluntary certification from the National Council of Architectural Registration Boards (NCARB). See the Other Resources section for links to more information about licensing and certification.

Sample High School Program of Study

This Program of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals.

Design/Pre-Construction Architecture & Construction

Grade 9	Grade 10	Grade 11	Grade 12
English/Language Arts			
English/Language Arts I	English/Language Arts II	English/Language Arts III Technical Writing	English/Language Arts IV

Grade 9	Grade 10	Grade 11	Grade 12
Math			
Algebra I	Geometry	Algebra II	Trigonometry Pre-Calculus
Science			
Earth or Life or Physical Science	Biology	Physics	Chemistry
Social Studies/Sciences			
State History Civics or World History	U.S. History	Economics Psychology	
Career & Technical Courses			
Introduction to the Built Environment	The Language of Architecture and Construction Information Technology Applications	Safety, Health and the Workplace Environment Principles of Design and Pre-Construction	Applications in Design and Pre-Construction

States' Career Clusters Initiative, 2008, www.careerclusters.org.

Important

- Check with your advisor to make sure that your course selections satisfy your graduation requirements.
- Courses available may vary from school to school.

Sample Career Path

People take different pathways through their careers, but no one starts at the top. This is an example of how the earnings, education and experience requirements, and responsibilities might progress for someone in this occupation.

Level 1

Sample Title	Intern
Earnings	\$35,000 to \$60,000 a year
Requirements	• Architecture degree from an accredited college

Level 1

Responsibilities Developing design or technical solutions under the supervision of an architect.

Level 2

Sample Title Licensed Architect

Earnings \$55,000 to \$100,000 a year

Requirements

- Completion of an architecture internship
- Successful completion of Architect Registration Exam

Responsibilities Responsible for particular parts of projects, under the direction of senior architects; daily design or technical development of projects.

Level 3

Sample Title Job Captain or Project Architect

Earnings \$65,000 to \$120,000 a year

Requirements

- 8 to 10 years of experience

Responsibilities Designing; full coordination of projects from start to finish.

Level 4

Sample Title Manager or Associate Architect

Earnings \$75,000 to \$300,000 a year

Requirements

- Business experience

Responsibilities Overall management responsibility for project teams and projects, including scheduling and budgeting; dealing with clients; overseeing major departments and functions of the firm.

Related Careers

Here are some other occupations that you might be interested in. Click on an occupation name to learn more.

- Artist
- Building Inspector
- Civil Engineer
- Construction Manager

- Construction Tradesperson
- Drafter
- Energy Auditor
- Exhibit Designer
- Home Inspector
- Industrial Designer
- Interior Designer
- Landscape Architect
- Naval Architect
- Planner

Career Clusters

Career Clusters are groups or families of occupations that share common characteristics such as knowledge requirements, skill sets, and/or goals.

Architecture & Construction

National Employment by Industry

Industry	% Employed
Professional, Scientific, and Technical Services	66
Self-Employed	24

Source: O*Net Online, Browse by Industry, US Department of Labor
<http://online.onetcenter.org/find/industry>

Other Resources

National Council of Architectural Registration Boards (NCARB)

NCARB is the federation of the state registration boards for architects. Be sure to click on Becoming An Architect to find out more about this profession, careers in architecture, and more.

<http://www.ncarb.org>

Life of an Architect

This website from a licensed architect offers insight into the career. Be sure to check out the Do You Want To Be An Architect? section.

<http://www.lifeofanarchitect.com>

Be sure to check out this list of reasons to become an architect:

<http://www.lifeofanarchitect.com/top-ten-reasons-to-be-an-architect>

Perspectives on Strategy & Architecture – Qualities of an Architect

Find out which qualities are important as an architect.

<http://www.perspectivesonsa.wordpress.com/2012/03/10/qualities-of-an-architect>

Architectural Digest

Here you can find inspiration and ideas from the world of architecture!

<http://www.architecturaldigest.com>

ArchDaily

ArchDaily provides news and updates from the global architecture community.

<http://www.archdaily.com>

Architectural Record

This website offers news, articles, forums, and more to those interested in architecture.
<http://www.archrecord.construction.com>

Association of Collegiate Schools of Architecture (ACSA)

A non-profit, membership association of schools of architecture. Scroll over Resources and click on Student Resources to learn about educational opportunities in architecture.
<http://www.acsa-arch.org>

Society of American Registered Architects (SARA)

A professional society for all types of architects. Click on SARA Scope to read their official publication.
<http://www.sara-national.org>

Art Career Project

Discover different careers in the art world! Click on About A Career to browse career possibilities. There is also information about education in the Schools Near You section and interviews in the Expert Artists section.
<http://www.theartcareerproject.com>

Occupational Outlook Handbook – Architects

Career information from the US Department of Labor.
<http://www.bls.gov/ooh/Architecture-and-Engineering/Architects.htm>