

CAREER GUIDE FOR ARCHITECTS

SOC Code: 17-1011

Pay Bands: 5 and 6 ([Salary Structure](#))

Standard Occupational Description: Plan and design structures, such as private residences, office buildings, theaters, factories, and other structural property.

Architect positions in the Commonwealth are assigned to the following Roles in the [Architecture and Engineering Career Group](#):

[Architect I](#)

[Architect II](#)

While Architects within the Commonwealth are all located within the Architecture and Engineering Career Group, individuals may want to pursue other opportunities within the Commonwealth depending upon individual training, education, knowledge, skills, abilities, and interests.

Other Career Group(s) that may be of interest are:

[General Administration](#)

[Program Administration](#)

[Media and Production Services](#)

[Engineering Technology](#)

[Policy Analysis and Planning](#)

SKILLS, KNOWLEDGE, ABILITIES AND TASKS

(Technical and Functional Expertise)

Skills

Note: *The technical and functional skills listed below are based on general occupational qualifications for Architects commonly recognized by most employers. Typically, you will not be required to have all of the skills listed to be a successful performer. Recruitment and selection standards for an individual state job must be based on the specific knowledge, skills, and abilities for that job as indicated in the job announcement and job description in the Employee Work Profile.*

Skills

1. Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
2. Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
3. Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
4. Managing one's own time and the time of others.
5. Understanding written sentences and paragraphs in work related documents.
6. Motivating, developing, and directing people as they work, identifying the best people for the job.
7. Adjusting actions in relation to others' actions.
8. Communicating effectively in writing as appropriate for the needs of the audience.

9. Talking to others to convey information effectively.
10. Analyzing needs and product requirements to create a design.

Knowledge

Note: *The technical and functional knowledge statements listed below are based on general occupational qualifications for Architects commonly recognized by most employers. Typically, you will not be required to have all of the knowledge listed to be a successful performer. Recruitment and selection standards for an individual state job must be based on the specific knowledge, skills, and abilities for that job as indicated in the job announcement and job description in the Employee Work Profile.*

The **Knowledge** of:

1. Materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.
2. Design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
3. Practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
4. Structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
5. Business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
6. Arithmetic, algebra, geometry, calculus, statistics, and their applications.
7. Circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
8. Principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
9. Relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
10. Laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.

Abilities

Note: *The technical and functional abilities listed below are based on general occupational qualifications for Architects commonly recognized by most employers. Typically, you will not be required to have all of the abilities listed to be a successful performer. Recruitment and selection standards for an individual state job must be based on the specific knowledge, skills, and abilities for that job as indicated in the job announcement and job description in the Employee Work Profile.*

The **Ability** to:

1. Listen to and understand information and ideas presented through spoken words and sentences.
2. Communicate information and ideas in speaking so others will understand.
3. See details at close range (within a few feet of the observer).
4. Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
5. Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, and mathematical operations).
6. Speak clearly so others can understand you.

7. Communicate information and ideas in writing so others will understand.
8. Apply general rules to specific problems to produce answers that make sense.
9. Identify and understand the speech of another person.
10. Imagine how something will look after it is moved around or when its parts are moved or rearranged.

Tasks

Note: *The following is a list of sample tasks typically performed by Architects. Employees in this occupation will not necessarily perform all of the tasks listed.*

1. Prepares information regarding design, structure specifications, materials, color, equipment, estimated costs, and construction time.
2. Plans layout of project.
3. Integrates engineering element into unified design.
4. Prepares scale drawings.
5. Consults with customer to determine functional and spatial requirements of structure.
6. Conducts periodic on-site observation of work during construction to monitor compliance with plans.
7. Directs activities of workers engaged in preparing drawings and specification documents.
8. Prepares contract documents for building contractors.
9. Represents customer in obtaining bids and awarding construction contracts.
10. Administers construction contracts.
11. Prepares operating and maintenance manuals, studies, and reports.

INTERESTED?

Like people, occupations have traits or characteristics. These characteristics give important clues about the nature of the work and work environment, and give you an opportunity to match your own personal interests to a specific occupation. When you choose a job in an occupation that matches your own interests you have taken an important step in planning a successful and rewarding career.

The Architect occupation has the following characteristics:

Artistic — Artistic occupations frequently involve working with forms, designs and patterns. They often require self-expression and the work can be done without following a clear set of rules.

Realistic — Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.

Investigative — Investigative occupations frequently involve working with ideas, and require an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.

Enterprising — Enterprising occupations frequently involve starting up and carrying out projects. These occupations can involve leading people and making many decisions. Sometimes they require risk taking and often deal with business.

LICENSURE, REGISTRATION, OR CERTIFICATION REQUIREMENTS

Generally licensure is required for Architect positions in state government. The Department of Labor's information is that all States and the District of Columbia require individuals to be licensed (registered) before they may call themselves architects or contract to provide architectural services. Nevertheless, many architecture school graduates work in the field while they are in the process of becoming licensed. However, a licensed architect is required to take legal responsibility for all work. Licensing requirements include a professional degree in architecture, a period of practical training or internship, and passage of all divisions of the Architect Registration Examination (ARE).

During the required training period leading up to licensing as architects, entry-level workers are called interns. This training period, which generally lasts 3 years, gives them practical work experience in preparation for the ARE. Typical duties may include preparing construction drawings on CADD, building models, or assisting in the design of one part of a project.

A growing number of architects voluntarily seek certification by the National Council of Architectural Registration Boards (NCARB), which can facilitate an individual's becoming licensed to practice in additional States. Certification is awarded after independent verification of the candidate's educational transcripts, employment record, and professional references. Certification is the primary requirement for reciprocity of licensing among State Boards that are NCARB members.

The Professional Engineer license may be required for some Architect positions. These positions are identified by each state agency.

Licensing information can be found on the Department of Professional & Occupational Regulations' web site at <http://www.dpor.virginia.gov>

EDUCATIONAL, TRAINING, AND LEARNING OPPORTUNITIES

The Department of Labor provides the following information:

Architects—licensed professionals trained in the art and science of building design—develop concepts into images and plans of buildings that can be constructed by others.

Architects design the overall aesthetic and look of buildings and other structures, but the design of a building involves far more than its appearance. Buildings also must be functional, safe, and economical and must suit the needs of the people who use them. Architects consider all these factors when they design buildings and other structures.

Architects provide professional services to individuals and organizations planning a construction project. They may be involved in all phases of development, from the initial discussion with the client through the entire construction process. Their duties require specific skills—designing, engineering, managing, supervising, and communicating with clients and builders. Architects spend a great deal of time explaining their ideas to clients, construction contractors, and others. Successful architects must be able to communicate their unique vision persuasively.

Architects sometimes specialize in one phase of work. Some specialize in the design of one type of building—for example, hospitals, schools, or housing. Others focus on planning and pre-design services or construction management and do minimal design work. They often work with engineers, urban planners, interior designers, landscape architects, and other professionals. In fact, architects spend a great deal of their time coordinating information from, and the work of, others engaged in the same project.

Three types of professional degrees in architecture are available through colleges and universities. The majority of all architectural degrees are from 5-year Bachelor of Architecture programs, intended for students entering university-level studies from high school or with no previous architectural training. In addition, a number of schools offer a 2-year Master of Architecture program for students with a pre-professional undergraduate degree in architecture or a related area, or a 3- or 4-year Master of Architecture program for students with a degree in another discipline.

Many schools of architecture also offer post-professional degrees for those who already have a bachelor's or master's degree in architecture or other areas. Although graduate education beyond the professional degree is not required for practicing architects, it may be for research, teaching, and certain specialties.

Several States require continuing education to maintain a license, and many more States are expected to adopt mandatory continuing education. Requirements vary by State, but usually involve the completion of a certain number of credits every year or two through seminars, workshops, formal university classes, conferences, self-study courses, or other sources.

The State Council of Higher Education of Virginia lists Hampton University, the University of Virginia and Virginia Tech as Virginia schools offering programs in architecture. The State Council of Higher Education's web site is <http://www.schev.edu/Students/FindaProgram.asp?from=k12>.

COMMONWEALTH COMPETENCIES

Competencies are a set of identified behaviors, knowledge, skills, and abilities that directly and positively impact the success of employees and the organization. Competencies can be observed and measured. When consistently demonstrated, competencies make employees particularly effective in their work. Competencies help lay out a road map to career success. You can use the Commonwealth Competencies to help improve your individual performance by adopting behaviors that make high performing employees successful in their jobs. In this way, you can use the Commonwealth Competencies for your further professional development.

The Commonwealth Competencies are:

1. Technical and Functional Expertise
2. Understanding the Business
3. Achieving Results
4. Serving the Customer
5. Teamwork
6. Interpersonal and Communication Skills
7. Leadership and Personal Effectiveness

The above competencies may be applied to employees throughout the Commonwealth of Virginia. They can be rank-ordered by agencies and hiring managers to represent the needs of a specific job. The rank ordering will change depending upon the occupation, an organization's priorities, the actual job requirements, and the supervisor's preferences.

Career success is both about what you do (applying your technical knowledge, skills, and ability) and how you do it (the consistent behaviors you demonstrate and choose to use) while interacting and communicating with others. Hopefully, by studying the Commonwealth competencies, identifying your developmental opportunities, and working to refine your own competence, you can take charge of your career!

For additional information about the **Commonwealth Competencies** go to: http://jobs.state.va.us/cc_planningctr.htm. For the competencies, we first list the competencies and then define each. Finally, we list competency indicators; to describe what successful performance looks like.

COMMONWEALTH CAREER PATH

Career opportunities in the Commonwealth are not limited to moving “up” to the next highest role and pay band, changing positions, or to becoming a supervisor. That’s because most roles describe a broad group of occupationally related positions that perform a range of work that requires increased knowledge and skills. For that reason, Commonwealth roles describe the career paths within the same or higher-level role for the same or different Career Group. The broad salary range and the Commonwealth’s pay practices provide flexibility in recognizing career development and advancement. (Salary Structure)

For example:

Pay Band	Practitioner Role
5	Architect I
6	Architect II

Pay Band	Manager Role
5	Architect Manager I
6	Architect Manager II
7	Architect Manager III
8	Architect Manager IV

Sample Career Path

Architect I

The Architect I role provides career tracks for architects whose expertise levels range from trainee to advanced level. Responsibilities include applying architecture/engineering principles and practices to projects of varying complexity in specialty areas. Specialty areas include those requiring knowledge of civil, environmental, structural, mechanical, electrical, safety, materials, engineering and architecture.

Architect II

The Architect II role provides career tracks for architects who serve as an expert or first line supervisor. Duties include evaluating the plans and specifications for capital outlay projects prepared by other architects and engineers; or for applying related principles and practices to complex, extensive and diversified engineering and architectural projects in specialty areas.

Architecture Manager I

The Architecture Manager I role provides career tracks for managers who manage various administrative, budgetary, planning, scheduling and technical activities related to multiple complex architectural/engineering projects or programs and the staff performing related functions. These functions draw upon knowledge in a specialty of architecture and engineering; capital outlay or other construction projects, transportation, water and wastewater projects or programs and health and safety related operations.

Architecture Manager II

The Architecture Manager II role provides career tracks for managers who manage, coordinate, and direct the activities of one or more specialized program operations in their assigned geographic or divisional area. This role also provides career tracks for managers who manage staff and resources related to the procurement, design, construction or renovation of capital projects or non-capital outlay for an entire agency's construction and maintenance reserve programs. This includes budgetary, planning, scheduling, public relations, human resource functions, and technical activities related to a broad range of engineering and/or architecture, administrative and other projects or programs.

Architecture Manager III

The Architecture Manager III role provides career tracks for managers who direct the transportation engineering, construction, maintenance, administrative and other operations and programs of a defined geographic transportation district. This role provides career tracks for managers who serve as an assistant to the Commissioner for Transportation and direct the operations of divisions and/or districts in areas such as administration, planning and operations. In addition, this role provides career tracks for executive level of Engineering and Buildings, and Facilities Management managers for the Commonwealth and for managers of an agency's design and construction projects that involve multiple facilities with special requirements, such as security provisions and long-term development and evaluation of programs.

Architecture Manager IV

The Architecture Manager IV role provides a career track for the executive manager who serves as the agency's chief engineer or architect responsible for planning and directing large-scale, multi-division preliminary engineering and construction programs for operations with statewide scope. Directs areas such as location and design, structure and bridge, right of way and utilities, materials and transportation construction. Interfaces with state and federal officials and executives on agency issues.

ADDITIONAL OCCUPATIONAL INFORMATION CAN BE FOUND AT:

O*NET

<http://online.onetcenter.org/>

Virginia Employment Commission

<http://www.vec.virginia.gov/vecportal/index.cfm>

Department of Professional & Occupation Regulation

<http://www.dpor.virginia.gov>

Career One Stop

<http://www.careeronestop.org/>

Virginia Career Resource Network
<http://www.vacrn.net/>

The American Institute of Architects
<http://www.aia.org>

National Council of Architectural Registration Boards
<http://www.ncarb.org>