

# Architecture



## Summary

An Architect designs new buildings, makes changes to existing buildings and advises on conservation and restoration of old buildings. These buildings can be commercial, such as office buildings, factories, and restaurants, as well as residential, such as apartment complexes. They work very closely with end users and clients to customize the designs to their needs and specifications. They make sure that these potential designs are safe, economical, functional and aesthetically pleasing. They often employ the use of Computer-Aided Design (CAD) software to diagram their designs and ensure their feasibility. They usually work on a project from start to finish and with lot of engineers and designers to ensure maximum customer satisfaction.



## Career Opportunities in Architecture

- Architect
- Architecture Designer
- Architectural Engineer
- Interior Designer
- Landscape Architect
- Naval Architect



## How to Become an Architect?

|               | Stream   | Graduation                | After Graduation          | After Post Graduation |
|---------------|--|---------------------------|---------------------------|-----------------------|
| <b>Path 1</b> | Clear Class XII with Science Stream with Maths | Pursue B.Arch for 5 years | Pursue M.Arch for 2 Years | -                     |
| <b>Path 2</b> | Clear Class XII with Science Stream with Maths | Pursue B.Arch for 5 years | Pursue MURP for 2 years   | -                     |



## Important Facts

- For Most colleges have eligibility performance criteria of minimum 50% aggregate marks in Class XII.
- For B. Tech degree in Architecture, most colleges require a minimum score of 60% and for M. Tech and Ph.D. programs the eligibility criteria is 60% in B.Tech and M.Tech respectively.
- Besides that, some colleges/ universities also have an age limit.

- For admissions into IITs, NITs and SPAs, the candidate is required to clear 10+2 with Physics/Chemistry/Mathematics.
- However, for other institutions, candidates from all streams are eligible if they have Mathematics as a subject



## Leading Institutes

### Top Architecture Institutes in India

| College  | Location       | Website  |
|--|----------------|--|
| Department of Architecture, IIT Kharagpur                | Kharagpur      | <a href="http://www.iitkgp.ac.in">www.iitkgp.ac.in</a> Copy  |
| Department of Architecture, IIT Roorkee                  | Roorkee        | <a href="http://www.iitr.ernet.in">www.iitr.ernet.in</a> Copy  |
| Sir JJ College Of Architecture                           | Mumbai         | <a href="http://www.sirjjarchitecture.org">www.sirjjarchitecture.org</a> Copy  |
| Aligarh Muslim University                                | Aligarh        | <a href="http://www.amu.ac.in/departmentpage.jsp?did=27">http://www.amu.ac.in/departmentpage.jsp?did=27</a> Copy                   |
| Maulana Azad National Institute of Technology            | Bhopal         | <a href="http://www.manit.ac.in/">http://www.manit.ac.in/</a> Copy   |
| Jawaharlal Nehru Architecture & Fine Arts University     | Hyderabad      | <a href="http://www.jnafau.ac.in/">http://www.jnafau.ac.in/</a> Copy   |
| Faculty of Architecture & Ekistics, Jamia Millia Islamia | New Delhi      | <a href="http://www.jmi.ac.in">http://www.jmi.ac.in</a> Copy   |
| School Of Planning and Architecture                      | New Delhi      | <a href="http://www.spa.ac.in">http://www.spa.ac.in</a> Copy   |
| Andhra University  | Vishakhapatnam | <a href="http://www.andhrauniversity.edu.in/engg/arch/index.html">http://www.andhrauniversity.edu.in/engg/arch/index.html</a> Copy |

| College   | Location           | Website  |
|---|--------------------|--|
| Chandigarh College Of Architecture                      | Chandigarh         | <a href="http://cca.nic.in">http://cca.nic.in</a> Copy   |
| Centre for Environmental Planning and Technology (CEPT) | Gujarat            | <a href="http://www.cept.ac.in">http://www.cept.ac.in</a> Copy   |
| School Of Planning and Architecture                     | Bhopal             | <a href="http://www.spabhupal.ac.in/">http://www.spabhupal.ac.in/</a> Copy   |
| Sushant School Of Art & Architecture (Ansal University) | Gurgaon, Haryana   | <a href="http://www.ansaluniversity.edu.in/sushant-school-of-art-and-architecture/">http://www.ansaluniversity.edu.in/sushant-school-of-art-and-architecture/</a> Copy |
| Department of Architecture, NIT Tiruchirappalli         | Tiruchirappalli    | <a href="http://www.nitt.edu/home/academics/departments/architecture/">http://www.nitt.edu/home/academics/departments/architecture/</a> Copy                           |
| Department of Architecture, NIT Calicut                 | Tiruchirappalli    | <a href="http://www.nitc.ac.in/">www.nitc.ac.in/</a> Copy  |
| Manipal School of Architecture & Planning               | Manipal, Karnataka | <a href="http://manipal.edu/foa.html">http://manipal.edu/foa.html</a> Copy   |
| Birla Institute of Technology, Mesra                    | Jharkhand          | <a href="http://www.bitmesra.ac.in">http://www.bitmesra.ac.in</a> Copy   |
| Guru Gobind Singh Indraprastha University (GGSIPU)      | New Delhi          | <a href="http://www.ipu.ac.in">http://www.ipu.ac.in</a> Copy   |
| ICFAI University  | Multiple Locations | <a href="https://www.icfaiuniversity.in/">https://www.icfaiuniversity.in/</a> Copy   |

| College                    | Location | Website  |
|----------------------------|----------|--|
| World University of Design | Haryana  | <a href="https://worlduniversityofdesign.ac.in/programmes.php#">https://worlduniversityofdesign.ac.in/programmes.php#</a> Copy |

### Top Architecture Institutes in the World

| College  | Location       | Website  |
|--|----------------|--|
| Massachusetts Institute of Technology                      | United States  | <a href="http://web.mit.edu">http://web.mit.edu</a> Copy   |
| Bartlett School of Architecture, University College London | United Kingdom | <a href="http://www.bartlett.ucl.ac.uk/architecture">http://www.bartlett.ucl.ac.uk/architecture</a> Copy     |
| University of California, Berkeley (UCB)                   | United States  | <a href="http://www.berkeley.edu">http://www.berkeley.edu</a> Copy   |
| Delft University of Technology                             | Netherlands    | <a href="http://www.tudelft.nl/en/">http://www.tudelft.nl/en/</a> Copy                                       |
| Harvard University   | United States  | <a href="http://www.harvard.edu">http://www.harvard.edu</a> Copy   |
| National University of Singapore                           | Singapore      | <a href="http://www.nus.edu.sg">http://www.nus.edu.sg</a> Copy   |
| University of Cambridge                                    | United Kingdom | <a href="https://www.cam.ac.uk">https://www.cam.ac.uk</a> Copy   |
| Tsinghua University  | China          | <a href="http://www.tsinghua.edu.cn/publish/newthuen/">http://www.tsinghua.edu.cn/publish/newthuen/</a> Copy |
| The University of Tokyo                                    | Japan          | <a href="http://www.u-tokyo.ac.jp/en/index.html">http://www.u-tokyo.ac.jp/en/index.html</a> Copy             |
| The University of Sydney                                   | Australia      | <a href="http://sydney.edu.au">http://sydney.edu.au</a> Copy   |
| University of British Columbia                             | Canada         | <a href="https://www.ubc.ca/academics/">https://www.ubc.ca/academics/</a> Copy                               |



## Architecture Entrance Exams

Undergraduate

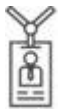
| College   | Tentative Date   | Important Elements  | Website  |
|---|------------------|---|--|
| National Aptitude Test for Architecture (NATA)              | April-August     | Drawing, Aesthetic sensitivity  | <a href="https://www.nata.in/2016/">https://www.nata.in/2016/</a> Copy   |
| JEE Main (Paper 2)  | April            | Maths, Drawing, Aptitude  | <a href="http://jeemain.nic.in/webinfo/Public/Home.aspx">http://jeemain.nic.in/webinfo/Public/Home.aspx</a> Copy       |
| JEE Advanced  | May              | Physics, Chemistry, Maths   | <a href="http://www.jeeadv.ac.in/">http://www.jeeadv.ac.in/</a> Copy   |
| Architecture Aptitude Test (AAT)                            | June             | Freehand drawing, Geometrical Drawing, Three-dimensional perception, Imagination and aesthetic sensitivity, Architectural awareness | <a href="http://www.jeeadv.ac.in/aat">http://www.jeeadv.ac.in/aat</a> Copy   |
| BITSAT  | May              | Physics, Chemistry, Maths, English and Logical Reasoning  | <a href="http://bitsadmission.com/bitsatmain.aspx">http://bitsadmission.com/bitsatmain.aspx</a> Copy                   |
| Maharashtra Architecture Common Entrance Test (MH Arch CET) | May              | Maths, Aptitude, Drawing  | <a href="http://mhtcet2016.co.in">http://mhtcet2016.co.in</a> Copy   |
| World University of Design (NATA/JEE)                       | February - April | "NATA/ JEE or other exams as prescribed by the Council of Architecture - NATA: MCQs on Diagrammatic Reasoning, Numerical            | <a href="https://worlduniversityofdesign.nopaperforms.com/">https://worlduniversityofdesign.nopaperforms.com/</a> Copy |

| College | Tentative Date | Important Elements   | Website |
|---------|----------------|--|---------|
|         |                | Reasoning, Verbal Reasoning, Inductive Reasoning, Situational Judgment, Logical Reasoning, Abstract Reasoning JEE B. Arch, there will be three sections- Mathematics, Aptitude, and Drawing. There will be 30 questions in the Maths section; 50 questions in the Aptitude section and 2 Drawing questions in the exam." |         |

### Postgraduate

| College                                       | Tentative Date      | Important Elements  | Website  |
|---|---------------------|---|--|
| Graduate Aptitude Test in Engineering (GATE)  | January to February | Architecture and Design, Building Materials, Construction and Management, Building and Structures, Environmental Planning and Design, Urban Design, Urban Planning and Housing, Planning Techniques and Management, Services, Infrastructure and Transportation | <a href="http://www.gate.iisc.ernet.in">http://www.gate.iisc.ernet.in</a> Copy               |
| Common Entrance Examination for Design (CEED) | December            | Interaction Design and Visual Communication, Problem identification & solving, Sketching Representation techniques,   | <a href="http://www.gate.iitb.ac.in/ceed2016/">http://www.gate.iitb.ac.in/ceed2016/</a> Copy |

| College | Tentative Date | Important Elements  | Website |
|---------|----------------|---|---------|
|         |                | Visual perception Poster, Logo, Character designing, Storytelling, Interface design & Product Design, Basics of materials and manufacturing processes |         |



## Work Description

Architects design new buildings & also modify existing buildings. They also help in the restoration and protection of old buildings.

Typical work activities include

- Discussing about the aims, needs and financial plan of a project
- Formulating, designing and presenting possible plans & drawings to the client;
- Recommending to the client the functionality of their plans;
- Working within the given budget and time limit
- Bargaining with multiple service providers and contractors
- Managing the project and ensuring timely and proper functioning of service providers
- Supervise projects from its starting stage to its completion stage
- Frequent site visits to know about the development of the projects
- Solving complications and matters that surface during construction stage
- Ensuring that the ecological balance of the project is achieved



## Pros & Cons of a Career in Architecture

### Pros

- Architecture is a very rewarding and satisfying career for those who are driven by the need for creativity in their field of work.
- Architects work in environments that are continually changing, where they are faced by diverse challenges every day. Thus, the likelihood of boredom is very low.
- It is a highly respectable career that will make you feel good about yourself.
- Architects make a difference to our surroundings, ensuring that our living environment is safe, practical and aesthetically pleasing.

### Cons

- Architects are required to undergo lengthy and extensive training.
- Salary compensations received by architects are average, and a bit on the low side compared to other professions that require similar amount of training and specialization.
- Architects are expected to carry the project through to the deadline, which can often mean working overtime and at odd hours.
- It is subject to changes in the economy and the real estate market, and is thus volatile.