SCOPE OF CIVIL ENGINEERING

Introduction of Civil Engineering:

Civil engineering is the art of directing the great sources of power in nature for the use and convenience of man. Basically it is concerned with planning, design and construction for environmental control, development of natural resource, buildings, transportation facilities and other structures required for health, welfare, safety, employment and pleasure of mankind. The main scope of civil engineering is planning, designing, estimating, supervising, managing and maintenance of structures like building, roads, bridges, dams etc. Broad disciplines of Civil Engineering: Civil engineering is a wide field and includes many types of structures such as residential buildings, public buildings, industrial buildings, roads, bridges, tunnels, railways, dams, canals, airports, harbours, waste water treatment plants, water supply networks and drainage networks, drainage networks etc.

According to the type of structures and activities carried out, main branches of civil engineering are classified as follows:

• Structural Engineering • Geotechnical Engineering • Transportation Engineering • Environmental Engineering • Water resources Engineering • Surveying and levelling

Scope of Civil Engineering in Government Sector

There is a massive career scope in Civil Engineering as BE/BTech Civil Engineering graduates can explore promising opportunities in both the private sector and public sectors. Most importantly, there is an immense scope of Civil Engineering in the government sector where you can work in the following government jobs in Civil Engineering:

- ONGC
- PWD
- Electricity boards
- Armed Forces
- NHAI
- Indian Railways
- IOC
- Town Planning
- BHEL

At these public-sector organisations, there are numerous vacancies available at Indian Railways, ONGC, PWD and BHEL and offer the most scope of Civil Engineering in India!

Scope of Civil Engineering in the Private Sector

Here are the most popular job profiles and careers in Civil Engineering in India:

- **Project Manager**
- Planning and Design Officer
- Site Engineer
- Construction Managers
- Civil Engineering Technicians
- **Architects**
- Assistant Engineer
- Senior Engineer
- Chief Engineer
- City Engineer
- Division Leader and Head
- Deputy Engineer
- Surveyors
- Director of Public Work
- Urban and Regional Planners
- Environmental Engineers
- Professor and Teachers
- Researcher
- Consultants
- **Entrepreneurs**

Popular Private Companies for Civil Engineers

Looking for the best private companies for Civil Engineering jobs? Here are the top private companies in India that hire Civil Engineering graduates:

- **Punj Lloyd**, Maharashtra
- **Akme Projects Ltd**, New Delhi
- **Bridge & Roof Co (India) Limited**, Kolkata
- **DLF Limited**, Haryana
- **Coastal Projects Pvt Ltd (CPPL)**, Hyderabad
- **CQRA**, Mumbai
- **Gammon Infrastructure Projects Limited (GIPL)**, Mumbai
- **Stewarts & Lloyds of India Ltd**, Kolkata
- **Arun Excello Group of Companies**, Tamil Nadu
- **Conart Engineers Ltd**, Mumbai
- **Essar Group**, Maharashtra

List of Civil Engineering Jobs

Now that you are familiar with the most popular Civil Engineering jobs in the government and private sector, take a look at the comprehensive list of Civil Engineering jobs in demand around the world:

- Structural Engineer
- Civil Engineer
- Geotechnical Engineers
- Site Engineers
- Construction Engineers
- Project Engineer
- Architectural Engineer
- Nuclear Engineer
- CAD Technician
- Environmental Engineer
- Civil Engineering Technicians
- Architects
- Assistant Engineer
- Senior Engineer
- Chief Engineer
- City Engineer
- Division Leader and Head
- Deputy Engineer
- Surveyors

Skills Required

As a highly technical and intellectually-rewarding field of study, the scope of Civil Engineering is truly immense and requires candidates to possess certain skills to thrive in their careers! Here are the key skills required to pursue a successful career in Civil Engineering:

- Technical and Mathematical Proficiency
- Problem-Solving Skills
- Organizational Skills
- Attention to Detail
- Excellent Communication Skills
- Numeracy and IT skills
- Data Interpretation Skills

Essential skills to prosper in this field

During their four years of this engineering degree, students develop the necessary skill sets. This aids them in obtaining the highest positions in the sector by having -

- A firm grasp on social and professional responsibilities.

- Communication skills
- Recognizing the importance of lifelong learning.
- Ability to work in a variety of groups.
- Technical Expertise
- Strong math skills, as well as the ability to apply them to engineering problems.
- Solution-oriented – with the capacity to assess and solve problems in a variety of situations.
- Ability to plan projects with sociological, financial, and environmental implications in mind.
- Well-versed with Modern engineering tools and processes.