

# BIM CIVIL-ADVANCE

Course Brochure 2026-2027

## BIM CIVIL - ADVANCE

BIM in Structure Design & Construction Coordination

Exposure to global BIM standards and documentation

Proficiency in 7+ BIM software

Career assistance and Placement

5+ Projects (Building, Bridges & Industrial)

PG Certification in  
**BIM CIVIL - ADVANCE**

Course Duration-7 month

**STRUCTUREX PVT. LTD.**

ISO 21001 : 2018 Certified Company

MSME Certified

7+ Year in Industry



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# INTRODUCTION

we are designer engineer architecture planner technical specialists and trainer. we operate in the innovation and revolutionary changing field of designer and engineering construction installation and infrastructure educational services rank top in relate with civil/structure/infrastructure



We have a global community of engineers, technician and expert to deliver quality of training and services

community of 10000+ and still counting  
Our trainee are from South east Asia  
Europe, Australia and UAE.

Our corporate training program and engineering educational services ranked top in INDIA and all over the world by most recognized organizations. We provide courses relate with civil/structural/infrastructure engineering.

# ABOUT PROGRAM

## Program Overview

This 7-month, live online PG Program is designed for civil engineers and technicians looking to build advanced Building Information Modelling (BIM) skills for diverse civil infrastructure projects. The curriculum blends theoretical concepts with hands-on training in Autodesk Revit, Navisworks, Tekla Structures, BIM 360, Trimble Connect, and Dynamo, preparing learners to deliver fully coordinated, multi-dimensional (3D, 4D, 5D) BIM projects aligned with ISO 19650 and Indian/international structural codes.

## Curriculum at a Glance

- Module 01 — BIM Research & Study
- Module 02 — Architecture Data (Autodesk Revit)
- Module 03 — Structure Data (BIM Structural Modelling)
- Module 04 — Steel & Bridge Structure Modeling (Tekla Structures)
- Module 05 — Common Data Environment (BIM 360 & Trimble Connect)
- Module 06 — BIM Simulation (Navisworks — 4D/5D/6D)
- Module 07 — Visual Programming (Dynamo)

## Software & Tools Covered

Autodesk Revit   Autodesk Navisworks   Tekla Structures   BIM 360   Trimble Connect   Dynamo

## Design Codes & References

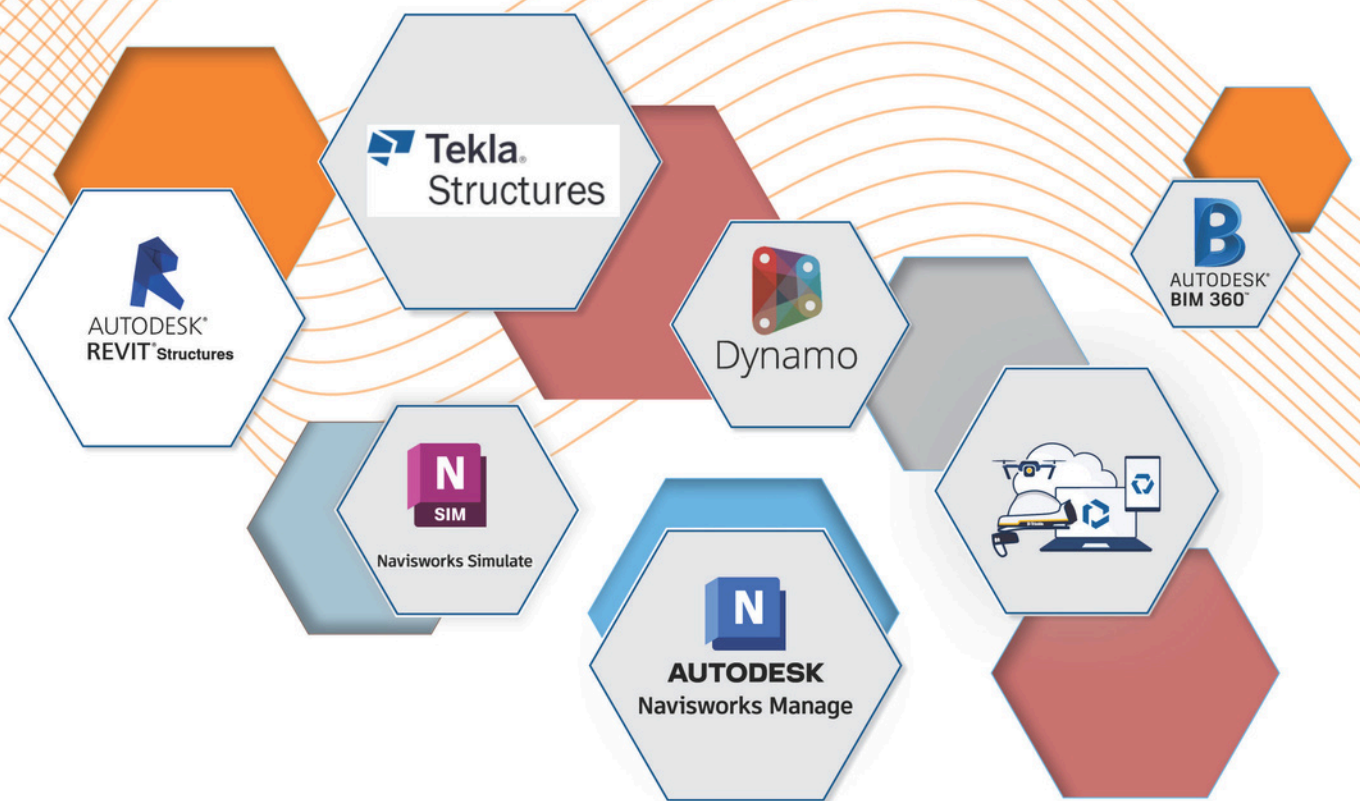
ISO 19650 Series   PAS 1192   NBIMS-US   NBC-India   CPWD   UK BIM Framework |  
IS 456   IS 800   IS 1893   AASHTO   Eurocodes   OSHA   IS Safety Standards

## Projects Include

Building Design (Structure)   Metro Design (Infrastructure)   Bridge Design (Structure)  
Steel Building (Infrastructure)   Oil & Gas (Structure)   Special Structure

# Master 07+ Software and Tool

- Master 07 Software and Tool
- 6+ Live Project
- 100+ hr. of Learning
- E-Learning + Live Session



# Module: 01 BIM Research

## Module: 01 BIM Research

**1.1 BIM Research and Study:**  
BIM in AEC industry is new era data driven technology.

**1.2 ISO Standard for BIM**

**1.3 Understanding Project Implementation**



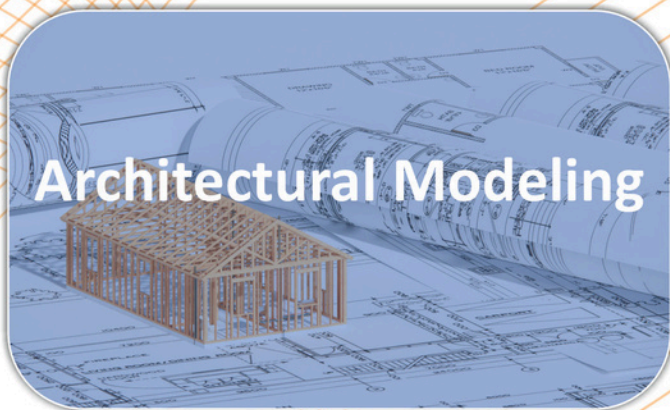
### Steps involved

**Plan:** Inform project planning by combining reality capture and real-world data to generate context models of the existing built and natural environment.

**Design:** During this phase, conceptual design, analysis, detailing and documentation are performed. The preconstruction process begins using BIM data to inform scheduling and logistics.

**Build:** During this phase, fabrication begins using BIM specifications. Project construction logistics are shared with trades and contractors to ensure optimum timing and efficiency.

**Operate:** BIM data carries over to operations and maintenance of finished assets. BIM data can be used down the road for cost-effective renovation or efficient deconstruction too.



# AUTODESK REVIT

## Module :02 Autodesk Revit - Architecture

### Modelling 1.2 BIM: Autodesk Revit

#### Architecture Data:

Design to documentation: Place walls, doors, and windows. Generate floor plans, elevations, sections schedules, 2D and 3D views, and renderings quickly and accurately.

#### Visualization:

Generate photorealistic renderings. Create documentation with cutaways, 3D views, and stereo panoramas to extend your design to virtual reality.

#### Coordination and collaboration:

Share, sync, and iterate designs with engineers and contractors in Revit in a unified project environment.

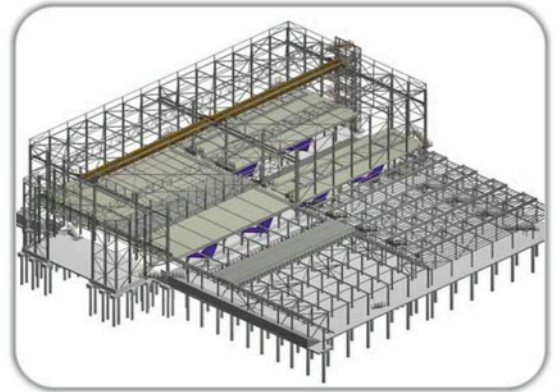
# Module : 03 Autodesk Revit-Structure

## Module: 03 Structural Modeling

BIM Structural Modelling is the core for any BIM Engineer.

This Module cover various project type Live Projects:

1. Building structure (RCC)
2. Bridge structure
3. Steel Structure

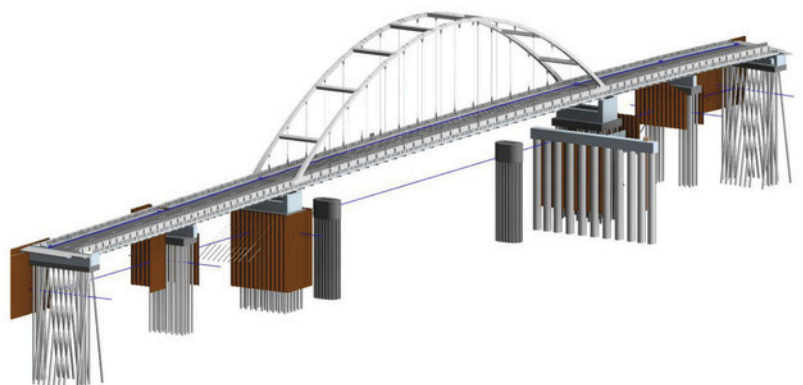


### Structure Data Modeling & Documentation

**Concrete reinforcement:** Model 3D concrete reinforcement in an advanced BIM environment. Create detailed reinforcement designs and shop drawing documentation with debar bending schedules.

**Design to detail work flows:** Connect steel design and detailing workflow. Define design intent for a higher level of detail for steel connections in the Revit model.

**Documentation:** Create more accurate, detailed documentation of steel and concrete designs.



# Module : 04 Infrastructure Modelling

## Steel and Bridge Structure Modeling

Software: Tekla structure

### Steel Structure :

Learning different type of steel structure PEB / Warehouse and others .

Modeling, Detailing, Cost estimation, Fabrication and shop drawing, Connection modeling and their component creation.

### Bridge Structure :

Learning Bridge structure Girder RC/ Steel truss bridge. Modeling, Detailing, Cost estimation, Fabrication and shop drawing, Connection modeling and their component creation.

### Why Tekla structure?

#### BrIM is about data standardization

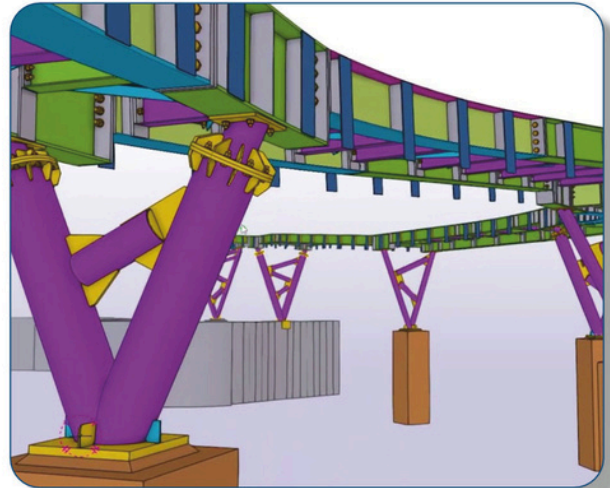
Transparent communication and high-level collaboration are the key drivers for both BIM and BrIM. Making the most out of the tools requires standardization. Standardized information can be used and kept in usable format when forwarded in the process which helps to integrate the project stages.

#### Secondly: BrIM is about technology

BIM and BrIM can be connected to other modern technologies, such as 3D printing, autonomous construction, big data analysis, augmented reality and virtualization, the Internet of Things (IoT), wireless monitoring, and cloud and real-time collaboration.

#### Most of all: BrIM is about people

The BrIM transformation is streamlining processes and developing corporate cultures toward model-based practices. However, the most important (and probably most challenging) aspect is to take care of people in the transformation.

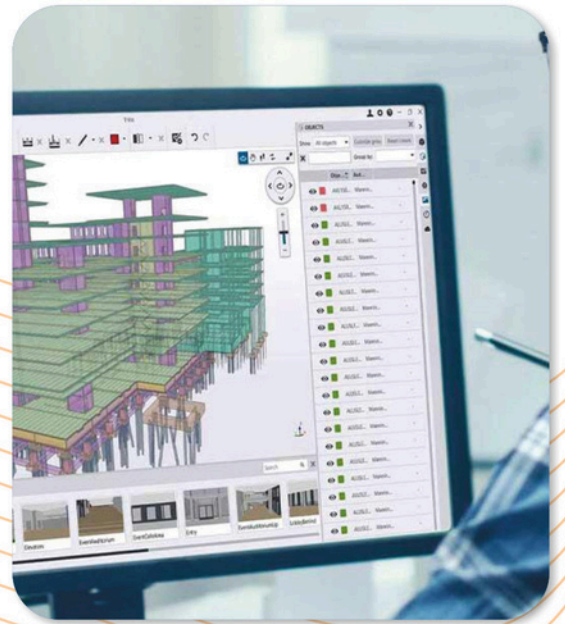


# Module : 05 Common Data Environment(CDE)

## Common Data Environment (CDE)

### Trimble connect:

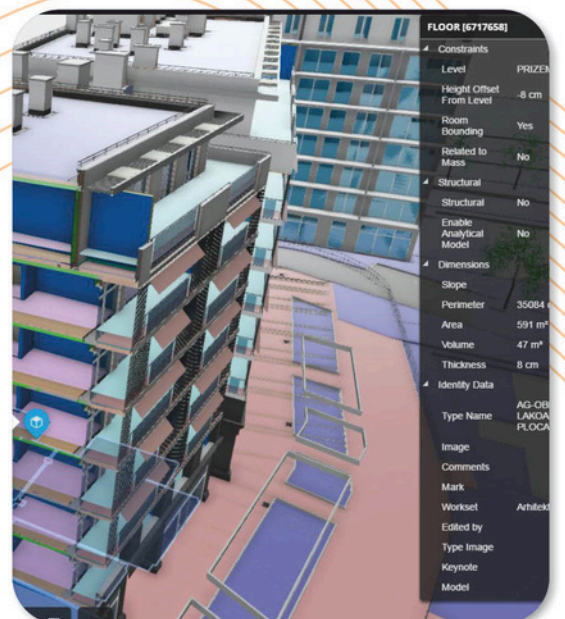
Trimble Connect is a cloud-based collaboration platform with real time status-sharing. Trimble Connect is available for web, Windows, mobile and mixed reality.



## Common Data Environment (CDE)

### Autodesk BIM 360 :

BIM 360 is an Autodesk cloud-based solution that allows project teams to effectively work in a collaborative environment. In the AEC industry, it connects all project stakeholders to execute projects from conceptual design through construction and ultimately project turnover.



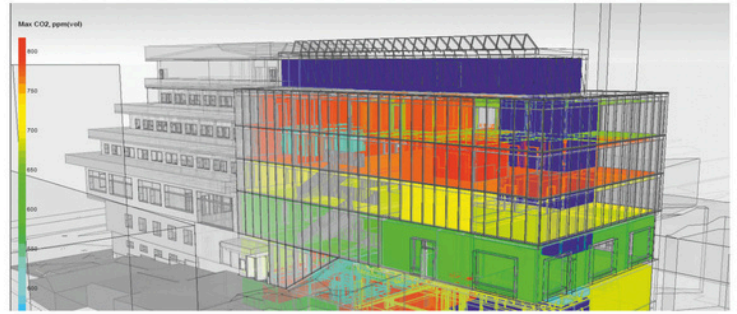
# Module : 06 BIM 4D-54

## Modelling : 06 BIM 4D-54

### 1.1 BIM Simulation: Autodesk Navisworks

Simulating the progress of the construction activity helps the construction team visualize logistical issues or inefficiencies

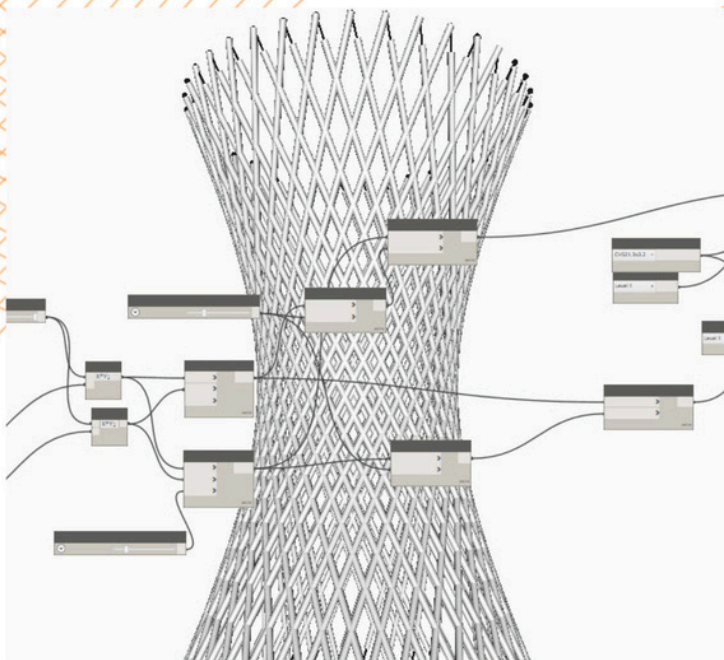
The virtual simulation exposes details such as out-of-sequence work, scheduling conflicts between multiple trades, 'what if' scenarios, and macro-level construction phasing strategies all in order to achieve the optimization of the construction schedule.



### 1.2 4D Simulation : Real timeline of project and clash detection

### 1.3 5D Cost Timeline of project (Costing)

### 1.4 6D Project life cycle information



## Modelling : 07 Visual Programing

### Software: DYNAMO

**1.1 Visual Programing:** Establishing visual, systemic, and geometric relationships between the different parts of a drawing is key to the design process. Workflows influence these relationships from the concept stage to final design. Similarly, programming allows us to establish a workflow, but through formalizing algorithms.

**1.2 Revit and Dynamo:** Using Dynamo, you can work with enhanced BIM capabilities in Revit. Dynamo and

Revit can be utilized together to model and analyze complex geometries, automate repetitive processes, minimize human error, and export data to Excel files and other file-types not typically supported by Revit. Dynamo can make the design process more efficient, with an intuitive interface and many pre-made scripting libraries available as well.

# Module : 09 AR-VR

## 1.1 AR: Arguments Reality

## 1.2 VR: Virtual Reality

**1.2 Scan to BIM:** In a Scan to BIM process, a laser scanner is used to capture an accurate 3D scan of the real world conditions on a project. The scan data is then imported into a 3D modelling environment to create either accurate as-built models or to inform the design with the real world conditions.



# Module : 10 Rendering

v-ray

Revit

**1.2 Scan to BIM:** In a Scan to BIM process, a laser scanner is used to capture an accurate 3D scan of the real world conditions on a project. The scan data is then imported into a 3D modelling environment to create either accurate as-built models or to inform the design with the real world conditions.

# COURSE ROADMAP

**Week**  
**01**

Introduction program

**Week**  
**02**

IT Session

**Week**  
**02**

Personal Interaction

**Week**  
**02**

Module: 01 BIM Intro

**Week**  
**03-09**

Module: 02 - 03  
BIM Modeling-Revit

**Week**  
**10-19**

Module : 04  
BIM Modeling-Tekla

**Week**  
**19**

Module:05  
CDE (Common Data Envirn.)

**Week**  
**20-21**

Module:06  
BIM 4D-5D

**Week**  
**22-23**

Module:07  
Visual Programing

**Week**  
**24**

Project Review

**Week**  
**24-25**

Assessment

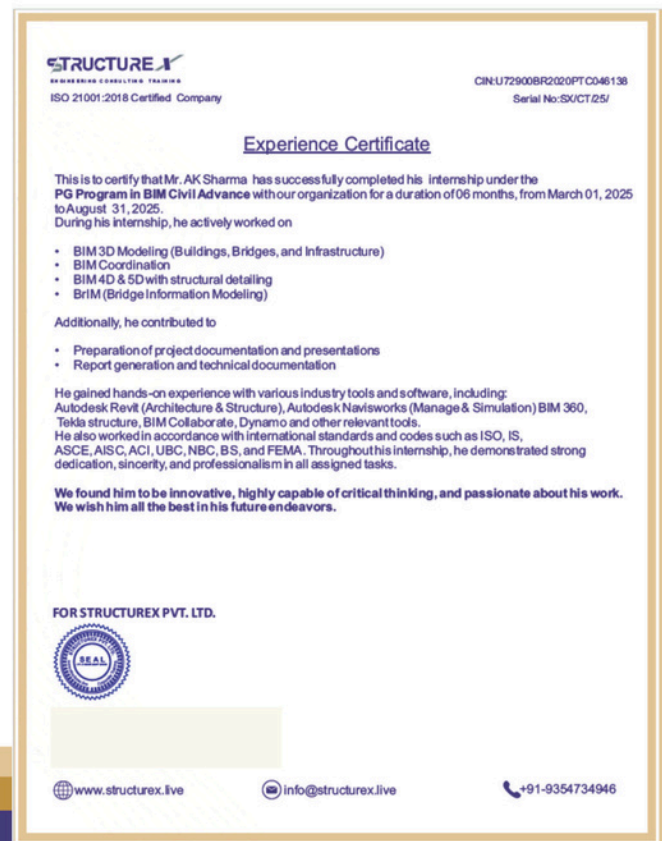
**Week**  
**26-30**

Career Assistance

# Certification

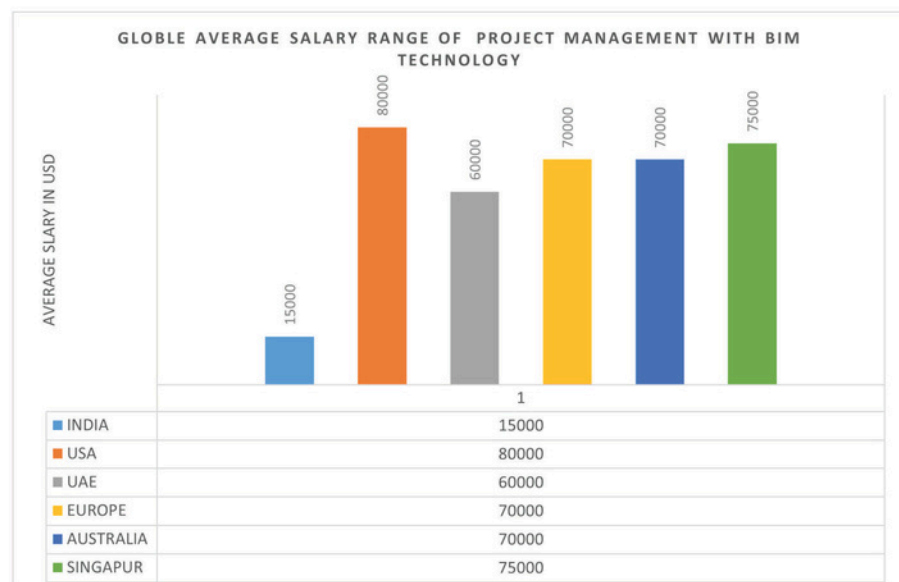
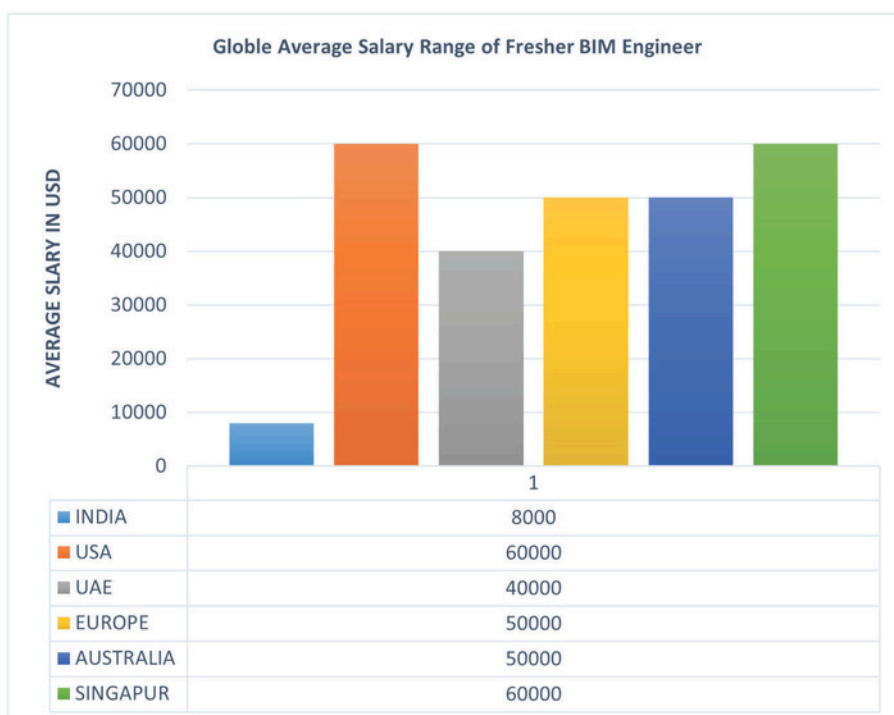
## List of certificate (T & C\*\*)

1. Program Certificate
2. Internship Certificate
3. Project Experience Certificate



# Career Graph

- BIM Modeler (Structure+Archi+MEP)
- BIM Construction Coordinator
- BIM Project Coordinator
- BIM Manager



# EXCLUSIVE CAREER SUPPORT

From Learning to Landing the Job — Every StructureX Learner Gets It

**100%**

Career Support

**2+**

Guided Career Sessions

**1000+**

Professionals Trained

**4.8 ★**

Google Rating

## What's Included

### Resume & Portfolio Building

One-on-one guidance to build an industry-ready resume and project portfolio showcasing your live project work and software proficiency.

### LinkedIn & Professional Branding

Optimize your LinkedIn profile and professional presence to get noticed by recruiters and industry connections in the AEC space.

### Mock Interviews

Practice technical and HR interviews with experienced faculty, with structured feedback to sharpen your interview performance.

### Guided Career Sessions

10 dedicated career mentorship sessions covering job search strategy, salary negotiation, and industry expectations.

### Employer & Placement Connect

Access to StructureX's industry network and placement assistance to connect you with hiring companies and consultancies.

### Lifetime Alumni Network

Stay connected with the StructureX alumni community for referrals, mentorship, and ongoing career opportunities beyond the program.

**Note\*\* Carrer opportunity depend on marketing opening and learner performance.**

Structurix do not guarantee of placement after taking this course.

# ADMISSION & COURSE DELIVERY

## 1. Enrollment & Registration

Apply online at [structurex.live/pg-diploma-registration](https://structurex.live/pg-diploma-registration), complete document verification, and confirm your seat with the program fee payment via the secure gateway.

## 2. Onboarding & LMS Access

Receive your login credentials for the StructureX Academy LMS ([academy.structurex.live](https://academy.structurex.live)), get access to the batch WhatsApp group, and attend a welcome/orientation session outlining the roadmap, schedule, and support channels.

## 3. E-Learning + Live Interactive Classes — BIM Research to Visual Programming

Progress through structured modules covering BIM research and workflow, architecture and structure modelling, and steel & bridge structure modelling, via E-Learning & live mentorship-led sessions on Autodesk Revit, Navisworks, Tekla Structures, BIM 360, Trimble Connect, Dynamo, and Primavera.

## 4. Hands-on Live Projects

Apply concepts directly on 10+ real-world projects — building structures, metro design, bridge structures, steel buildings, oil & gas, and special structures — reinforcing each module with practical, project-based learning.

## 5. BIM Coordination & Clash Detection

Build 4D construction simulation, 5D cost estimation, and 6D project lifecycle skills in Navisworks, learning model coordination and clash detection across architecture, structure, and steel/bridge disciplines.

## 6. Common Data Environment & Visual Programming

Learn collaborative workflows using BIM 360 and Trimble Connect as a Common Data Environment (CDE), and build visual programming skills in Dynamo to automate modelling workflows.

## 7. Doubt Resolution & Mentorship

Get continuous faculty support through live Q&A sessions, dedicated mentorship touchpoints, and lifetime access to recorded sessions for revision at your own pace.

## 8. Assessment & Project Report Submission

Complete your program assessment and compile your final BIM project report covering modelling, coordination, and simulation work, reviewed and evaluated by faculty.

# FEATURES , ELIGIBILITY & FEE STRUCTURE

## Key Features:

1. Mode of Program: E-Learning + Online Live session
2. Platform : MS - Team or other
3. Duration: 07 Month
4. Recording of live class
5. Access of E-Library
6. 1.5 Year access of e-learning

## Qualification Needed:

Bachelor/Diploma/Master/PHD in civil engineering or relevant work experience

## Program Fee:

INR 70,000/- (Including 18% GST)

Other then Indian & African subcontinent : USD 900/-

For Training & Refund Policy visit our page  
<https://structurex.live/course-and-certification-term-condition/>

## Contact Us:

For further details, please reach out to:

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[www.structurex.live](http://www.structurex.live)

## Online Program For Civil/Mechanical Program

- ① PG Program in Project Management & BIM Advance
- ② PG Program in BIM Civil Advance
- ③ PG Program in BIM Architectural Advance
- ④ PG Program in Bridge Design & BrIM Technology
- ⑤ PG Program in Steel Structure & BIM Technology
- ⑥ PG Program in High Rise & Tall Structure
- ⑥ PG Program in Steel Structure & BIM Technology

For more Information Visit



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**THANKS FOR BEING WITH US**