

**Program Brochure
2024**



PG Program

**BIM TECHNOLOGY &
PROJECT MANAGEMENT**

*A holistic approach for civil engineer to get in to current
MNC'S demand & entrepreneur*



**Live
8 Months**



**15+
Project**



**Technical &
Nontechnical**



**12 Core Industrial
Software**



**Life Time
Career support**

Enroll Today

Become BIM Engineer, Coordinator & Manager

TABLE OF CONTENT

INTRODUCTION	01
ABOUT PROGRAM	02
CORPORATE TRAINING PROCESS	03
EXCLUSIVE CAREER SUPPORT	04
BIM TECHNOLOGY PROCESS	05
SOFTWARE AND TOOLS	06
PROGRAM MODULE 01 (BIM Modeling)	07-08
PROGRAM MODULE 02 (BIM Analysis)	09
PROGRAM MODULE 03 & 04 (BIM Simulation & BIM Coordination)	10
PROGRAM MODULE 05 & 06 (BIM Management)	11
PROGRAM MODULE 07 & 08 (Data Presentation & Dynamo)	12
PROGRAM MODULE 09 & 10 (AR-VR & Rendering)	13
SAMPLE CERTIFICATE	14
CAREER PROSPECTIVE	15
ADMISSION PROCESS	16
FEATURES ELIGIBILITY & FEE STRUCTURE	17

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

PG Diploma in Bridge Design & Technology

is a full flange training program which enable you to carrier in different technical positions due to technical advancement in design and engineering worldwide professional qualification are not satisfying current MNC company job demand so structurex department of corporate training design this course for professional, fresh Graduate and Technical Specialist. Real challenge for Engineers and technical

specialist are increasing day by day due to project complexity and environment factor by adapting data driven technology this course enable you to accept that challenges



What is BRIM

Bridge Information Modelling (BRIM) is the foundation of digital transformation in the architecture, engineering, and construction (AEC) industry. As the leader in BIM, Trimble is the industry's partner to realize better ways of working and better outcomes for business and the built world.

Bridge Information Modelling (BIM) is the holistic process of creating and managing information for a built asset. Based on an intelligent model and enabled by a cloud platform, BRIM integrates structured, multi-disciplinary data to produce a digital representation of an asset across its life cycle, from planning and design to construction and operations.

CORPORATE TRAINING PROCESS



STRUCTUREX Pvt. Ltd. Online program learning providing best project based and career oriented training to fresher and experienced engineer. We focus on core and latest technological approach to provide best career oriented training. Quality management and critical engineering is our backbone. Fresh collage graduate have a great opportunity to start career and get placed in their desire company, **With our PGD, MASTER and SKILL Certification Program.**

Online training Process



Interview and offer letter



Personal coaching



Group formation



Online learning management



Technical setup



Conceptual and theory



National & International environment



Software and tools training



Technical workshops



Project Training



Assessment



Certification



Career Assistance & Placement

EXCLUSIVE CAREER SUPPORT

STRUCTUREX provide a life time career assistance to ensure candidates success and getting Placed.



Live Career-Oriented Webinars

Live webinar sessions that include curriculum and career services walkthrough to help learners understand their learning objective and expectations of hiring managers.



Leadership Skill Development Sessions

Recurring training sessions with experts to help learners develop Interpersonal and Leadership Skills.



1-on-1 Career Mentoring Sessions

One-on-one Career Mentoring sessions on how to develop the right skills and attitude to secure a dream job.



Exhaustive Interview Preparation

Expert tips, sample interview questions, mock interviews with constructive feedback from industry experts to gain hands-on experience of technical rounds, HR round, and more.



Job Search Assistance & Job Feeds

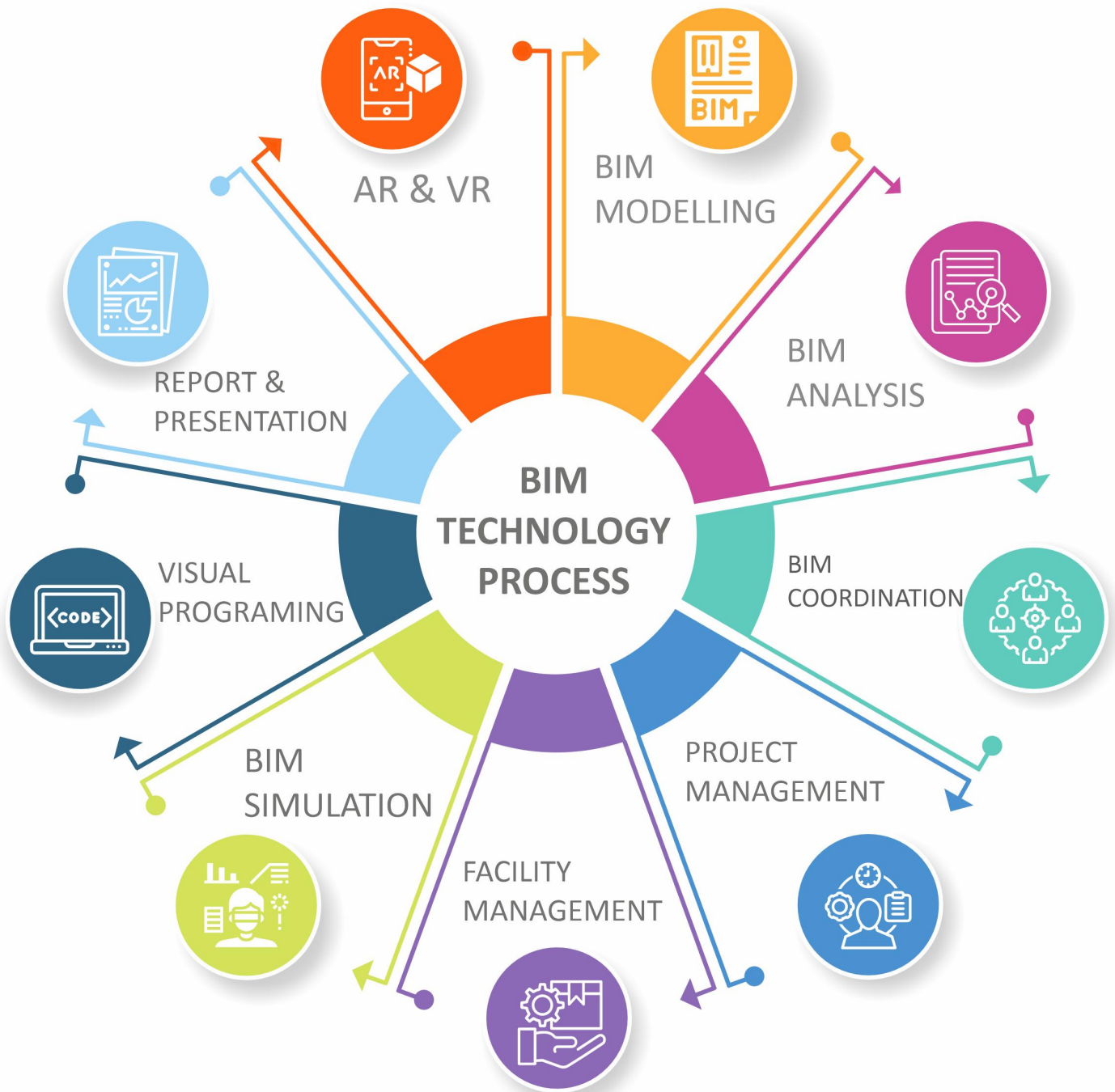
Access to multiple job portals to help learners navigate through thousands of jobs including global remote jobs.



Profile Building Assistance

A dedicated Career Coach will provide expert tips on how to create an attractive, relevant resume and LinkedIn Profile.

BIM TECHNOLOGY PROCESS



COVERING 12 SOFTWARE



AUTODESK®
REVIT® Structures



AUTODESK®
REVIT® MEP



AUTODESK
REVIT
ARCHITECTURE

ORACLE®

Primavera P6 EPPM

B

AUTODESK
BIM Collaborate
Pro



AUTODESK®
BIM 360™



AUTODESK
Navisworks Manage



Power BI



AUTODESK Navisworks Simulate



BEXEL MANAGER



Dynamo



chaos
V-Ray

PROGRAM MODULE 01

Module: 01 Research and 3D Modeling

Duration:60 hr.

1.1 BIM Research and Study:

BIM in AEC industry is new era data driven technology.

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.

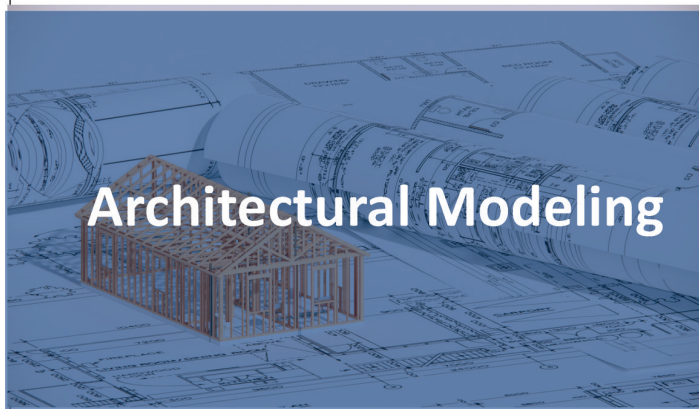
Design: During this phase, conceptual design, analysis, detailing and documentation are performed. The preconstruction process begins using BIM data to inform scheduling and logistics.

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.



BIM Research



Architectural Modeling



**AUTODESK
REVIT**

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.

Analysis:

Optimize building performance in early-stage design, run cost estimates, and monitor performance over the lifetime of the project and the building.

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.

PROGRAM MODULE 01

Module: 01 Research and 3D Modeling

Duration:60 hr.

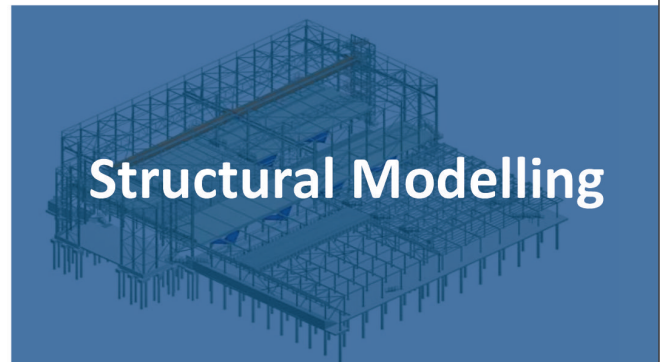
Structure Data

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

Analysis: Conduct structural analysis and export to analysis and design applications with the analytical model while you create the physical model in Revit.



MEP Modeling & Construction Data

Integrated design: Streamline the engineering design process with Revit. Coordinate and communicate design intent in a single model before construction begins.

Analysis: Conduct simulations and interference detection early in the design process. Use conceptual energy analysis data for engineering-driven calculations.

Documentation: Design, model, and document building systems in the context of a full building information model, including architectural and structural components.

Fabrication: Model for MEP fabrication with tools that automate the fabrication model layout. Prepare a model for detailed coordination of fabrication and installation.

Construction Data

PROGRAM MODULE 02

Module:02

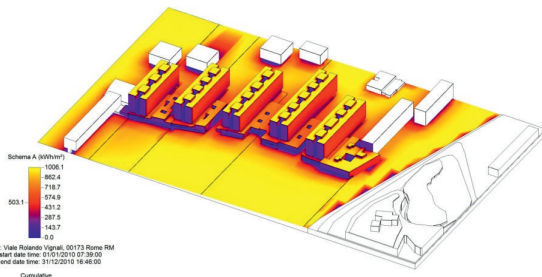
Duration: (15hr.)

BIM Analysis:

To optimize structure we need BIM analysis

Software: REVIT and RWIND

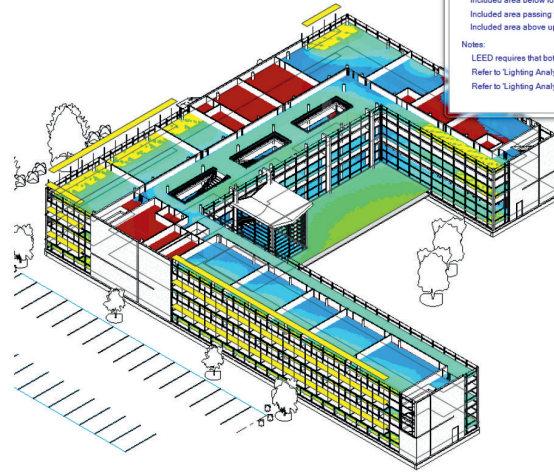
Heat Analysis: With energy optimization techniques, you can analyse your Revit model as you work on the design. The earlier you use optimization techniques, the more impact you can have on the overall energy performance. Use the analysis tools throughout the design process to refine the building design and make decisions about energy performance.



LEED 2009 IEQc8.1 Daylighting Analysis Results Summary:

9am September 21	3pm September 21
GHI: 449, DNI: 622, DHI: 87 W/m²	GHI: 339, DNI: 534, DHI: 100 W/m²
Included area below lower threshold: 16%	Included area below lower threshold: 16%
Included area passing threshold limits: 77%	Included area passing threshold limits: 77%
Included area above upper threshold: 7%	Included area above upper threshold: 7%

Notes:
LEED requires that both analysis times meet passing criteria of at least 75%.
Refer to 'Lighting Analysis' schedules for detailed analysis results.
Refer to 'Lighting Analysis' floor plan views for results visualizations.

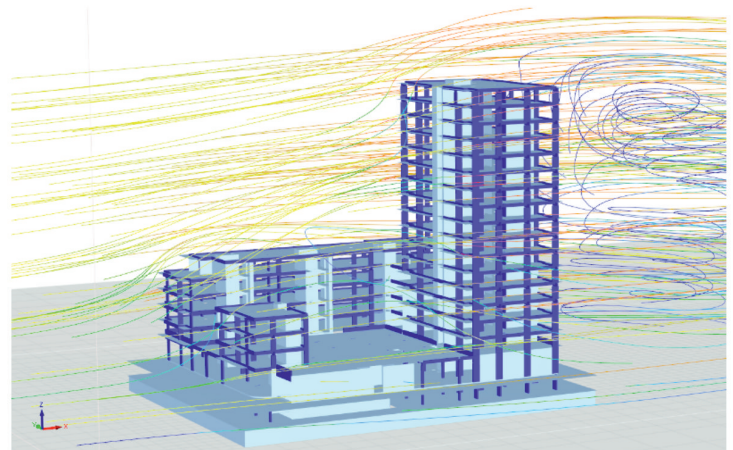


Solar Analysis: Solar Analysis provides in context solar radiation analysis results to help you track solar energy throughout your design. The tool provides automated settings for specific study types, as well as customizable options. Solar analysis uses surfaces on the model. A surface can be created from standard architectural elements (walls, roofs, floors, and ceilings) or conceptual masses. Detailed geometry element types are not supported, including many family types grouped objects, components, linked objects, imported surface geometry, and energy analysis model surfaces. Results for these geometry types will often lead to inaccurate results that are close to zero.

Load Analysis: Gravity and lateral systems, Structural steel and reinforced concrete systems, Logical separations in structure, Evaluations of specific elements, Phased construction and design options.

Wind Simulation /CFD: DUBAL RWIND

Performing wind simulation (wind tunnel test)



PROGRAM MODULE 03 & 04

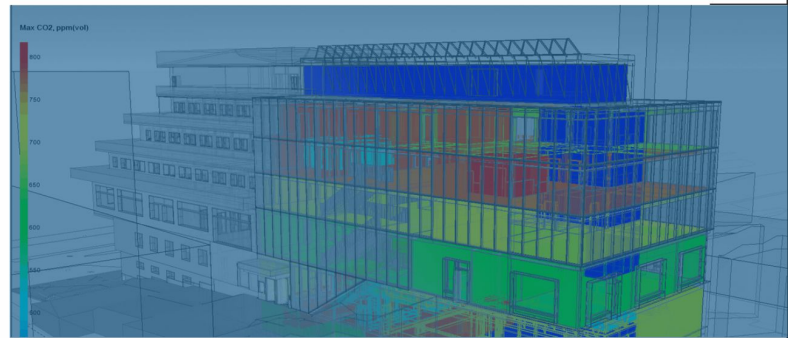
Module:03

Duration: (15 hr.)

1.1 BIM Simulation: Autodesk Navisworks Software: Naviswork Manage & Simulate

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



Module:04

Duration: (15 hr.)

1.1 BIM Coordination Software: BIM 360 + BIM Collaborate

BIM Coordination is a crucial part of BIM Process, with construction manager and coordination between different project aspect. Using cloud based platform the outcome is great.

Clash Detection: Catch errors early and spend more time on the biggest construct ability issues.

Includes Design Collaboration: Track design progress in a shared time line to get an overall picture of the project. Enable Field Teams from Anywhere: View models on mobile — and give your field team the detailed data they need.



PROGRAM MODULE 05 & 06

Module:05

Duration: 1 Months (30hr.)

1.1 Construction Project Management

Construction project management involves directing and organizing each part of the project life cycle, from ideation to completion. It's a holistic practice with the goal of delivering projects on time and under budget. Construction project management is a complex discipline that requires addressing many important concerns, including cost control, scheduling, procurement, and risk assessment. Project managers interact with all team members involved in a construction project, from architects to owners to contractors.

1.2 Billing

1.3 Software: Primavera

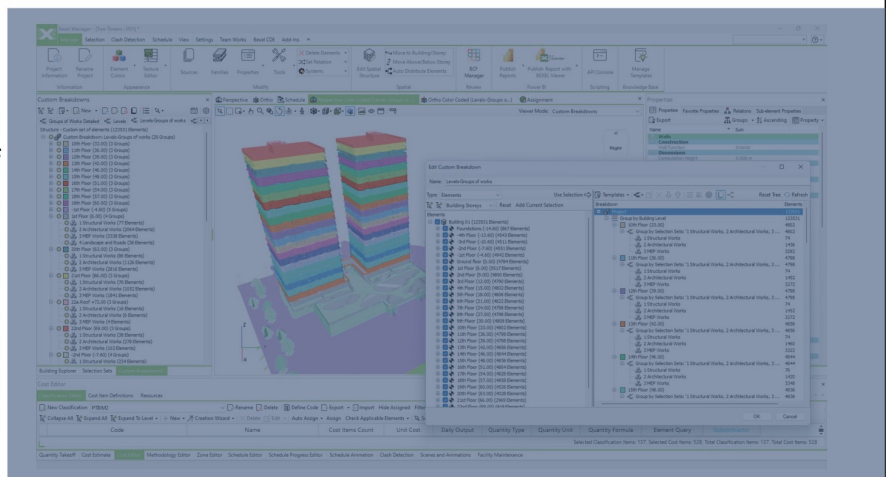


Module:06

Duration: (10 hr.)

Software: Bexel Manager

BEXEL Manager is a premium BIM solution providing the most comprehensive set of features for advanced 3D visualization, model data management, clash detection, automated QTO, cost management, smart scheduling and progress monitoring. With extensive data analysis and reporting tools BEXEL Manager empowers all project stakeholders to make informed data-driven decisions based on real-time data.



Smart Scheduling : Advanced 4D BIM scheduling engine designed to bring the functionality of creating fully automated construction schedules and alleviate time consuming, manual sequencing. A smart algorithm finds the optimal solution in terms of minimum construction cost and time and resource balancing even for the most complex projects, containing hundreds of thousands of elements.

Cost Management : A fully integrated 5D BIM Cost Management enables various advanced analyses such as model-based Cost Estimation, Schedule creation and optimization, Construction progress monitoring, and Schedule impact analyses. Cost Management enhances project control by integrating spatial and temporal dimensions with cost data, providing a comprehensive platform for analyses and a more holistic project management process.



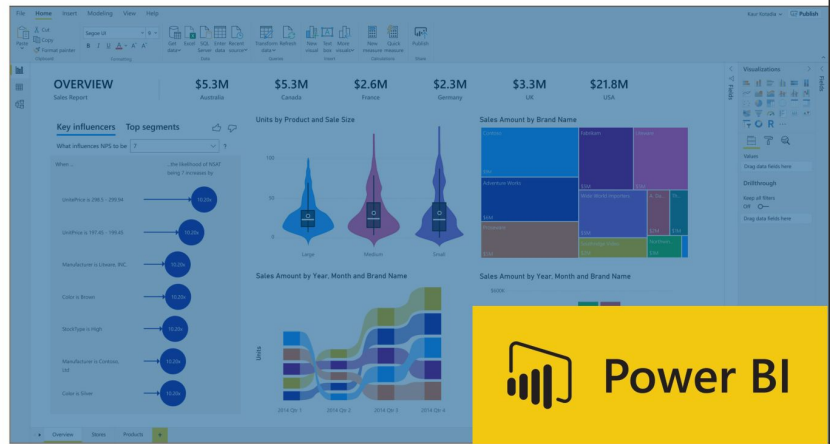
PROGRAM MODULE 07 & 08

Module : 07 Data Visualization

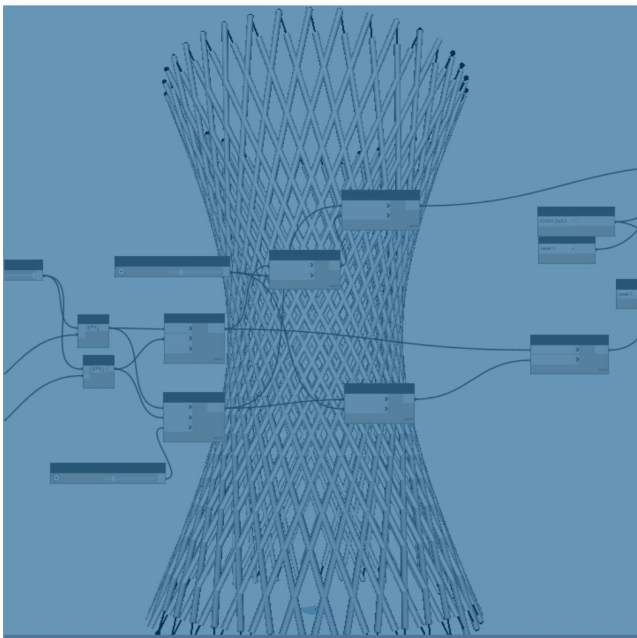
Software : POWER BI

Turn your data into visuals with advanced data-analysis tools, AI capabilities, and a user-friendly report-creation tool. Create data sets from any source and add them to the One Lake data hub to create a source of truth for your data.

Help users make better decisions by infusing insights into the app you use every day, like those in Microsoft 365. Reshape how your organization accesses, manages, and acts on data by activating Microsoft Fabric in your Power BI experience.



Dynamo



Module:08 Duration: (08 hr.)

Software: DYNAMO

1.1 Visual Programming: Establishing visual, systemic, and geometric relationships between the different parts of a drawing is key to the design process. Work flows 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.

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.

PROJECTS



Residential Building

High Rise Building

Commercial Complex

Stadium Projects



Steel Building

Airport Terminals

Bridge Structure

PROGRAM MODULE 09 & 10

Module:09

Duration: (5hr.)

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.



 v.ray

Revit

Module:10

Duration: (10hr.)

Software: V-RAY/Luminous

1.1 Rendering: V-Ray Vision gives you access to your own real-time digital camera, allowing for instant feedback and quick iterations with the ability to explore different materials and lighting. Share your projects with clients and collaborators via an executable file.

1.2 Walkthrough of Project

SAMPLE CERTIFICATE

Three certification

1. PG Certification from structurex
2. Project Experience certification
3. BEXEL Manager Certification

1st August,2023

Certificate ID: SX-PGD-58
www.structurex.live/verify/



Corporate Training

STRUCTUREX PRIVATE LIMITED

Certifies that

Mr. Sanjay Singh

has Successfully Completed

Post Graduate Diploma Program in

BIM TECHNOLOGY & PROJECT MANAGEMENT

A Program that include BIM 3D To 8D, BIM Coordination and implementation of BIM in Project Management

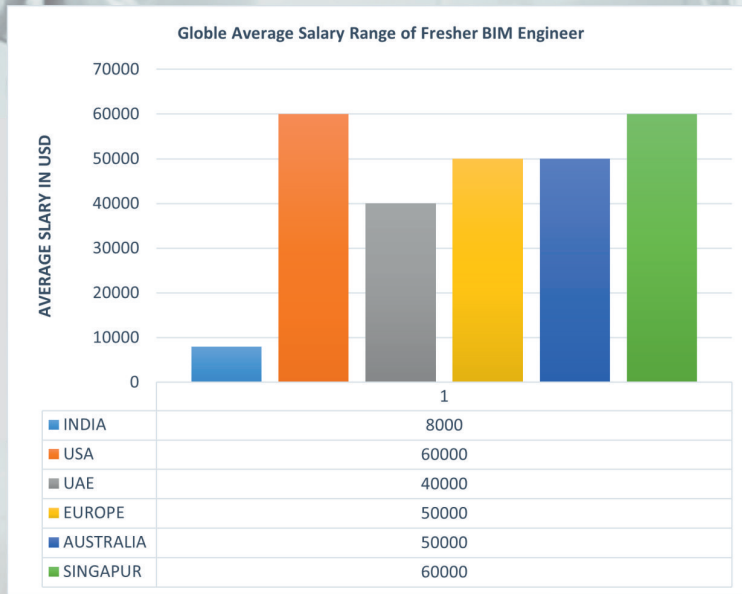


Program Coordinator

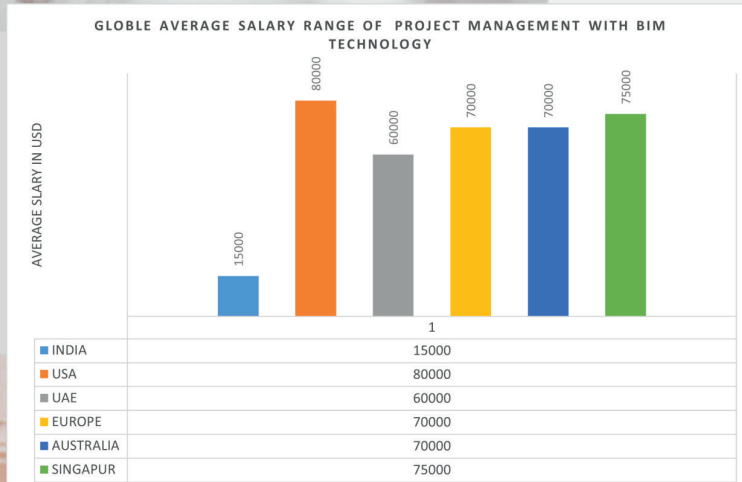
Program Director

CAREER PROSPECTIVE

BIM Engineer



BIM Manager



Global Hiring Company

ARUP	ATKINS Member of the SNC-Lavalin Group	TATA TATA CONSULTING ENGINEERS LIMITED	Stantec
wsp	Kimley»Horn Expect More. Experience Better.	k p f f	Balfour Beatty Construction
Honeywell	RAMBOLL	FLUOR	BECHTEL
INTEGRAL	COWI	M M MOTT MACDONALD	Shapoorji Pallonji
SKANSKA	ARCADIS Design & Consultancy for urban and built assets	Jacobs	VINCI

ADMISSION PROCESS



Enrolment Form

A one-on-one chat with our SME to understand your basic knowledge, prior work experience, and your expectations from the course. After your interview assessment,



Interview and offer letter

A one-on-one chat with our SME to understand your basic knowledge, prior work experience, and your expectations from the course. After your interview assessment, you will receive an offer letter from us.



Payment

Based on your interview performance, you would receive an offer letter and an fee payment as per option chosen



Batch Allotment

After the payment formalities, you will be given course credentials and your learning journey will begin!

FEATURES , ELIGIBILITY & FEE STRUCTURE

Key Features:

1. Mode of Program: Online Live
2. Platform : Zoom Meeting
3. Duration: 08 Month
4. Recording of live class
5. Access of E-Library
6. 1 Year access of www.academy.structurex.live for e-learning

Eligibility

Bachelor/Master/PHD in civil engineering or relevant work experience in AEC Industry

Program Fee:

INR 85,000 (Including 18% GST)

Other then Indian & African subcontinent : USD 1,300/-

Maximum 2 installment applicable

For One Time Payment option : 10% Fee Wavier

Contact Us:

For further details, please reach out to:

+91-9354-7349-46

info@structurex.live

www.structurex.live



Online Program For Civil/Mechanical Program



- 1 PGD in BIM Technology & PM
- 2 PGD in Bridge Design & Technology
- 3 PGD in Steel Structure & BIM Technology
- 4 PGD in High Rise & Tall Structure

For more Information Visit



WWW.STRUCTUREX.LIVE

 info@structurex.live

 +91-9354734946

THANKS FOR BEING WITH US