

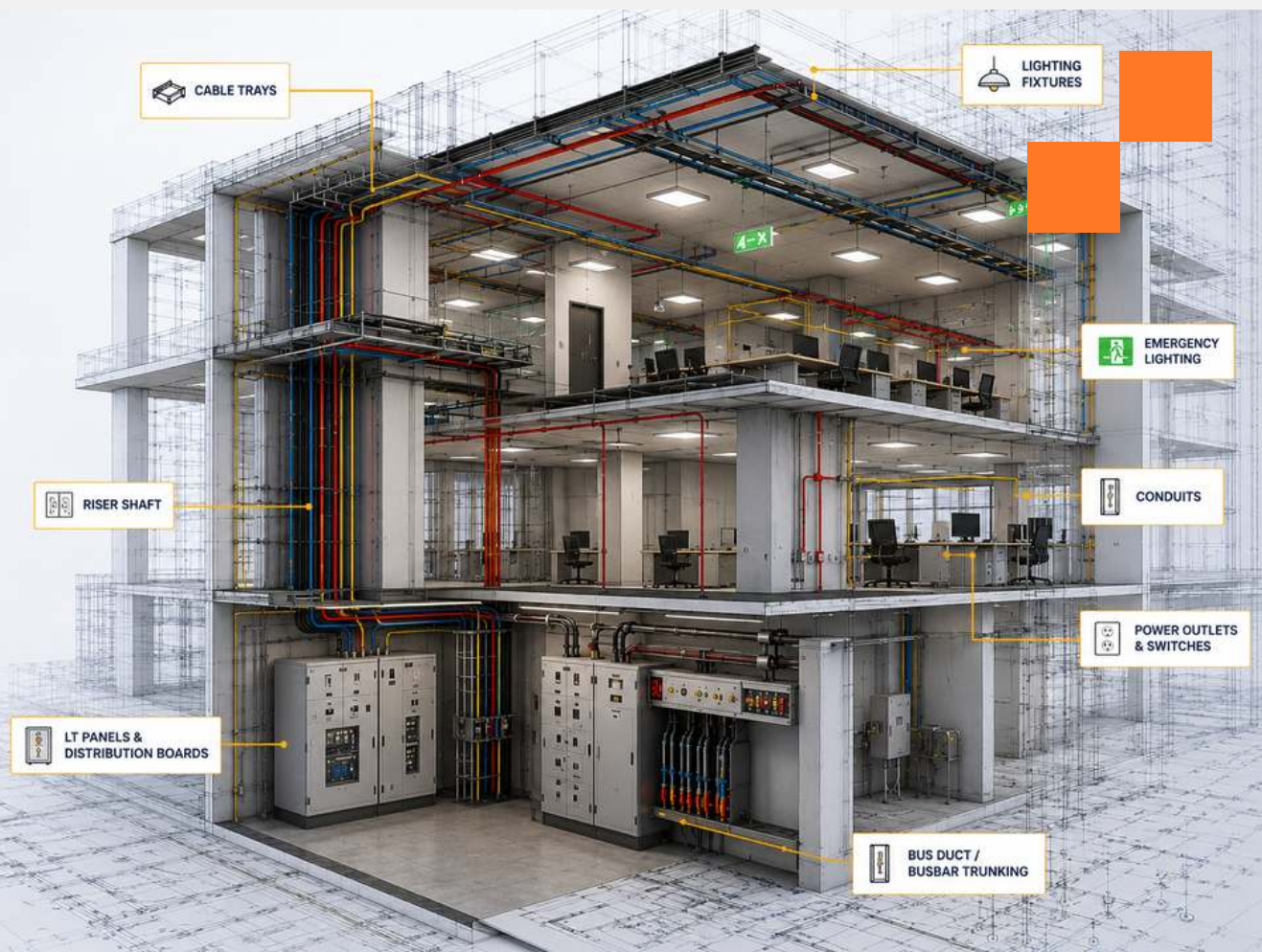
Syllabus

Electrical **BIM** Professional Program



(2 Months)

Core Electrical **BIM** Training



Kochi | Kozhikode | Thrissur | Coimbatore | Thiruvananthapuram

info@bimcafe.in | www.bimcafe.in | 09778 135 014

WHY ELECTRICAL ENGINEERS SHOULD LEARN **BIM**?

BIM is the global standard for design and construction coordination.. For electrical engineers, it enables accurate **system design, better coordination**, and access to international projects.

What Will You Do as an Electrical BIM Engineer?

- Model electrical systems including power, lighting, cable trays & low-voltage services
- Identify and resolve clashes with HVAC, plumbing & structural systems
- Prepare coordinated shop drawings for site execution
- Generate quantity take-offs for project estimation
- Coordinate with architects, structural engineers & MEP teams
- Deliver accurate, construction-ready BIM models

What's the Big Opportunity?

- High global demand and better salaries
- Jobs in multinational firms & mega projects
- Work abroad or on international projects remotely
- Future-proof career in a BIM-driven industry

Who Can Learn?

- Electrical engineering students & graduates
- Working electrical engineers seeking upskilling
- MEP professionals aiming to add BIM to their skill set
- Diploma holders in electrical fields

Electrical **BIM** Professional Program (Core Electrical BIM Program)

Duration: 2 Months (60+ hours, including project practice)

Includes Live Industry Project & Internship Experience

Software Covered

Tools Included	
Autodesk Revit Electrical	 AUTODESK Revit
Autodesk Navisworks Manage	 AUTODESK Navisworks Manage
Autodesk Construction Cloud (ACC)	 AUTODESK Construction Cloud

Practical Assessments

- 2 assessments (Family Creation & Developing 3D models from Design Inputs) are included in the Revit classes.

International Projects

2 International Electrical BIM Projects

- Project developed up to LOD 300 – Residential Building
- Project developed up to LOD 300 – Commercial Building

Total Training Hours: 60+ Hours

Electrical BIM Course

Revit Electrical



1. BIM Fundamentals & Revit Interface

- Introduction to BIM in Electrical Projects
- LOD 300 / 350 Concept
- Revit Interface & Navigation
- Project Setup & Units
- Templates & Electrical Project Setup
- Worksets & Basic Worksharing
- Linking Architectural & Structural Models

2. Electrical Settings & System Configuration

- Electrical Settings Configuration
- Voltage Definitions
- Distribution Systems Setup
- Wire Types & Cable Settings
- Creating View Templates
- Filters Based on System Type
- Browser Organization

3. Lighting & Power Layout

Lighting Systems

- Adding Lighting Fixtures
- Creating Lighting Circuits
- Switching Circuits
- Lighting Control Concepts

Power Systems

- Adding Receptacles
- Adding Electrical Equipment
- Creating Power Circuits
- Load Classification

4. Panel Boards & Circuit Management

- Creating Panels
- Panel Schedules
- Load Balancing
- Circuit Numbering & Editing
- Managing Distribution Boards

5. Cable Management Systems

- Conduit Types Creation
- Conduit Modelling
- Cable Tray Types Creation
- Cable Tray Modelling
- Routing Preferences
- Show Disconnects
- Creating & Labelling Wiring Plans

6. Schedules & Quantity Take-Off

- MEP Schedules Creation
- Material Take-Off
- Panel Schedules
- Adding Fields & Parameters
- Filters, Sorting & Grouping
- Formatting & Appearance
- Sheet List Creation
- BOQ Extraction

7. Documentation & Shop Drawings

Sheet Setup

- Sheets & Placeholders
- Guide Grids
- Viewports & View Placement
- Title Block Creation & Editing

Annotation & Detailing

- Adding Dimensions
- Tags & Text
- View References
- Section & Detail Creation

Revisions & Issue

- Adding Revisions
- Managing Revision Clouds
- Print Setup & Print Sets
- Export to CAD
- Export 3D Models to NWC

8. Coordination & Clash Detection

- Linking MEP Models
- Interdisciplinary Coordination
- Clash Preparation for Navisworks
- Exporting to NWC
- Basic Clash Review Concepts

9. Live Electrical Project

- Complete Lighting Layout
- Complete Power Layout
- Conduit & Cable Tray Routing
- Panel Schedule Generation
- Shop Drawing Preparation
- Final Submission Package

10. Electrical Revit Families

- Lighting family creation
- Panel family basics
- Electrical connectors

Navisworks Manage



1. Introduction to Navisworks Manage Interface

- Overview of Navisworks Manage for BIM coordination
- Navigating the interface: Ribbon, toolsets, selection tree, and workspace
- View controls: Zoom, pan, orbit, walk, fly, and ViewCube
- Understanding model hierarchy and discipline segregation

2. Setting Up a Navisworks Coordination Model

- Exporting discipline models from Revit to Navisworks (NWC workflow)
- Appending and managing multiple discipline models (Architecture, Structure, MEP)
- Creating and managing Federated Coordination Models
- Understanding file types: NWC, NWD, and coordination workflows

3. Visualization, Animation, and Walkthroughs

- Model visualization techniques for coordination and review
- Saving & Exporting viewpoints

4. Clash Detection and BIM Coordination

- Introduction to clash detection workflows in Navisworks Manage
- Creating & running clash tests (Hard, Soft, Clearance clashes)
- Analyzing clash results and grouping clashes
- Managing clash issues through viewpoints and coordination workflows
- Coordinating with multidisciplinary teams using clash reports

Autodesk Construction Cloud (ACC) **AUTODESK** Construction Cloud

1. Introduction to ACC & BIM 360

- What is Autodesk Construction Cloud?
- Difference between BIM 360 & ACC
- Real-time collaboration & cloud-based workflows
- ACC Modules: Docs, Build, Collaborate, Takeoff (brief intro)

2. User Interface & Project Navigation (10 mins)

- Logging in and navigating the ACC platform
- Dashboard overview
- Accessing multiple projects
- Role-based access and permissions

3. Document Management (Docs Module) (15 mins)

- Uploading & organizing drawings and models
- Version control
- Markups, issues, comments
- Comparing drawing versions

4. Model Coordination & Review (15 mins)

- Viewing and navigating 3D models in browser
- Clash viewing (Model Coordination intro)
- Section views, properties, and measurements
- Assigning and tracking issues

5. Collaboration Use Case + Q&A

- Sample use case: Architect, Structural & MEP coordination
- Exporting issues and reports
- Real-world project examples
- Closing discussion/Q&A

ACC Tricks & Tips in BIM work flow

Explaining Project BEP & Design Inputs

International BIM Projects for Real-World Experience

**Gain real-world project experience and
become a job-ready BIM professional.**

Overview of Our Projects for Students

At BIM Cafe Learning Hub, we make BIM learning simple, practical, and industry-focused. You will work on real international project case studies, gaining hands-on experience just like professionals in leading BIM companies.

Our parent company, DDG BIM Services Pvt Ltd, delivers BIM services for projects in the Middle East, the US, and the UK – where BIM is not optional, but a mandatory industry standard.

During the program, you will also understand different Levels of Development (LOD 300 & 350), helping you learn how detailed, coordinated, and construction-ready a BIM model must be in real-world projects.

You won't just learn software – you will understand how BIM is applied in actual international projects.

Hands -On Learning Experience

Each project mimics the actual workflow of an architecture, engineering, and construction (AEC) project. In BIM, collaboration between disciplines (architecture, structural, mechanical, electrical) is essential. Students work as part of multidisciplinary teams to coordinate and resolve clashes and design challenges, just like they would in a real-world environment.

Electrical – 2 Projects (US & Middle East-Based)

Electrical

Project 1: Residential (US-Based)

- This project focuses on developing a BIM model at LOD 300, where students will create a more refined model with approximate geometry and system placement.
- Students will learn how to create distribution systems, perform electrical circuiting, generate panel and lighting fixture schedules, design conduits, and model ELV systems.

Project 2: Commercial Building (UAE-Based)

- In this project, students will refine their BIM modelling skills by advancing the model from LOD 200 to LOD 300, where the design elements are fully developed with precise geometry, dimensions, and connections.
- Students will learn how to create distribution systems, perform electrical circuiting, generate panel and lighting fixture schedules, model containment layouts, and develop ELV systems.

BIM Mock Interviews; CV & Portfolio Preparation

- Mock interviews (real interview simulation)
- 80 must-know BIM questions PDF
- CV & Portfolio preparation guidance
- Industry workflow exposure

Did you know?

Electrical BIM Engineers are in high demand in international projects and multinational companies.

As you prepare for your mock interview, we will also help you create a professional CV and portfolio to showcase your skills and projects. This way, you will be fully ready to impress potential employers!

At BIM Cafe Learning Hub, we emphasize not only technical skills but also the importance of strong communication in the English language. In today's global AEC industry, the ability to speak and write clearly in English is essential for collaborating with international teams, presenting ideas confidently, and succeeding in job interviews.

That is why we encourage our students to continuously improve their English communication skills along with mastering BIM tools.

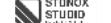
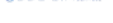
By the end of this program, you will be able to independently model, coordinate, and deliver electrical BIM projects at LOD 300 standards.

Who Can Join?

- Electrical Engineering Students
- Electrical Diploma Holders
- MEP Engineers
- Site Electrical Engineers
- Engineers transitioning into BIM

We wish you success in your BIM career journey.

BIM CAFE ALUMNI — SUCCESSFUL PLACEMENTS

 SAI ARAVIND VIT, CHENNAI Btech Civil Engineering (2025-Batch) Placed as BIM INTERN AT 	 SNEHA DEV GOVERNMENT ENGINEERING COLLEGE SREEKESHRAPURAM PALAKKAD Btech Civil Engineering (2025-Batch) Placed as JUNIOR BIM ENGINEER AT 	 ADHIL NP JDT ISLAM POLYTECHNIC COLLEGE Diploma in Civil Engineering (2025-Batch) Placed as JR BIM MODELER AT 
 KEERTHANA P ST THOMAS COLLEGE OF ENGINEERING AND TECHNOLOGY, MATTANUR, KANNUR Btech Civil Engineering (2025-Batch) Placed as BIM INTERN AT 	 JESWIN ABRAHAM MATHEW SAINTGITS COLLEGE OF ENGINEERING Btech Civil Engineering (2024-Batch) Placed as BIM INTERN AT 	 KRISHNAPRIYA P K CUSAT, KALAMASSERI B. Tech Civil Engineering (2022-Batch) Placed as DRAFTMAN AT 
 VISHNU SUDHEER UNIVERSAL ENGINEERING COLLEGE B-tech Civil (2020-Batch) Placed as BIM MODELER AT 	 HARIMURALI V CARMEL COLLEGE OF ENGINEERING AND TECHNOLOGY Civil Engineering (2025-Batch) Placed as BIM MODELER AT 	 AKASH S CARMEL COLLEGE OF ENGINEERING AND TECHNOLOGY Btech Civil Engineering (2025-Batch) Placed as BIM ENGINEER (INTERNSHIP) AT 
 LINO SOMAN FISAT Btech in Civil Engineering (2022-Batch) Placed as BIM TRAINEE AT 	 ATHULYA K S SCMS SCHOOL OF ARCHITECTURE B Arch (2023-Batch) Placed as BIM TRAINEE AT 	 GOWTHAM MURALEEDHARAN SN POLYTECHNIC COLLEGE KANHANGAD Diploma in Civil Engineering (2022-Batch) Placed as BIM TRAINEE AT 
 ALANRAJ N JDT ISLAM POLYTECHNIC COLLEGE Diploma in Civil Engineering (2025-Batch) Placed as JR BIM MODELER AT 	 SHAJI C GOVERNMENT POLYTECHNIC COLLEGE PERINTHALMANNA Diploma in Civil Engineering (2001-Batch) Placed as JR BIM ENGINEER AT 	 NANDAGOPAL D SAINTGITS COLLEGE OF ENGINEERING Btech Civil Engineering (2024-Batch) Placed as BIM INTERN AT 
 AKASH MR MAR ATHANASIOS COLLEGE OF ENGINEERING, KOTHAMANGALAM Btech Electrical & Electronics Engineering (2019-Batch) Placed as JR. BIM MODELER AT 	 SREEJITH.O.K CARMEL POLYTECHNIC COLLEGE Diploma in Mechanical Engineering (2021-Batch) Placed as JUNIOR BIM MODELLER AT 	 PARVATHY M R REGIONAL INSTITUTE OF ENGINEERING B-tech Civil (2019-Batch) Placed as BIM FACULTY AT 
 ADHILA EBRAHIM KMEA ENGINEERING COLLEGE, EDATHALA Btech Civil Engineering (2025-Batch) Placed as BIM MODELER TRAINEE AT 	 KAVYA V COLLEGE OF ENGINEERING PATHANAPURAM BTech in Civil Engineering (2017-Batch) Placed as BIM MODELER AT 	 SAMIN SULAIMAN NRM SCHOOL OF ARCHITECTURE (CUSAT) B Arch (2025-Batch) Placed as BIM MODELER AT 
 BASIL M ALEAYAS MBITS BTech Mechanical (2022-Batch) Placed as REVIT MEP MODELLER AT 	 JULIET JOYICHEN SCMS SCHOOL OF ARCHITECTURE, KARUKUTTY B Arch (2024-Batch) Placed as BIM MODELER (TRAINEE) AT 	 ADITH SHABU PRIST UNIVERSITY, CHENNAI Btech Electrical & Electronics engineering (2023-Batch) Placed as JR ELECTRICAL BIM MODELER / BIM MEP MODELER AT 

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Autodesk—the power to design and make a better world for all.

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SITE ID NO.

BIM Cafe Learning Hub

AUTHORISED TRAINING CENTER

Ernakulam, India

SITE ADDRESS / COUNTRY

India

APPROVED TERRITORY**

SITE AUTHORISATION VALID UNTIL: 01 FEBRUARY 2026

AUTODESK
Authorized Training Centre

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RAJITHA M INSTRUCTOR	07-JUNE-2025 COURSE DATE	33-48 HOURS COURSE DURATION

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RAJITHA M INSTRUCTOR	07-JUNE-2025 COURSE DATE	33-48 HOURS COURSE DURATION

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RAJITHA M INSTRUCTOR	07-JUNE-2025 COURSE DATE	33-48 HOURS COURSE DURATION

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