

A Unit of Alva's Education Foundation (R)

(Affiliated to Visvesvaraya Technological University, Belagavi. Approved by AICTE, New Delhi
Shobhavana Campus, Mijar, Moodbidri

[Accredited by NAAC with A+ Grade & NBA (ECE & CSE)]

CIVIL ENGINEERING DEPARTMENT

Report On the

Certification Course: Revit Architecture

- Title: Revit ArchitectureCertification Course Report
- > Department: Civil Engineering
- > Course Duration: 60 hours
- Location: CADD Lab, 4thFloor, Mechanical Block, AIET,Mijar
- Course Organizer: Organizedby Civil EngineeringDepartment
- > Academic Year: 2023-2024
- > Total Students: 27
- > Taught By: Globe Tech
 Engineering Solution Firm
- > Prepared By: Mr. Surendra P.
- > Presented To: IQAC Committee





A Unit of Alva's Education Foundation (R)

(Affiliated to Visvesvaraya Technological University, Belagavi. Approved by AICTE, New Delhi Shobhavana Campus, Mijar, Moodbidri [Accredited by NAAC with A+ Grade & NBA (ECE & CSE)]

CIVIL ENGINEERING DEPARTMENT

REPORT ON REVIT ARCHITECTURE CERTIFICATION COURSE

Course Overview

A Certification Course in Revit Architecture was conducted for the final-year Civil Engineering students of Alva's Institute of Engineering and Technology (AIET), Moodbidri, in collaboration with Globe Tech Engineering Solutions, Mangalore. The course aimed to provide comprehensive and practical training in Revit Architecture, a crucial tool for modern architectural design and Building Information Modelling (BIM).

The course was designed as a 60-hour deep learning program, scheduled across both the Odd and Even semesters of the Academic Year 2023-2024. This initiative was part of the Diploma in Architecture: Add-on Course for Civil Engineering Students, bridging the gap between civil engineering and architectural design skills.

Course Coordination and Support

- Course Coordinator: Mr. Surendra P., Assistant Professor, Civil Engineering Department, AIET.
- Instructor and Course Provider: Globe Tech Engineering Solutions, Mangalore.
 - o Proprietor: Mr. Vinod Kumar.
 - o Staff: Ms. Dhanya, Instructor.

The course was supported by:

- Head of Department (HOD): Dr. H. Ajith Hebbar, Civil Engineering Department,
 AIET.
- Principal: Dr. Peter Fernandes, AIET.
- Management of AIET: For their continued encouragement and facilitation of such skill development programs.



A Unit of Alva's Education Foundation (R)

(Affiliated to Visvesvaraya Technological University, Belagavi. Approved by AICTE, New Delhi Shobhavana Campus, Mijar, Moodbidri [Accredited by NAAC with A+ Grade & NBA (ECE & CSE)]

CIVIL ENGINEERING DEPARTMENT

Course Objectives

The primary objectives of the Revit Architecture Certification Course were:

- 1. To familiarize students with the concepts and tools of Building Information Modeling (BIM), using Revit Architecture as a platform.
- 2. To develop hands-on skills for creating accurate and professional architectural designs.
- 3. To enhance students' technical proficiency, empowering them with the skills necessary to work with modern architectural design software in the construction industry.

Course Syllabus

The course syllabus was structured to provide students with both foundational and advanced skills in Revit Architecture. The syllabus included the following core topics:

1. Introduction to Revit Architecture

- a. Overview of Revit and its applications in architectural design.
- b. User interface, project settings, and file management.

2. Basic and Advanced Modelling Tools

- a. Walls, doors, windows, and roof modelling.
- b. Working with families and custom elements.

3. Floor Plans and Elevations

- a. Creating floor plans and elevations, managing views, and annotation techniques.
- b. Working with building components and constraints.



A Unit of Alva's Education Foundation (R)

(Affiliated to Visvesvaraya Technological University, Belagavi. Approved by AICTE, New Delhi Shobhavana Campus, Mijar, Moodbidri [Accredited by NAAC with A+ Grade & NBA (ECE & CSE)]

CIVIL ENGINEERING DEPARTMENT

4. Schedules and Documentation

- a. Creating schedules for materials, components, and elements.
- b. Understanding tags, annotations, and documentation standards in Revit.

5. 3D Modeling and Visualization

- a. Creating and managing 3D views and rendering.
- b. Exporting rendered images for presentation.

6. Collaborative and Advanced Features

- a. Linking files, managing worksets, and teamwork in Revit.
- b. Creating detailed drawings and managing project data.

7. Final Project and Assessment

- a. Applying the learned skills in a final design project.
- b. Assessment: As part of the Revit Architecture certification course, Globe Tech Solutions conducted a test on 15-04-2024 to assess student's expertise and to award certifications.

Course Schedule

The 60-hour certification course was scheduled in accordance with the academic timetable and conducted every Saturday from 2:00 PM to 5:00 PM during the Odd Semester. This timing ensured that students could attend the course without disrupting their regular academic activities.

Materials Provided

To aid in the learning process, Globe Tech Engineering Solutions provided a comprehensive course handbook to each student at the beginning of the course. This handbook covered the theoretical concepts, practical exercises, and a detailed guide to



A Unit of Alva's Education Foundation (R) (Affillated to Visvesvaraya Technological University, Belagavi, Approved by AICTE, New Delhi Shobhavana Campus, Mijar, Moodbidri [Accredited by NAAC with A+ Grade & NBA (ECE & CSE)]

CIVIL ENGINEERING DEPARTMENT

using Revit for architectural design. The students were encouraged to use this resource as a reference throughout the course.

At the end of the course, Globe Tech Engineering Solutions issued Course Completion Certificates to the students, validating their participation and successful completion of the certification program.

Student Engagement and Performance

A total of 27 final-year Civil Engineering students participated in the course, which was aimed at giving them a strong foundation in architectural design software. Throughout the course, students displayed enthusiasm and commitment to learning, engaging actively in both theoretical and practical sessions. Their interest in mastering the software was reflected in the quality of their assignments, their consistent progress throughout the course, and their excellent performance in the final project.

The students demonstrated impressive skills in applying Revit to architectural design and planning, making the course a resounding success.

Feedback from Students

The feedback collected from students at the end of the course was extremely positive. Some key takeaways from the student feedback include:

- Course Relevance: Students found the course highly relevant and valuable, as it equipped them with essential skills that will enhance their employability in the field of civil engineering and architecture.
- Quality of Instruction: Ms. Dhanya's hands-on approach to teaching, which included a mix of theoretical lessons and practical exercises, was highly appreciated. Students were able to grasp complex Revit concepts with ease.



A Unit of Alva's Education Foundation (R)

(Affiliated to Visvesvaraya Technological University, Belagavi, Approved by AICTE, New Delhi Shobhavana Campus, Mijar, Moodbidri

[Accredited by NAAC with A+ Grade & NBA (ECE & CSE)]

CIVIL ENGINEERING DEPARTMENT

- Course Materials: The course handbook provided by Globe Tech Engineering Solutions was well-received by the students, with many mentioning that it served as a helpful reference throughout the course.
- Course Schedule: The course's Saturday schedule was convenient for students, as it did not interfere with their academic commitments.
- **Overall Experience**: A large number of students rated the course as excellent in terms of both content and delivery, noting that it significantly improved their understanding of Revit Architecture and its applications in the real world.



Photo 1: Students are actively planning and designing a single-storey building as their final exercise for the certification course.

Conclusion

The Revit Architecture Certification Course was a highly successful and enriching program for the final-year Civil Engineering students at AIET, Moodbidri. The students not only gained valuable knowledge of Revit Architecture but also acquired practical skills in BIM, which are essential for modern architectural and engineering practices.



A Unit of Alva's Education Foundation (R)
(Affiliated to Visvesvaraya Technological University, Belagavi. Approved by AICTE, New Delhi
Shobhavana Campus, Mijar, Moodbidri
[Accredited by NAAC with A+ Grade & NBA (ECE & CSE)]

CIVIL ENGINEERING DEPARTMENT

The course's success can be attributed to the collaboration between AIET and Globe Tech Engineering Solutions, the support from the institution's management, and the guidance provided by the faculty members. We extend our sincere thanks to Dr. Peter Fernandes, Principal of AIET, Dr. H. Ajith Hebbar, HOD of Civil Engineering, and the entire AIET management for their continuous encouragement in organizing such skill-enhancing programs.

The Diploma in Architecture Add-on Course for Civil Engineering students has proven to be an invaluable addition to their academic curriculum, offering them an opportunity to enhance their technical proficiency in architectural design software. The course has not only met its objective of enhancing the students' design capabilities but has also set the foundation for future learning and professional development in the field of construction and architecture.

We are confident that the skills acquired through this certification will be beneficial to the students as they enter the workforce, prepared to meet the technological demands of the construction and design industry.

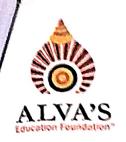
SURENDRA P. COURSE COORDINATOR

H.O.D.

Dept. of Civil Engineering Alva's Institute of Engg. & Technology Mijar, Moodbidri - 574 225 PRINCIPAL

PRINCIPAL

Alva's Institute of Engg. & Technology, Mijar, MOQDBIDR1 - 574 225, D.K 1



A Unit of Alva's Education Foundation (R)
(Affiliated to Visvesvaraya Technological University, Belagavi. Approved by AICTE, New Delhi Shobhavana Campus, Mijar, Moodbidri [Accredited by NAAC with A+ Grade & NBA (ECE & CSE)]

CIVIL ENGINEERING DEPARTMENT

The course's success can be attributed to the collaboration between AIET and Globe Tech Engineering Solutions, the support from the institution's management, and the guidance provided by the faculty members. We extend our sincere thanks to Dr. Peter Fernandes, Principal of AIET, Dr. H. Ajith Hebbar, HOD of Civil Engineering, and the entire AIET management for their continuous encouragement in organizing such skill-enhancing programs.

The Diploma in Architecture Add-on Course for Civil Engineering students has proven to be an invaluable addition to their academic curriculum, offering them an opportunity to enhance their technical proficiency in architectural design software. The course has not only met its objective of enhancing the students' design capabilities but has also set the foundation for future learning and professional development in the field of construction and architecture.

We are confident that the skills acquired through this certification will be beneficial to the students as they enter the workforce, prepared to meet the technological demands of the construction and design industry.

SURENDRA P. COURSE COORDINATOR

Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidrì - 574 225

PRINCIPAL

PRINCIPAL

Alva's Institute of Engg. & Technology, Mijar. MOODBIDRI - 574 225, D.K