



GYRFALCON

DESIGN & BUILD PVT. LTD.

SCAN TO BIM COURSE BROUCHER

Course Title: Scan to BIM

Course Overview: This course is designed to provide students with an understanding of the principles and practices involved in using point clouds to create Building Information Models (BIMs). Students will learn the theory and practice of scanning, processing, and modeling, and will develop the necessary skills to create and manage high-quality BIMs from point cloud data.

Course Learning Outcomes:

By the end of this course, students will be able to:

1. Understand the principles and practices involved in using point clouds to create BIMs
2. Understand the different types of scanners and their applications
3. Use point cloud processing software to create BIMs
4. Understand how to work with different file formats and coordinate systems
5. Model using different BIM software tools
6. Develop skills in managing and organizing point cloud data
7. Develop skills in quality control and quality assurance of BIMs
8. Understand the practical applications of Scan to BIM technology in the construction industry

Course Outline:

Week 1: Introduction to Scan to BIM

Overview of the course

Introduction to point clouds and BIMs

Applications of Scan to BIM technology

Week 2: Types of Scanners and their Applications

Types of scanners and their specifications

Laser scanning and photogrammetry

Best practices in scanning

Week 3: Point Cloud Processing Software

Overview of point cloud processing software

Importing point cloud data

Point cloud registration and alignment

Quality control and quality assurance

Week 4: Working with Different File Formats and Coordinate Systems

- Understanding coordinate systems
- Working with different file formats
- Converting point cloud data

Week 5: BIM Software Tools

- Overview of BIM software tools
 - Modeling from point cloud data
 - Creating BIMs from point cloud data
- Week 6: Managing and Organizing Point Cloud Data
- Best practices in managing point cloud data
 - Organizing point cloud data
 - Developing skills in data management

Week 7: Quality Control and Quality Assurance of BIMs

- Understanding quality control and quality assurance
 - Developing skills in quality control and quality assurance
 - Best practices in quality control and quality assurance
- Week 8: Practical Applications of Scan to BIM Technology
- Practical applications of Scan to BIM technology
 - Overview of case studies
 - Discussion and analysis of case studies

Assessment:

- Participation in class discussions and activities (20%)
- Assignments (40%)
- Final Project (40%)