



## BABA FARID COLLEGE OF ENGG. & TECHNOLOGY

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### Engineering Practices in Civil

Name of the Program	Duration	Documents (Topic Covered in report is Curriculum)	Page No.
Engineering Practices in Civil	33 Hours	List of the students enrolled(with signature of students)	1
		Model certificates	2-4
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**\*Topic Covered in report is Curriculum**

# Baba Farid College of Engineering & Technology (Attendance Register)

Programme/Semester: B.Tech. Civil Engineering /4th, 6th Semester

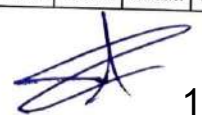
Teacher Name: Er. Rajan Vinayak, Assistant Professor

Course Code: CC\_EPC

Certificate Course : Engineering Practices In Civil (Lab)

Session : 2021-22 (EVEN SEMESTER)

S.No.	Name	UID	Semester	25-03-22	01-04-22	04-04-22	08-04-22	11-04-22	18-04-22	22-04-22	25-04-22	02-05-22	06-05-22	09-05-22	13-05-22	16-05-22	20-05-22	23-05-22	27-05-22	30-05-22	03-06-22	06-06-22	10-06-22	13-06-22	17-06-22	DELIVERED	TOTAL	%age	Signature of student		
1	Wani Shahid Shakeel	2073053	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Wani Shahid		
2	IRFAN MAQBOOL SHEIKH	2073049	4th	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	IRFAN MAQBOOL SHEIKH		
3	Akeel ahmad bhat	2073047	4th	ABSENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Akeel		
4	YAWAR AMIN WANI	2073041	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	YAWAR AMIN WANI		
5	Faizan Ali	2073042	4th	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	Faizan		
6	Sufaiya Ashraf	2073054	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	44	40	90.91	Sufaiya	
7	Lallawmsanga	2073018	4th	PRESENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	44	38	86.36	Lallawmsanga
8	Fc Zothanlana	2073022	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Fc Zothanlana	
9	Zoramthara	2073011	4th	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	Zoramthara	
10	Benjamin Lalpanmawia	2073031	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	40	90.91	Benjamin Lalpanmawia	
11	Mohd Mubssar	2073056	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	40	90.91	Mohd Mubssar	
12	Zairemmawii	1973037	6th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	40	90.91	Zairemmawii	
13	K.Lalramchuanpuii	1973027	6th	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	K.Lalramchuanpuii	
14	Sukhjeet Singh	1973028	6th	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Sukhjeet Singh	
15	Jafar Alam	2073019	4th	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	40	90.91	Jafar Alam	
16	Pardeep Sharma	1973030	6th	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	32	72.73	Pardeep Sharma	
17	Jaspreet Kaur	1973009	6th	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Jaspreet Kaur	
18	Amolak Singh	1973008	6th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	Amolak Singh	
19	Rohit Kumar	1973017	6th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	40	90.91	Rohit Kumar	
20	Majid Ahmad Bhat	1973033	6th	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Majid Ahmad Bhat	
21	Navraj Singh	1973002	6th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	Navraj Singh	
22	Shrawan Kumar Singh	1973024	6th	PRESENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	32	72.73	Shrawan Kumar Singh	
23	Fateh singh	2073024	4th	PRESENT	ABSENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Fateh singh	
24	Harsimran Singh	1973003	6th	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Harsimran Singh	
25	Captain	1973001	6th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Captain	
26	Abhishek	1972066	6th	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Abhishek	
27	Khushal garg	1973015	6th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	Khushal garg	
28	Lovepreet Singh	1973007	6th	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Lovepreet Singh	
29	Tushar jaura	1973005	6th	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Tushar jaura	
30	Simran kaur	2073004	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Simran kaur	
31	Ramandeep kaur	1973011	6th	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	32	72.73	Ramandeep kaur	
32	simran	1973016	6th	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	simran	
33	Shubham	2073005	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	42	95.45	Shubham	
34	Pankaj Kumar	2073001	4th	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Pankaj Kumar	
35	Peerzada Danish Hussain	2073038	4th	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Peerzada Danish Hussain	
36	Jason Lalramthanga	2073016	4th	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	16	36.36	Jason Lalramthanga	
37	Umesh kumar	1973029	6th	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	40	90.91	Umesh kumar	
38	Md Atiqur Rahman	1973022	6th	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Md Atiqur Rahman	
39	Agyapal singh	1973018	6th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	40	90.91	Agyapal singh	
40	Ufalq Ashraf Bhat	1973032	6th	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	18	40.91	Ufalq Ashraf Bhat	

  
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Sr. No.CE/2021-22/EVEN/CC/EPC/001

# **BABA FARID COLLEGE OF ENGINEERING AND TECHNOLOGY**

**Muktsar Road, Bathinda, Punjab (India)**

(Approved by AICTE & Affiliated to Maharaja Ranjit Singh Punjab Technical University, Bathinda)

## **CERTIFICATE OF COMPLETION**

This is to certify that Ms./Mr. **Wani Shahid Shakeel** UID **2073053** Program **B Tech Civil Engineering, Semester 4th** has successfully completed certificate course on “**Engineering Practices in Civil**” which was organized by Department of Civil Engineering, Baba Farid College of Engineering and Technology, Bathinda during Session 2021-22 (EVEN Semester).

Bathinda, Punjab(India)



**Er. Rajan Vinayak**  
Course Coordinator  
Department of CE

**BABA FARID**  
**GROUP OF INSTITUTIONS**

Bathinda, Punjab(India)



**Er. Tanu**  
Head  
Department of CE

Sr. No.CE/2021-22/EVEN/CC/EPC/002

# **BABA FARID COLLEGE OF ENGINEERING AND TECHNOLOGY**

**Muktsar Road, Bathinda, Punjab (India)**

(Approved by AICTE & Affiliated to Maharaja Ranjit Singh Punjab Technical University, Bathinda)

## **CERTIFICATE OF COMPLETION**

This is to certify that Ms./Mr. **Irfan Maqbool Sheikh** UID **2073049** Program **B Tech Civil Engineering, Semester 4th** has successfully completed certificate course on “**Engineering Practices in Civil**” which was organized by Department of Civil Engineering, Baba Farid College of Engineering and Technology, Bathinda during Session 2021-22 (EVEN Semester).

Bathinda, Punjab(India)



**Er. Rajan Vinayak**  
Course Coordinator  
Department of CE

**BABA FARID  
GROUP OF INSTITUTIONS**

Bathinda, Punjab(India)



**Er. Tanu**  
Head  
Department of CE

Sr. No.CE/2021-22/EVEN/CC/EPC/003

# **BABA FARID COLLEGE OF ENGINEERING AND TECHNOLOGY**

**Muktsar Road, Bathinda, Punjab (India)**

(Approved by AICTE & Affiliated to Maharaja Ranjit Singh Punjab Technical University, Bathinda)

## **CERTIFICATE OF COMPLETION**

This is to certify that Ms./Mr. **Akeel ahmad bhat** UID **2073047** Program **B Tech Civil Engineering, Semester 4th** has successfully completed certificate course on “**Engineering Practices in Civil**” which was organized by Department of Civil Engineering, Baba Farid College of Engineering and Technology, Bathinda during Session 2021-22 (EVEN Semester).

Bathinda, Punjab(India)



**Er. Rajan Vinayak**  
Course Coordinator  
Department of CE

**BABA FARID  
GROUP OF INSTITUTIONS**

Bathinda, Punjab(India)



**Er. Tanu**  
Head  
Department of CE



## Report on Engineering Practices in Civil

**Eligible Students:** B.Tech. 4<sup>th</sup> & 6<sup>th</sup> Semester

**Date:** 25-03-2022 to 17-06-2022

**Duration of Course:** 33 Hours

**Course Code:** CC\_EPC

**No. of students Enrolled:** 40

**Timing:** 01.50-03.20

**Days:** Monday & Friday

**Course Coordinator:** Er. Rajan Vinayak, Assistant Professor (CE)

The Engineering Practices in Civil course covered various aspects of surveying and construction, focusing on the use of total station instruments, bar bending schedules (BBS), and quantity surveying of building materials. The course aimed to provide students with the necessary knowledge and skills required in the surveying industry, including theoretical and practical aspects of total station operation, BBS preparation, and material quantity calculations.

This course proved to be an effective platform for students to acquire practical skills and knowledge related to surveying, total station instruments, bar bending schedules, and quantity surveying of building materials. Overall, the course received positive feedback from students, and 38 out of 40 participants received certificates for successfully completing the program.

### **Teaching Pedagogy:**

The course began with an introduction to surveying methods, principles, and basic trigonometry functions for distance and angular measurements. Students learned about coordinate systems, units of measurement, and the establishment of survey control points. The theoretical aspects of total station instruments were covered, including their components, working principles, advantages, and limitations. Practical sessions focused on familiarizing students with the machine parts, instrument handling, machine setup, job and station setup, traversing techniques, and detailed surveys. The theoretical aspects of bar bending schedules and the calculation of bar



length, weight, and numbers were also taught. Additionally, methods for calculating material volume and analyzing rates of different building materials were covered.

## **Topics Covered:**

The modules covered in this course are as follows:

### **Module-1: Fundamentals of Surveying (Theoretical Aspects)**

- Introduction to surveying methods and principles.
- Basics of trigonometry functions for distance and angular measurements.
- Understanding coordinate systems and units of measurements.
- Establishing survey control points.

### **Module-2: Total Station (Theoretical Aspects)**

- Common concepts related to Total Station (EDM).
- How Total Station works and its machine components.
- Exploring the advantages and limitations of Total Station technology.

### **Module-3: Total Station (Practical Aspects)**

- Familiarization with the different parts of the Total Station machine.
- Handling and operating the Total Station instrument.
- Setting up the Total Station equipment, including leveling, centering, and focusing.
- Job setup, station setup, and orientation techniques.
- Traversing methods (Close and Open).
- Conducting detail surveys using Total Station.

### **Module-4: Bar Bending Schedule (BBS) (Theoretical Aspects)**

- Preparation of Bar Bending Schedule for reinforcement steel.
- Calculation of length, weight, and quantity of bars.

### **Module-5: Quantity Surveying of Building Materials**

- Methods for calculating the volume of building materials.
- Analysis of rates for different types of building materials.



These modules provide a comprehensive understanding of surveying fundamentals, the practical aspects of using Total Station, preparing Bar Bending Schedules, and conducting quantity surveying for building materials.

## **Assessment Procedure:**

The students were evaluated throughout the course based on four parameters: Technical Knowledge, Hands-on Practice, Skill Test, and Attendance. Each parameter carried a certain weightage in the overall evaluation.

### **1. Technical Knowledge in Concerned Field (20 marks):**

This parameter measured their theoretical knowledge, conceptual understanding, and ability to apply that knowledge to practical scenarios.

### **2. Hands-on Practice (10 marks):**

Hands-on practice evaluated the student's ability to apply their knowledge in practical situations. It measured their proficiency in utilizing tools, techniques, or software relevant to the course.

### **3. Skill Test (10 marks):**

The skill test assessed the student's competency and proficiency in specific skills related to the course. It focused on practical skills that were essential for the field of study.

### **4. Attendance (10 marks):**

Attendance refers to the student's regular presence in the course. It emphasizes the importance of active participation and consistent engagement throughout the duration of the program.

## **Outcomes:**

1. Students gained the necessary knowledge about the diverse applications of total station technology, enabling them to apply it effectively in various surveying tasks.
2. Through practical training, students learned how to conduct accurate field surveys using total station techniques.
3. Students gained an in-depth understanding of the functions and components of total station equipment and became proficient in setting up the equipment using techniques such as centering, leveling, and focusing.
4. They learned how to calculate the quantities of various building materials needed for construction purposes.



5. Students were provided with coordinate files for AutoCAD software, allowing them to create maps, measure distances, and calculate areas accurately. They successfully utilized this data to determine the dimensions of existing buildings on the college campus.



**Dimensions of Existing Buildings on the College Campus in AUTOCAD software**