



## BABA FARID COLLEGE OF ENGG. & TECHNOLOGY

---

### Brick Work Masonry

Name of the Program	Duration	Documents (Topic Covered in report is Curriculum)	Page No.
Brick Work Masonry	33 Hours	List of the students enrolled(with signature of students)	1
		Model certificates	2-4
		Reports showing assessment procedures and Curriculum	5-9

**\*Topic Covered in report is Curriculum**

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

Programme/Semester: B.Tech. Civil Engineering /2nd, 4th, 8th Semester  
 Teacher Name: Er. Sandeep Maan, Assistant Professor  
 Course Code: CC\_BWM

Certificate Course : Brick Work Masonry (Lab)  
 Session : 2021-22 (EVEN SEMESTER)

S.No.	Name	UID	Semester	25-03-22	28-03-22	01-04-22	04-04-22	08-04-22	18-04-22	22-04-22	25-04-22	02-05-22	06-05-22	09-05-22	13-05-22	18-05-22	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	Manisha	2173014	2nd	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	44	32	72.73	Manisha	
2	Gagandeep Kaur	2173012	2nd	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	Gagan	
3	Neha Rani	2173007	2nd	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Neha	
4	Happy Singh	1873022	8th	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Happy	
5	Jeenat Kumar	1873027	8th	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Jeenat	
6	Chandan Goyal	1873011	8th	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	chandan		
7	Alakhdeep Singh	1873010	8th	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	44	40	90.91	Alakhdeep	
8	Parteek Karnawal	2173017	2nd	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	44	36	81.82	Parteek		
9	Amritpal Singh	2173002	2nd	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	Amritpal	
10	Ramandeep Singh	2173034	2nd	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	Ramandeep	
11	Md Yunus Khan	2173033	2nd	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	44	40	90.91	Md Yunus		
12	Jagjeet Singh	2173003	2nd	PRESENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	32	72.73	Jagjeet	
13	Aftab	1873005	8th	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Aftab	
14	Deepanshu	2173038	2nd	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	44	40	90.91	Deepanshu	
15	Aashish Babu	2173022	2nd	ABSENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	44	16	36.36	Aashish	
16	Vivek Babu	2173021	2nd	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	44	32	72.73	Vivek	
17	Nikki Kaur	2173037	2nd	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	Nikki
18	Manjinder Singh	2173039	2nd	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Manjinder
19	Jaskaran Singh	2173015	2nd	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Jaskaran
20	Besharat Hussain	2073043	4th	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Besharat	
21	Showkat Nabi Bhat	2073051	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	Showkat	
22	Sandeep Bansal	1873012	8th	PRESENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Sandeep	
23	Bharat Choudhary	2173010	2nd	PRESENT	ABSENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Bharat	
24	Ram Singh	2173001	2nd	ABSENT	ABSENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Ram	
25	Arun	2173006	2nd	PRESENT	PRESENT	ABSENT	ABSENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	36	81.82	Arun
26	Kabir	2173010	2nd	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	44	36	81.82	Kabir	
27	Wahid Bashir Bhat	2073055	4th	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	PRESENT	44	38	77.27	Wahid	
28	Mohammad Farhan Shah	2173026	2nd	PRESENT	PRESENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	38	86.36	M Farhan	
29	Md Azlan Khan	2173027	2nd	PRESENT	ABSENT	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	Md Azlan	
30	Vishajjeet Singh	2173032	2nd	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	ABSENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	ABSENT	PRESENT	ABSENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	PRESENT	44	34	77.27	Vishajjeet	

Sandeep Maan  
1

Sr. No.CE/2021-22/EVEN/CC/BWM/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. **Manisha** UID **2173014** Program **B Tech Civil Engineering, Semester 2nd** has successfully completed certificate course on “**Brick Work Masonry**” 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. Sandeep Maan**  
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/BWM/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. **Gagandeep Kaur** UID 2173012 Program **B Tech Civil Engineering, Semester 2nd** has successfully completed certificate course on “**Brick Work Masonry**” 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)

S-M Maan

**Er. Sandeep Maan**  
Course Coordinator  
Department of CE

**BABA FARID  
GROUP OF INSTITUTIONS**

Bathinda, Punjab(India)

Tanu

**Er. Tanu**  
Head  
Department of CE

Sr. No.CE/2021-22/EVEN/CC/BWM/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. **Neha Rani** UID **2173007** Program **B Tech Civil Engineering, Semester 2nd** has successfully completed certificate course on “**Brick Work Masonry**” 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. Sandeep Maan**  
Course Coordinator  
Department of CE

**BABA FARID  
GROUP OF INSTITUTIONS**

Bathinda, Punjab(India)



**Er. Tanu**  
Head  
Department of CE



## Report on Brick Work Masonry

**Eligible Students:** B.Tech. 2<sup>nd</sup>, 4<sup>th</sup> & 8<sup>th</sup> Semester

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

**Duration of Course:** 33 Hours

**Course Code:** CC\_BWM

**No. of students Enrolled:** 30

**Timing:** 01.50-03.20

**Days:** Monday & Friday

**Course Coordinator:** Er. Sandeep Maan, Assistant Professor (CE)

Brick laying is a skill-intensive process used for constructing walls and structures using bricks as the primary building material. It involves precise techniques to ensure stability and durability of the finished structure. This report highlights the key modules covered during a brick laying course, including an overview of bricks, tools and equipment used, types of brick bonding, setting out walls, and the importance of plumbing, leveling, and gauging. The course aimed to provide students with the necessary knowledge and skills to successfully execute brickwork.

This course offered a comprehensive curriculum that covered essential aspects of bricklaying. It provided students with theoretical knowledge, practical skills, and hands-on experience required in brickwork construction. The course successfully trained 28 students, who received certificates upon completion, and received positive feedback for its effectiveness in imparting bricklaying expertise.

### **Teaching Pedagogy:**

The course followed a structured approach to teaching brick laying. It began with an understanding of bricks and related terms, including their dimensions, manufacturing process, and different types available. Students were then introduced to the various tools and equipment used in brickwork, ranging from hand tools to power tools and measuring devices. The course



extensively covered different brick bonding techniques, emphasizing the importance of choosing the right bond for specific projects. Setting out walls, plumbing, leveling, and gauging were crucial skills taught to ensure accurate brick placement. Lastly, students were guided on setting out complex wall designs and excavations, enabling them to tackle intricate projects.

## **Topics Covered:**

The required modules for the bricklaying course can be summarized as follows:

### **Module 1: Bricks and Related Terms**

- Dimensions of bricks
- Manufacturing process of bricks
- Different types of bricks and their characteristics (class and strength)

### **Module 2: Bricklaying Tools and Brick Cut Shapes**

- Hand tools: trowels, hammers, bolsters
- Power tools: heavy-duty drills, mixers for mortar and plaster
- Measuring devices: laser levels, tape measure
- Lifting equipment: bosun's chairs

### **Module 3: Types of Brick Bonding**

- Stretcher bond
- Header bond
- English bond
- Flemish bond
- Facing bond
- Dutch bond
- English cross bond
- Brick on edge bond
- Raking bond
- Zigzag bond
- Garden wall bond



## **Module 4: Setting out a Basic Wall**

- Process of developing the physical positions of corners and walls
- Transferring dimensions from the layout plan to the ground

## **Module 5: Plumbing, Leveling, and Gauging**

- Gauge: Checking the height of the course
- Level: Ensuring the course is level
- Plumb: Verifying that the wall is vertical

## **Module 6: Setting out a Complex Design of Wall**

- Clearly defining the outline of the excavations for complex wall designs

These modules cover essential aspects of bricklaying, including understanding bricks, utilizing tools, mastering different brick bonding techniques, setting out walls accurately, and ensuring proper plumbing, leveling, and gauging.

### **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 acquired the necessary knowledge about bricklaying, including understanding brick dimensions, manufacturing processes, and different types of bricks.
2. They learned how to select bricks that are true to shape and angle, and reject damaged or chipped bricks.
3. Students gained knowledge about different brick bonding techniques, enabling them to choose the appropriate bond for specific projects.
4. Students learned how to construct projects in accordance with provided drawings, translating the dimensions and specifications into actual brickwork.
5. The bricklaying project undertaken during the course entitled Mastering the Art of Brickwork. By understanding the technical aspects, utilizing appropriate tools, and implementing precise techniques, students acquired the ability to construct robust and visually appealing brick structures.





**Construction of Wall Using Brickwork**