# BABA FARID COLLEGE OF ENGG. & TECHNOLOGY

## Fundamental of Python

| Name of the Program | Duration | Documents (Topic Covered in report is Curriculum) | Page No. |
|---|---|---|---|
| Fundamental of Python | 32 Hours | List of the students enrolled(with signature of students) | 1 |
| | | Model certificates | 2-4 |
| | | Reports showing assessment procedures and Curriculum | 5-7 |

***Topic Covered in report is Curriculum**

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

Teacher Name: Er. Satvir Singh
Subject : Fundamental of Python (CCFP-02) (lab)
Program.B.TECH - EE , Sem 6th
Session: 2021-22 (even)

| Sr No. | UID | STUDENT NAME | 16-Mar-22 | 18-Mar-22 | 23-Mar-22 | 25-Mar-22 | 30-Mar-22 | 01-Apr-22 | 06-Apr-22 | 08-Apr-22 | 13-Apr-22 | 15-Apr-22 | 22-Apr-22 | 27-Apr-22 | 29-Apr-22 | 04-May-22 | 06-May-22 | 18-May-22 | 20-May-22 | 24-May-22 | 27-May-22 | Total Lecture | classes attended | Student Attendance |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1976001 | Gurpreet Singh | A | P | P | P | A | A | P | P | P | P | P | P | A | P | P | P | P | P | P | 38 | 30 | Gurpreet |
| 2 | 1976004 | Gaganjot Kaur | A | P | P | P | P | A | P | P | P | A | P | A | P | P | P | P | P | A | A | 38 | 26 | Gagan |
| 3 | 1976005 | Kirandeep Kaur | P | P | P | A | P | P | P | P | A | P | A | P | P | P | P | A | P | P | P | 38 | 30 | Kiran |
| 4 | 1976006 | Monika | P | A | A | P | P | P | A | A | P | A | P | P | P | P | P | P | P | P | P | 38 | 28 | Monika |
| 5 | 1976007 | Lovepreet Singh | P | A | A | A | P | P | A | A | A | P | A | P | P | P | P | P | P | P | P | 38 | 24 | Lovepreet |
| 6 | 1976013 | Amit Kumar Sah | A | P | P | P | A | A | P | P | P | A | P | P | A | P | P | P | P | P | P | 38 | 28 | Amit kumar |
| 7 | 1976014 | Jameel Ahmad Sofi | P | P | P | P | P | P | P | P | P | P | P | P | P | A | P | P | P | A | P | 38 | 34 | Jameel |
| 8 | 1976015 | Amandeep Kaur | P | P | P | A | P | P | P | P | A | P | A | P | P | P | P | A | A | P | P | 38 | 28 | Amandeep |
| 9 | 1976017 | Vivek Arora | A | P | P | A | P | A | P | P | A | P | A | P | P | P | P | P | A | A | P | 38 | 24 | Vivek |
| 10 | 1976018 | Davand Ram | A | P | P | A | P | A | P | P | A | P | P | A | P | P | P | P | P | P | P | 38 | 28 | Davand Ram |
| 11 | 1976019 | Yashpal Singh | A | P | P | P | P | A | P | P | P | P | P | P | P | P | P | P | P | P | P | 38 | 34 | Yashpal |
| 12 | 1976020 | Arundeep | A | P | P | P | P | A | P | P | P | P | P | A | P | P | P | P | P | P | P | 38 | 32 | Arundeep |
| 13 | 1976021 | Gursimrandeep Singh | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | A | P | 38 | 36 | Gursimran |
| 14 | 1976022 | AADIL AHMAD TANTRY | P | A | A | P | P | P | A | A | P | P | P | P | P | P | P | P | P | P | P | 38 | 30 | Aadil |
| 15 | 1976023 | Sumit Sharma | P | P | P | P | P | P | P | P | P | P | P | P | A | P | P | P | P | A | P | 38 | 34 | Sumit |
| 16 | 1976025 | Kanwal Preet Kaur | P | P | P | P | P | P | P | P | P | P | P | A | P | P | P | P | P | P | P | 38 | 36 | Kanwal |
| 17 | 1976026 | Khunjamayum Gunabanta Meitei | P | A | A | P | P | P | A | A | P | P | P | P | P | P | P | P | P | P | P | 38 | 30 | Khunjamayum |
| 18 | 1976027 | Sukhdeep Singh | P | P | P | P | P | P | P | P | P | P | P | A | P | P | P | P | P | P | P | 38 | 36 | Sukhdeep |
| 19 | 1976028 | Sandeep Kumar | P | A | A | A | P | P | A | A | A | P | A | A | P | P | P | P | P | P | P | 38 | 22 | Sandeep |
| 20 | 1976029 | Pawandeep Singh | P | A | A | P | P | P | A | A | A | A | A | A | A | A | A | A | A | A | P | 38 | 10 | Pawan |
| 21 | 1976030 | Muskan | A | A | A | A | A | A | A | A | A | p | A | A | A | p | A | A | A | A | p | 38 | 6 | Muskan |

Course Coordinator

Satvir Singh

Sr. No. EE/2021-22/CC/Even/CCFP/33

# 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. Gurpreet Singh UID **1976001** Program **B.Tech Electrical Engineering, Semester 6th** has successfully completed certificate course on **"Fundamental of Python"** which was organized by Department of Electrical Engineering, Baba Farid College of Engineering and Technology, Bathinda during Session 2021-22 (Even Semester).

**Er. Satvir Singh**
**Course Coordinator**
**Department of EE**

BABA FARID GROUP OF INSTITUTIONS
Bathinda, Punjab(India)

**Er. Harsimran Singh**
**Head**
**Department of EE**

Sr. No. EE/2021-22/CC/Even/CCFP/34

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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. Gaganjot Kaur UID **1976004** Program **B.Tech Electrical Engineering, Semester 6th** has successfully completed certificate course on **"Fundamental of Python"** which was organized by Department of Electrical Engineering, Baba Farid College of Engineering and Technology, Bathinda during Session 2021-22 (Even Semester).

**Er. Satvir Singh**
**Course Coordinator**
**Department of EE**

BABA FARID GROUP OF INSTITUTIONS
Bathinda, Punjab(India)

**Er. Harsimran Singh**
**Head**
**Department of EE**

Sr. No. EE/2021-22/CC/Even/CCFP/35

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Muktsar Road, Bathinda, Punjab (India)

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## CERTIFICATE OF COMPLETION

This is to certify that Ms./Mr. Kirandeep Kaur UID **1976005** Program **B.Tech Electrical Engineering, Semester 6th** has successfully completed certificate course on **"Fundamental of Python"** which was organized by Department of Electrical Engineering, Baba Farid College of Engineering and Technology, Bathinda during Session 2021-22 (Even Semester).

**Er. Satvir Singh**
**Course Coordinator**
**Department of EE**

BABA FARID GROUP OF INSTITUTIONS
Bathinda, Punjab(India)

**Er. Harsimran Singh**
**Head**
**Department of EE**

# Report

# on

# Fundamental of Python

**Eligible Students:** B.Tech 6thSemester

**Date:**16/03/2022 to 27/05/2022

**Duration of Course:** 32 Hours

**Course Code:** CCFP-02

**No. of students Enrolled:** 21

**Timing:** 1:50 to 3:20

**Days:** Wednesday & Friday

**Course Coordinator**: Er. Satvir Singh, Assistant Professor (EE)

The Fundamental of Python course conducted during the session 2021-22 for B.Tech. Students. It was a comprehensive program aimed for providing a strong foundation in Fundamentals of python. The course duration was 32 hours, where out of 21 enrolled students, 19 successfully completed the course.

Python is a highly popular programming language known for its extensive libraries, simplicity, and readability. It is widely used in today's technology-driven world. Python is a high-level general-purpose language designed to write code in fewer lines while maintaining clarity. It is an interpreted language, meaning there are no type declarations required in the source code, making it flexible but sacrificing compile-time type checking. Python tracks the types of values at runtime and identifies code that doesn't make sense. There are two major versions of Python: Python 2 and Python 3, which have significant differences. Python enables programmers to work quickly and effectively integrate systems.

**Teaching Pedagogy:**

The teaching pedagogy for the Fundamentals of Python course focuses on providing a comprehensive learning experience for students. The course begins with an introduction to Python, highlighting its significance and relevance in the programming world. Interactive lectures are conducted to explain core concepts, with visual aids and real-world examples used to engage students. Hands-on coding exercises are provided to allow students to apply

their knowledge, with varying difficulty levels to cater to different skill levels. Code reviews and feedback are given to reinforce good coding practices and improve skills. The importance of code documentation and best practices is emphasized, along with interactive code debugging to develop problem-solving skills.

**Topics Covered:**

The course covers various modules essential for learning Python programming.

**Module 1**: Introduces built-in and external modules, pip installation, and using Python as a calculator.

**Module 2**: Focuses on variables, keywords, and operators.

**Module 3**: covers strings, including slicing and string functions.

**Module 4**: Covers Lists, tuples, and their methods .

**Module 5**: Explores dictionaries, sets, and their operations.

**Module 6**: Covers different types of loops and statements.

By studying these modules, students will acquire a foundational understanding of Python programming, including variables, data types, strings, lists, tuples, dictionaries, sets, and loops.

**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, andability 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):**

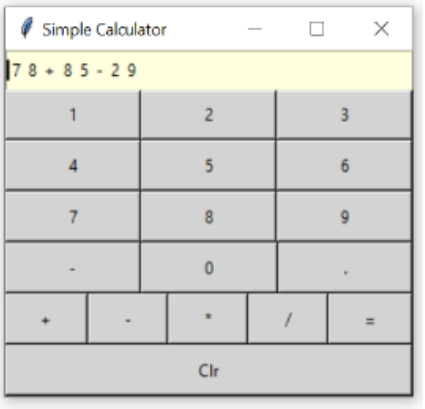
Attendance refers to the student's regular presence in the course. It emphasizes the

importance of active participation and consistent engagement throughout the duration of the program.

**Outcomes:**

Overall, the course equipped students with a solid foundation in Python programming and enabled them to create functional programs, apply their knowledge to practical scenarios, and enhance their problem-solving abilities, it can be summarized in the following points:

1. Students demonstrated proficiency in fundamental programming constructs, such as variables, conditionals, loops, and functions. They applied these skills to develop projects like a simple calculator, a text-based adventure game, or a number guessing game. This showcased their ability to implement core programming concepts effectively.
2. Students gained expertise in creating interactive programs by incorporating user input.
3. Through the course and projects, students developed strong problem-solving and logical thinking skills. They learned to break down complex problems into smaller, manageable tasks and used Python to devise solutions. This skill set is valuable not only in programming but also in various professional fields requiring analytical thinking and structured problem-solving.




**Screenshots of Simple Calculator project**