

# Department of Mechanical Engineering

## Report on

### ***In-house Internship on Python Programming and its Application in Mechanical Engineering***

#### **About the program:**

<b>Program schedule:</b>	10 <sup>th</sup> July – 21 <sup>st</sup> July 2023
<b>Program duration:</b>	6 Hrs/Day x 10 Days (60 Hrs)
<b>Program coordinators:</b>	Dr. C.P. Singh and Dr. N.S. Raghuvanshi

#### **Introduction:**

Two-week In-house internship program on “Python Programming and its Application in Mechanical Engineering” was organized by the Department of Mechanical Engineering, SATI Vidisha, during July 10-21, 2023. In this program, twenty sessions each of three hours duration were organized to cover the entire gamut of the topic including providing practical and hands on experience. The program was organized for the B. Tech. pre final year and final year students especially those students who were not able to get any appropriate internship program during this summer vacation.

#### **Objective:**

To guide and inspire students in their journey of learning Python programming, fostering a strong foundation in coding principles and problem-solving skills. Through this internship program, a supportive and engaging environment will be created where students can explore the world of Python. The program will facilitate the students to understand the basic concepts of Python Programming and its utilization in various subject in Mechanical Engineering like Fluid Mechanics, Machine design, HMT and IC engine etc.

#### **Program Contents:**

Following topics will be covered during the in-house internship program (IIP):

- Introduction to Python Programming and Python Installation.
- Basics of Python: identifiers, Keywords, Variables, Operators.
- Decision statement: If-Else statements.
- Lists, Tuples, Dictionary.
- Loops: While and for loop and related programs.
- Application of Python programming in Mechanical Engineering