

## AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,  
Accredited by NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)  
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113



Certificate Course  
on

### **PYTHON PROGRAMMING**

From 20<sup>th</sup> December 2021 to 31<sup>st</sup> December 2021

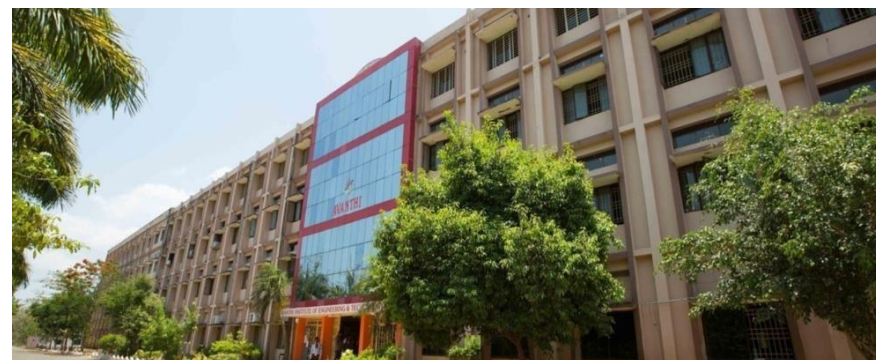


**ORGANIZED BY**

**DEPT. OF COMPUTER SCIENCE ENGINEERING AVANTHI  
INSTITUTE OF ENGINEERING AND TECHNOLOGY  
MAKAVARAPALEM (V), VISAKHAPATNAM-531113**

## AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

AIET started in the year 1999 and offers various courses at Engineering and PG level. The college is providing with rooms, computer centre, laboratories and seminar hall with audio-visual equipments. Industry Institute interaction is conducted regularly to emphasize on the latest trends in the present market.



It is very near to Narsipatnam. Frequent bus facilities are available both from and to Visakhapatnam and Narsipatnam. Very safe and secure hostel facility is available for Girl students. These are the additional facilities besides excellent academic atmosphere in the college campus.

### **DEPARTMENT OF COMPUTER SCIENCE ENGINEERING**

The Computer Science & Engineering department was established with B.Tech Program in 1999 with intake of 60 students and this was increased to 120 students in 2007 and increased to 180 students in 2012. The Post graduate Program M.Tech with C.S.E was started in 2005 with intake of 18 Students and this was increased to 24 students in 2012. The Computer Science & Engineering department was accredited by NBA in 2009 and 2014. Department mission is to be Instrumental in the

field of computer science & engineering by providing high quality education and continues improvement process of the program. The department has full fledged faculty with four professors with Ph.D and 40 staff members with experience in teaching and industry, which leads the skill students to get employment in the market. . The department encourages the faculty members and the students to participate paper presentations, seminars, workshops and National, International conferences and research activities. The department is well equipped laboratories and the computers have sophisticated development software tools. The department provides training to its students in advanced technologies like JAVA,WEB TECHNOLOGIES,DOTNET,PHP,Data Warehousing, Data Miningtools and Data storage systems as a supplement to the curriculum to enhance the employability of students. Our faculty members are the members of Computer Society of India, ISTE, IEEE.

### **ABOUT COURSE**

Python is a premier, flexible, and powerful open-source language that is easy to learn, easy to use, and has powerful libraries for data manipulation and analysis. For over a decade, Python has been used in scientific computing and highly quantitative domains such as Finance, Oil and Gas, Physics, and Signal Processing. Today, it is the most preferred language for Artificial Intelligence (AI), Robotics, Web Development, and Big Data.

### **TOPICS TO BE COVERED**

Day 1 : Introduction to Python  
Day 2 : Python basics  
Day 3 : Python program flow  
Day 4 : Functions and modules  
Day 5 : Exception handling  
Day 6 : File handling  
Day 7 : Classes in python  
Day 8 : Generators and iterators  
Day 9 : Data structures  
Day 10 : Collections

For Registration please contact Mr. B.Ganesh, Assistant Professor,CSE.

#### **CHIEF PATRON**

Smt. M. Gnaneswari  
President,  
Avanathi Institute of Engineering and Technology

#### **PATRON**

Dr. C P V N J Mohan Rao  
Principal,  
Avanathi Institute Of Engineering And Technology

#### **CHAIRMAN**

U.Nanaji  
Head of the Department  
Computer Science & Engineering



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### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### CIRCULAR

Date: 13/12/2021

On behalf of the Department of Computer Science and Engineering, AIET is conducting ten days certificate course collaboratively with APPSSDC on “Python programming” from 20<sup>th</sup> December 2021 to 31<sup>st</sup> December, 2021 for all the students of III year CSE. I advise to all the students of III year CSE to enroll your details for above course. For more details, you may consult Course Coordinator Mr. B.Ganesh, Assistant Professor, CSE

#### Resource Person Details:

1. Siddhodhana

Trainer

APSSDC

2. Swamy Kankipati

Trainer

APSSDC

U. Nanaji

Head of the Department

Computer Science and Engineering

Avanthi Institute of Engg & Technology  
Tamaram, Makavarapalem Md  
Visakhapatnam District, Pin-531113

Copy to: Principal, AIET



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### **Python Programming** **From 20<sup>th</sup> December 2021 to 31<sup>st</sup> December 2021** **Syllabus**

Day 1 : Introduction to Python

Day 2 : Python basics

Day 3 : Python program flow

Day 4 : Functions and modules

Day 5 : Exception handling

Day 6 : File handling

Day 7 : Classes in python

Day 8 : Generators and iterators

Day 9 : Data structures

Day 10 : Collections

Mr.B.Ganesh

Coordinator

U.Nanaji

Head Of the Department

Computer Science and Engineering

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### **Python Programming**

**From 20<sup>th</sup> December 2021 to 31<sup>st</sup> December 2021**

#### **Schedule**

##### **DAY 1(20-12-2021)**

- 9.00 A.M – 1.00 P.M : Introduction to Python
- 1.00 P.M – 2.00 P.M : Lunch break
- 2.00 P.M – 4.00 P.M : Installation of Python with real world examples

##### **DAY 2(21-12-2021)**

- 9.00 A.M – 1.00 P.M : Python basics
- 1.00 P.M – 2.00 P.M : Lunch break
- 2.00 P.M – 4.00 P.M : Data types in python

##### **DAY 3(22-12-2021)**

- 9.00 A.M – 1.00 P.M : Python Programming flow
- 1.00 P.M – 2.00 P.M : Lunch break
- 2.00 P.M – 4.00 P.M : Basic i/o operations and operators

##### **DAY 4(23-12-2021)**

- 9.00 A.M – 1.00 P.M : Functions
- 1.00 P.M – 2.00 P.M : Lunch break
- 2.00 P.M – 4.00 P.M : Modules

##### **DAY 5(24-12-2021)**

- 9.00 A.M – 1.00 P.M : Exception handling
- 1.00 P.M – 2.00 P.M : Lunch break
- 2.00 P.M – 4.00 P.M : Loops

**DAY 6(27-12-2021)**

- 9.00 A.M – 1.00 P.M : File handling  
1.00 P.M – 2.00 P.M : Lunch break  
2.00 P.M – 4.00 P.M : Packages

**DAY 7(28-12-2021)**

- 9.00 A.M – 1.00 P.M : Classes  
1.00 P.M – 2.00 P.M : Lunch break  
2.00 P.M – 4.00 P.M : objects

**DAY 8(29-12-2021)**

- 9.00 A.M – 1.00 P.M : Generators  
1.00 P.M – 2.00 P.M : Lunch break  
2.00 P.M – 4.00 P.M : Iterators

**DAY 9(30-12-2021)**

- 9.00 A.M – 1.00 P.M : Data Structures  
1.00 P.M – 2.00 P.M : Lunch break  
2.00 P.M – 4.00 P.M : Exceptions

**DAY 10(31-12-2021)**

- 9.00 A.M – 1.00 P.M : Collections  
1.00 P.M – 2.00 P.M : Lunch break  
2.00 P.M – 4.00 P.M : String methods



Mr.B.Ganesh  
Coordinator



U.Nanaji

Head Of the Department  
Computer Science and Engineering

Avanthi Institute of Engg & Technology  
Tamaram, Makavarapalem Md  
Visakhapatnam District, Pin-531113















87	19811A0587	SALADULA YAMUNA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
88	19811A0588	SENAPATHI DURGA SYAMALA	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
89	19811A0589	SINGAMPALLI PHANINENDRA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
90	19811A0590	UGGINA ANITHA	✓	✓	✓	✓	✓	X	✓	✓	✓	✓
91	19811A0591	UGIINA AVINASH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
92	19811A0592	ULABALA GEETHADEVI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
93	19811A0593	VEDULLA S S SATYA GAYATRI	✓	✓	✓	✓	✓	✓	✓	✓	✓	X
94	19811A0594	VEETURI SRI HARSHITHA PRAVALLIKA	✓	✓	✓	✓	✓	X	✓	✓	✓	✓

  
Coordinator

  
HOD

Avanthi Institute of Engg & Technology  
Tamaram, Makavarapalem M  
Visakhapatnam District, Pin-531113



**Andhra Pradesh State Skill Development Corporation (APSSDC)**  
(Department of Skills Development & Training, Govt. of Andhra Pradesh)



**Certificate of Participation**



Cert.No. SDC - PP - 7445

Regd Id : 19811A0533

This is to certify that Mr./Ms./Mrs.....K.Anusha.....  
of .....Avanathi Institute Of Engineering & Technology..... has successfully  
participated Training Program on .....Python Programming.....  
held from .....20-12-2021..... to .....31-12-2021.....

Principal (or) HOD

  
**Dr. Ravi K Gujjula**  
Chief General Manager (Technical)  
APSSDC

  
**Sri S. Satyanarayana, IAS**  
Managing Director  
APSSDC



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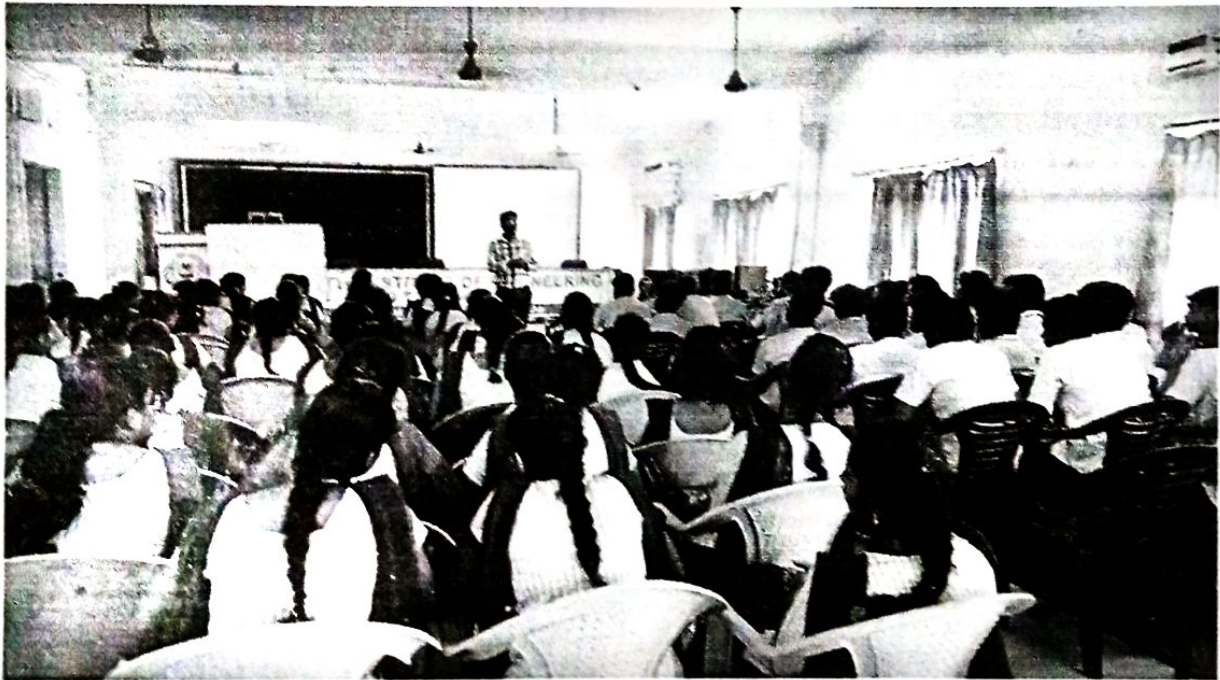
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### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

A Course On

Python Programming

Dated:20-12-2021



  
Coordinator

  
H.O.D

Avanathi Institute of Engg & Technology  
Tamaram, Makavarapalem Md  
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**Department of Computer Science and Engineering**

Dt:31-12-2021

**BRIEF REPORT**

Department of Computer Science and Engineering, Avanthi Institute of Engineering and Technology had organized a certificate course on “Python Programming” from 20-12-2021 to 31-12-2021.

We had **Resource Person: Siddhodhana, Trainer, APSSDC** was explained about python introduction and installation of python. The difference between a compiled and interpreted languages. Many of those who had experience with C++/Java remarked how easy it was to declare a variable in Python (without specifying its data type) and change its data type fluidly. The reason is that Python doesn't actually “hold” any data but is merely pointers to data objects.

**Resource Person: Swamy Kankipati, Trainer, APSSDC** was explained about built-in data structures of Python (lists and dictionaries). The list is an ordered collection of data in Python. Its syntax, indexing, working and basic operations like len(), append(), sort(), and list concatenation were taught. They were also introduced to the map() function and list slicing. Next, we moved on to dictionaries in Python and its key-value structure was explained. Since dictionaries make use of Hashmaps, searching in dictionaries is faster than lists. Different dictionary functions like .keys(), .values(), .get(key), etc. were taught.

  
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