ABOUT DEPARTMENT

CSE Program is an intellectually challenging discipline. This study will provide you with a strong foundation of knowledge in Problem-solving and logical thinking. Some of the areas of study are algorithms and data structures, programming languages, software engineering, database systems, Operating Systems to name a few. A record number of jobs being created in computer science related fields. Both UG and PG programs were established in the year 2011. Current Student intake -

- 1. B.Tech. Program in Computer Science and Engineering has an intake of 240 students.
- 2. M.Tech Program in Computer Science and Engineering has an intake of 24 students.
- 3. B.Tech. Program in CSE (Data Science) has an intake of 120 students
- 4. B.Tech. Program in CSE (Artificial Intelligence and Machine Learning) has an intake of 120 students

Seminars are an integral part of our academic programs and conducted every week. It acts as a means for students to deliberate on subjects from technical to current affairs and even inspiring videos are screened. Students-initiated clubs which are intended to generate curiosity in young minds and promoting intelligent designs to help solving some of the problems in our daily life. Organizing and conducting technical events like Code champ, hackathon competitions will enhance and showcase the coding abilities of the students.

Our students undergo entrepreneurship and inventiveness workshops, Coding sessions, and hackathons, which strive to be the most innovative in the world. In an increasingly competitive job market, CSE students have excellent options for a secure future & jobs. They have demonstrated & sustained success by securing jobs in top MNC's.

OUR RECRUITERS



ELIGIBILITY

Faculty members of all colleges (Engineering, Polytechnic and Science Dearee Colleges). **Research Scholars, Industry Professionals and** Students are eligible to attend the course.

REGISTRATION FEE

Participant: Rs. 200/-

REGISTRATION PROCESS

1. Registration fee will be paid though online mode, the account details for this purpose is

> Account Name : G.Surya Narayana Account No: 176310100007161 IFSC Code : ANDB0001763 Bank Name : Andhra Bank **Branch : New Boyanapalli**

(OR)

Google Pay : 9885709675

2. Link for registration: https://forms.gle/rdUYTzJDUmzn2vVv9



3. Only Online registration will be accepted and Last date of registration: 31.07.2020 (till 05.00 PM)

Certification:

Every participant will be given E-Certificate after the successful completion of training program

For further details contact:

Dr.G.Surya Narayana

Coordinator Professor, Dept. of CSE, Ph:9885709675 Mail ID : surya.aits@gmail.com

TOPICS COVERED

1. INTRODUCTION TO DATA SCIENCE

- 1.1. Introduction to DS & Analytics
- 1.2. Merits of Analytics
- 1.3. Role and Responsibilities of DS't
- 1.4. Possible Application Areas or Domains of DS
- 1.5. DS or ML Algorithms
- 1.6. Skills Required to DS't
- 1.7. Python for DS

2. ANACONDA SOFTWARE INSTALLATION

- 2.1. Anaconda Installation
- 2.2. Jupyter Notebook
- 2.3. Spyder Tool
- **3. PYTHON PROGRAMMING**
 - 3.1. Tokens of Python
 - 3.2. Control Structures
 - 3.3. Functions
 - 3.4. Data Structures
 - 3.5. Regular Expressions
 - 3.6. Modules and Packages
 - 3.7. Files
- 3.8. Exception Handling
- **4. NUMPY MODULE**
 - 4.1. Importing and operations of numpy
 - 4.2. Index, slice, reshape numpy arrays
 - 4.3. Numpy array broadcasting
 - 4.4. Vector Arithmetic Operations
 - 4.5. Matrix Arithmetic Operations
 - 4.6. Types of Matrices
 - 4.7. Matrix Operations
 - 4.8. Tensor Arithmetic operations

5. PANDAS MODULE

- 5.1. Importing pandas module
- 5.2. Pandas Series structure
- 5.3. Pandas Dataframe structure
- 5.4. Possible operations on Dataframe
- 5.5. Aggregating Data

6. MATPLOTLIB MODULE

- 6.1. Importing matplotlib
- 6.2. Types of plots
- 6.3. Line Plot
- 6.4. Scatter Plot
- 6.5. Bar Plot
- 6.6. Histogram
- 6.7. Pie Chart 6.8. Seaborn Tool

7. STATISTICS FOR DATA SCIENCE

- 7.1. Introduction to Statistics
- 7.2. Types of data
- 7.3. Terminologies of statistics
- 7.4. Descriptive Statistics
- 7.5. Inferential Statistics
- 7.6. Application of Statistics in Machine Learning

8. ML ALGORITHMS

- 8.1. Introduction to ML
- 8.2. Data Preparation
- 8.3. Linear Algorithms
- 8.4. Non-Linear Algorithms
- 8.5. Unsupervised Algorithms
- 8.6. Ensemble Algorithms

ABOUT COLLEGE

Sreyas Institute, located in the heart of the city, is the result of deliberation & planning of every aspect to create a world-class technical education institution. The first impression as you enter the sprawling green and verdant campus of Sreyas leaves a lasting impression of innate calm and energizing growth. The campus is scientifically planned and artistically designed. The students have access to the latest software & computing facilities for learning & research to groom them into future citizens. Our student-centric approach will ensure that Sreyans gain not just depth & breadth in their chosen area of specialization, but a holistic set of skills that will equip them to face the real world. At every stage, there will be opportunities to expand their boundaries, with multiple platforms for collaboration & learning. The infrastructure is absolutely world-class with opportunities to build practical skills in state-of-the-art laboratories & workshops. The thriving, vibrant campus with its multitude of activities will help them develop a well-rounded and arounded personality that evolves naturally. Finally, our intention is to ensure that every opportunity to learn is utilized to the maximum & the end goal is that the student transforms into an individual full of enthusiasm, confidence & knowledge to face global challenges, becoming both individually and professionally successful, as well as socially responsible. If these are the values you believe in too, you will do well at Sreyas. Bring your dream, drive & determination to Sreyas & we will help you realize your dream.

THE CAMPUS

The Campus is located at Nagole, the most happening area in the city of Hyderabad. The Campus is a stone's throw away from reputed media houses, service & IT Industry hubs. This proximity helps us in attracting the beacons of industry to our Campus for regular interactions with our students. The Campus is also the hub for many academic & professional activities.



CHIEF PATRONS

Sri Anantula Vinay Kumar Reddy Chairman Sri Chintala Ravindranath Yadav Secretary / Correspondent Sri Anantula Hriday Reddy Vice Chairman Sri Nirvetia Sarath Reddy CEO & Treasurer

PATRON

Dr. Suresh Akella Principal

CONVENER

Dr. Shaik Abdul Nabi Professor & HOD, CSE

COORDINATOR

Dr. C.Surya Narayana Professor, CSE

ORGANIZERS

Faculty of CSE Department

RESOURCE PERSON

Trainer

Mr. M. Venkat

NativE TecH HuB

Data Science & IOT







SREYAS INSTITUTE OF ENGINEERING AND TECHNOLOGY

Beside Indu Aranya, GSI, Bandlaguda, Nagole, Hyderabad, Telangana

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad) (Accredited by NBA, New Delhi and NAAC, Banglore) <u>https://sreyas.ac.in/</u>

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Presents Two-Week Short-Term Training Program on DATA SCIENCE WITH PYTHON 03rd - 15th August 2020

http://www.nativetechhub.com/



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Certificate of Appreciation

This is to certify that

Mr. SIBUN PARIDA,

Research Scholar of Bose Institute has participated in Two Week Online Short-Term Training Programme on "Data Science with Python" organized by the Department of Computer Science and Engineering, Sreyas Institute of Engineering and Technology held from August 03rd to 16th 2020.

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Dr. G. Surya Narayana Coordinator

Dr. Shaik Abdul Nabi Convener & HOD-CSE

Dr. Suresh Akella Principal



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Certificate of Appreciation

This is to certify that

Mrs. KIRANMAI NANDAGIRI,

Assistant Professor of Bhoj Reddy Engineering College for Women, JNTUH has participated in Two Week Online Short-Term Training Programme on "Data Science with Python" organized by the Department of Computer Science and Engineering, Sreyas Institute of Engineering and Technology held from August O3rd to 16th 2020.

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Dr. G. Surya Narayana Coordinator

Dr. Shaik Abdul Nabi Convener & HOD-CSE

Dr. Suresh Akella Principal