Brief Profile of the Department of CS & E:
The department of Computer Science & Engineering was established in the year 1991. The department offers high-quality undergraduate, postgraduate and doctoral programs. The department has a team of well-experienced faculty, graduated from IIT’s, NIT’s, Central Universities, and other premier Institutes of higher learning. The department provides state-of-art research facilities to generate knowledge and develop technologies in the thrust areas of Computer Science and Engineering.

Highlights of the Course:
• This short term course will be conducted three hours a day with no overlap to the regular office hours.
• The sessions will begin in the evening time, possibly after 5pm.
• All topics will be covered with hands-on using Python.

For any query regarding this course, please contact the Coordinators.

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Overview of the Short term course:
This FDP on Python for Scientific Computing aimed at imparting knowledge and training on the fundamentals of python with different aspects and applications to different fields of science and engineering.

Objectives:
- The program will positively impact the perceived ability to understand programming constructs in python.
- Participants will be able to demonstrate knowledge of python concepts to solve real-world problems.

Course Content:
- Introduction to Python:
- Installation, Python Editors
- Variables, Objects, Operators, Primitive Data Types
- Compound Data types: List, Tuples, Sets, Dictionaries
- Conditional Statements
- Loops: for, while, do-while
- Functions, Building your own functions
- Numpy: Multi-dimensional Arrays
- Matplotlib: 2D and 3D plotting in python
- Regular Expressions
- Scipy: Scientific library for python
- Pandas: Providing high-performance, easy-to-use data structures.
- **SymPy**: Symbolic mathematics and computer algebra.
- **NetworkX**: Library for analyzing complex networks.
- **scikit-image**: Collection of algorithms for image processing.
- **scikit-learn**: A collection of algorithms and tools for machine learning.

Resource Persons:
Eminent faculty from IITs, Central Universities, Industry and Senior Faculty from different departments of NIT Warangal, will deliver lectures and conduct hands-on sessions.

Registration is open to: Faculty members in all disciplines of Engineering, Sciences, Mathematics, Life sciences, Management, Post-Doctoral Fellows, Research Scholars, PG students, UG students who have an aptitude to work in the areas of data sciences and machine learning.

How to Apply: Eligible candidates may apply by filling the following google form with payment proof on or before 10th July, 2021.

https://forms.gle/UZ54vg8R5Mg9F5g89

Registration fee:

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<th>Category</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Faculty, Post-doctoral fellows, Research Scholars, PG students, UG students</td>
<td>Rs. 500 /-</td>
</tr>
<tr>
<td>Industry participants</td>
<td>Rs. 1000 /-</td>
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The registration fee may be remitted Online through NEFT, Quick transfer, Gpay, PhonePe, Paytm, or any other UPI to the Bank account given below and upload the proof of remittance in the google form.

Important Note: Please enter course code PSC in remarks while doing transaction. This is mandatory.

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<td>Bank Name:</td>
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<td>Branch:</td>
<td>NIT Warangal</td>
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<tr>
<td>IFSC Code:</td>
<td>SBIN0020149</td>
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Confirmation of Participation:
On receipt of the google form and fee remittance receipt, participants will be sent confirmation of their participation through email by 10th July, 2021. As the programme is conducted online with hands-on sessions, the number of participants in the workshop is limited to 80. Candidates are advised to register early to avoid disappointment.