CSE 120   Python Programming   -   3Cr

An introductory course in Python Programming. The course is approached as the foundation for the courses to follow.   Topics include Basic Syntax, Variable and data types, Operator, conditional and control statements, string manipulations, functions, modules, attributes, match and search functions and applications.

Module 1:
- Basic Syntax, Variable and data types, Operator
- Conditional Statements
- Looping
- Control Statements

Module 2:
- String Manipulation
- Lists
- Tuple
- Dictionaries

Module 3:
- Functions
- Modules
- Input/output
- Exception Handling

Module 4:
- Class and object
- Attributes
- Inheritance
- Overloading
- Overriding
- Data hiding

Module 5:
- Regular expressions
- Match function
- Search function
- Matching VS Searching
- Modifiers
- Patterns

TEXT BOOKS:

as approved at the academic council meeting held on 7ᵗʰ March,2020

1. Allen B. Downey, ``Think Python: How to Think Like a Computer Scientist'', 2nd edition, Updated for Python 3, Shroff/O'Reilly Publishers, 2016 (http://greenteapress.com/wp/think- python/)

2. Guido van Rossum and Fred L. Drake Jr, "An Introduction to Python – Revised and updated for Python 3.2, Network Theory Ltd., 2011.

REFERENCES:

1. Charles Dierbach, "Introduction to Computer Science using Python: A Computational Problem-Solving Focus, Wiley India Edition, 2013.

2. John V Guttag, "Introduction to Computation and Programming Using Python'', Revised and expanded Edition, MIT Press , 2013

3. Kenneth A. Lambert, "Fundamentals of Python: First Programs", CENGAGE Learning, 2012.

3. Paul Gries, Jennifer Campbell and Jason Montojo, "Practical Programming: An Introduction to Computer Science using Python 3", Second edition, Pragmatic Programmers,LLC,2013.

4. Robert Sedgewick, Kevin Wayne, Robert Dondero, "Introduction to Programming in Python: An Interdisciplinary Approach, Pearson India Education Services Pvt. Ltd., 2016.

5. Timothy A. Budd, "Exploring Python", Mc-Graw Hill Education (India) Private Ltd.,, 2015.

Course Faculty   **Vice Principal**

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