Course Number	ECC 6102
Course Title	**Python for Cloud Computing**
Course Outline	**Module 1: Introduction to Python** History & need of Python, Application of Python, Installing Python, Program structure, Interactive Shell, Executable or script files, User Interface or IDE. **Module 2: Python Loops, Functions, Modules and Libraries** Conditional Statements, The Range Function, Built-In Function, Structure of Python Functions (e.g. - map, zip, reduce etc.), User Defined Functions **Module 3: Python Data Structure and OOP** Class and objects, OOPS Concept, Error handling, Python Debugger **Module 4: Cloud application development using Python** Develop a basic application using Django & Flask Framework, Deploy the developed application in the Cloud, connect to the Database, Building API in Python
Learning Outcome	● By the end of this course, students will be able to: ● Code in Python for making decisions and construct loops. ● Utilize in-built and user-defined functions in Python. ● Make use of libraries in Python. ● Design, plan and develop web application using Python modules. ● Use Python and handle cloud resources remotely.
Assessment Method	Quiz / Assignment / ESE

TEXTBOOKS:
1. Gift, N. (2019). Python for DevOps: Learn Ruthlessly Effective Automation. O'Reilly Media.
2. Conway, K., & Smith, B. (2020). Cloud Native Python. O'Reilly Media.
3. Garnaat, M. (2011). Python and AWS Cookbook. O'Reilly Media.
4. Sbarski, P. (2017). Building Serverless Architectures. O'Reilly Media.
5. Murty, J. (2008). Programming Amazon Web Services: S3, EC2, SQS, FPS, and SimpleDB. O'Reilly Media.