Business Analytics-III

<table>
<tr><td>Course Name</td><td>Business Analytics-III</td></tr>
<tr><td>Course code</td><td>ODS2603</td></tr>
<tr><td>Course credit</td><td>3</td></tr>
<tr><td>Trimester</td><td>III</td></tr>
<tr><td>Course Level Goal (CLGs)</td><td>This course aims to equip students with the knowledge and skills required for advanced analytics using Python in the context of business. Students will develop a solid understanding of Python programming, data manipulation, and various regression models. Upon completion, they will be proficient in leveraging Python for data-driven decision-making and solving complex business challenges.</td></tr>
<tr><td>Course Outcomes (COs)</td><td>
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<tr><th>Course Outcome</th><th>Bloom’s Taxonomy Category</th><th>Level Number</th></tr>
<tr><td>CO1: Recall and understand advanced analytics concepts and techniques</td><td>Remember, Understand</td><td>Level 1, Level 2</td></tr>
<tr><td>CO2: Apply analytics models and tools to complex business datasets</td><td>Apply</td><td>Level 3</td></tr>
<tr><td>CO3: Analyze business trends and patterns using multivariate analysis</td><td>Analyze</td><td>Level 4</td></tr>
<tr><td>CO4: Evaluate predictive models and data-driven strategies</td><td>Evaluate</td><td>Level 5</td></tr>
<tr><td>CO5: Create advanced analytics solutions and dashboards</td><td>Create</td><td>Level 6</td></tr>
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<tr><td>Pre-Requisite</td><td>Business statistics</td></tr>
<tr><td>Course Outline</td><td>Module 1:
Introduction to Python for Data Analytics
Python Environment Setup and Installation (2 hours)
Introduction to Python IDE and Jupyter Notebook (2 hours)
Variables and Dictionary in Python (2 hours)
Datatypes and Operators in Python (1 hour)
Module 2:
Control Flow and Functions in Python
If, Elif, and Else Statements (1 hour)
For and While Loops (1 hour)
Break, Continue, and Pass (1 hour)</td></tr>
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	Functions and Object-Oriented Programming in Python (1 hour) **Module 3:** Data Manipulation and Computation with Python Libraries Mathematical Computation in Python using NumPy (2 hours) Scientific Computation in Python using SciPy (2 hours) Data Manipulation in Python using pandas (4 hours) **Module 4:**

	Regression Models in Business Analytics Data Cleaning Techniques (2 hours) Correlation Analysis (2 hours) Analytical Framework for Simple Linear Regression (2 hours) Introduction to Multiple Linear Regression and its Applications (2 hours) Logistic Regression Model and its Applications (4 hours)
References	Python programming- Reema Thareja- Oxford publishing Deep Learning using Python- Rose-Wiley