

Program	BS Business Education
Semester	8 <sup>th</sup>
Credit Hours	3
Pre-requisite	None
Course Title	Data Analytics for Business
Introduction	<p>The course will start with understanding the basic concepts of Data Analytics. During the first phase of the course, students will focus on the science of analysing data and making conclusions for effective business decisions. Students will also learn basic data techniques in Microsoft Excel and create dashboards for managing the data. During the second phase of the course, students will focus on getting hands-on experience with SQL and creating the databases using Microsoft SQL Server 2016. This will enable students to format and design databases for organizations.</p> <p>Lastly, we will focus on visualizations using PowerBI. This will help students analyse the data and get relevant findings. The course will conclude with an overview of Data Analysis Expression (DAX).</p>
Learning Outcome	<ul style="list-style-type: none"> <li>• Introduction to the Fundamentals of Data</li> <li>• Building a dashboard in Excel using different data format techniques</li> <li>• Introduction to Database Management Solutions</li> <li>• Addressing SQL queries and exploring details (DDL vs DML)</li> <li>• Using PowerBI for visualization</li> </ul>
Course Content	<p>Introduction to the Fundamentals of Data Analytics</p> <ul style="list-style-type: none"> <li>• Understand Data Analytics Reviewing Data</li> <li>• Format the data in Excel Key Excel Concepts</li> <li>• Creating a Dashboard in Excel</li> </ul> <p>Introduction to Database Management Solution</p> <ul style="list-style-type: none"> <li>• What is a Database</li> <li>• How to create a database using SQL Server</li> <li>• Introduction to SQL language</li> </ul> <p>Introduction to Database: Getting on board with Scripting</p> <ul style="list-style-type: none"> <li>• Using SQL Joins</li> <li>• DML vs DDL</li> </ul>

	<ul style="list-style-type: none"> <li>• Normalization of the Databases (Theory)</li> <li>• Writing SQL Queries and formatting the Data</li> </ul> <p>Visualization</p> <ul style="list-style-type: none"> <li>• Overview of Microsoft Power Platform</li> <li>• Understanding Power BI</li> <li>• Connecting Power BI to different data sources</li> </ul> <p>Visualization: Advance</p> <ul style="list-style-type: none"> <li>• Filters, variables, and bookmarks in PowerBI</li> <li>• Overview of DAX and data formatting in PowerBI</li> <li>• Publishing the dashboard on Workspace</li> <li>• Creating our first dashboard for Management</li> </ul> <p>Wrap Up</p> <ul style="list-style-type: none"> <li>• Revising the concepts studied during the course</li> </ul>								
Teaching/ Learning Strategies	<p>Lecture  Multimedia presentations  Cooperative Learning  Non creditor workshops and seminars.  Active Learning</p>								
Evaluation Criteria	<p>Course Evaluation</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>Sessional</td> <td style="text-align: right;">25</td> </tr> <tr> <td>Mid Semester Test</td> <td style="text-align: right;">35</td> </tr> <tr> <td>Final Test</td> <td style="text-align: right;">40</td> </tr> <tr> <td>Total</td> <td style="text-align: right;">100</td> </tr> </table>	Sessional	25	Mid Semester Test	35	Final Test	40	Total	100
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