

**Centre for Machine Learning and Intelligence**  
**Skill Based Elective**

**Artificial Intelligence for Business**

(Applicable for the UG Students admitted from 2023 – 2024 onwards)

**Semester: 3**

**Hours of Instruction: 4**

**Subject Code : 23BAISE2**

**No of Credits: 2**

**Course Objectives:**

1. To know about the basics of Artificial Intelligence.
2. To know about AI use in the Business environment.
3. To work with the Google Spreadsheet and MS excel.

**Unit 1: Introduction on AI in Business**

**-20Hrs**

Introduction about AI, Application of AI for Business, Big Data Overview, Data Science, Machine Learning basics, Supervised vs unsupervised learning, Deep Learning, Business challenges and opportunities to deployment of AI, AI in e-commerce – chatbot. Introduction on Google Spreadsheet, Formulas in Google Sheet, Types of Data Visualization.

**Unit 2: Implementation on Sheets**

**-40Hrs**

1. Basics of the Google Spreadsheet.
2. Importing data from various sources in Google Sheet.
3. Working with functions in Google Sheet.
4. Filter the data in Google Sheet.
5. Data visualization in Google Sheet.
6. Get the current stock market values from Wolfram Data Intelligence in MS Excel.
7. Applying Count, CountBlank and Countif function on Wolfram Data Intelligence in MS Excel.
8. Applying Mean and Median function on Wolfram Data Intelligence in MS Excel.
9. Applying Average and Mode function on Wolfram Data Intelligence in MS Excel.
10. Applying Standard Deviation function on Wolfram Data Intelligence in MS Excel.
11. Use of Correlation function on Wolfram Data Intelligence in MS Excel.

**Total Hours: 60**

**Reference Book:**

1. Barrie Roberts, "*Beginner's Guide to Sheets*", Independently published (June 14 2020), ISBN-13: 979-8653987212.
2. John Walkenbach, "*Microsoft Excel 2016 BIBLE*", Wiley; 1st edition (October 2015), ISBN-10: 1119067510.

**Reference Website Link:**

1. <https://www.w3schools.com/googlesheets/index.php>
2. <https://edu.gcfglobal.org/en/googlespreadsheets/>
3. <https://zapier.com/learn/google-sheets/google-sheets-tutorial/>
4. <https://www.tutorialspoint.com/excel/index.htm>
5. <https://www.javatpoint.com/excel-tutorial>

**Course Outcome:**

1. Get familiar with Artificial Intelligence Applications.
2. Working with Google Spreadsheet and function.
3. Working with MS Excel and function.
4. Get familiar with Wolfram Data Intelligence.
5. Apply Data Visualization in dataset.