

Emerging Technologies

International Business Analytics Professional

Curriculum

Program Outline:

Module 1: Fundamentals of Business Analytics

- 1. Introduction to Business Analytics
 - Core principles and strategies of business analytics.
 - o Understanding the importance of data in decision making.
 - o Key components of an effective business analytics strategy.

2. Statistical Analysis and Data Management

- o Performing statistical analysis for data-driven decision making.
- Managing and organizing data for analysis.
- Best practices for data management and quality assurance.

Module 2: Advanced Analytics Techniques

3. Predictive Analytics and Modeling

- o Building and evaluating predictive models.
- o Understanding regression analysis and classification techniques.
- o Best practices for model validation and deployment.

4. Machine Learning with Python and R

- Implementing machine learning algorithms and models using Python and R.
- Exploring supervised and unsupervised learning methods.



o Case studies and real-world applications.

5. Data Visualization Techniques

- o Creating and interpreting visualizations to represent data.
- o Using tools like Tableau, Power BI, and Matplotlib.
- Best practices for data visualization and storytelling.

Module 3: Data Visualization and Business Intelligence

6. Business Intelligence Systems

- Developing and using business intelligence tools and systems.
- o Best practices for designing BI dashboards and reports.
- o Understanding the role of BI in strategic decision making.

7. Advanced Data Visualization

- o Advanced techniques for data visualization and storytelling.
- o Creating interactive and dynamic visualizations.
- o Using advanced visualization tools and frameworks.

Module 4: Machine Learning and Data Science Applications

8. Machine Learning Applications

- o Applying machine learning techniques to solve business problems.
- o Understanding the lifecycle of a machine learning project.
- o Implementing machine learning solutions for real-world scenarios.

9. Data Science Projects

- o Designing and implementing data science projects.
- o Collaborating with peers and mentors to solve complex challenges.
- o Presenting and communicating data science findings.

Elective Modules

10. Data Ethics and Privacy

o Ethical considerations, privacy laws, and compliance strategies.

11. AI Integration for Business Analytics



o Implementing AI solutions in business analytics.

12. Big Data Solutions

o Managing and analyzing big data applications.

13. IoT Analytics

o Integrating and analyzing IoT data for business insights.

14. Business Analytics Project Management

o Leading analytics projects and ensuring successful delivery.

Websites:

- https://chools.in/
- https://ramaqchools.com/
- https://www.choolsgroup.com/