

# **Emerging Technologies**

## **Certified Information Management Professional (CIMP) Master Data Management Program**

### **Curriculum**

#### **Program Outline :**

##### **Module 1: Fundamentals of Master Data Management**

- 1. Introduction to Master Data Management**
  - Core principles, tools, and industry applications.
- 2. Basics of Data Governance**
  - Establishing data policies and standards.
- 3. Data Quality Management**
  - Ensuring data accuracy and reliability.
- 4. Data Modeling**
  - Creating efficient data models.

##### **Module 2: Advanced Data Management Tools**

- 5. Advanced Data Architecture Techniques**
  - Designing and managing complex data structures.
- 6. Data Warehousing**
  - Storing and retrieving large data sets efficiently.
- 7. Big Data Technologies**
  - Implementing Hadoop and Spark for large-scale data management.

## **8. Data Integration**

- Combining data from various sources.

## **Module 3: Practical Applications**

### **9. Data Cleaning and Preprocessing**

- Techniques for ensuring data quality and reliability.

### **10. Exploratory Data Analysis (EDA)**

- Analyzing data distributions, identifying patterns.

### **11. Advanced Data Governance Techniques**

- Implementing and managing data governance frameworks.

### **12. Business Intelligence Applications**

- Using data to drive decision making.

## **Module 4: Capstone Project**

### **13. Integration of Learned Skills**

- Apply tools and techniques to real-world data management problems.

### **14. Advanced Data Quality Management**

- Ensuring the highest levels of data accuracy and reliability.

### **15. Cloud Data Management**

- Utilizing cloud platforms for scalable data solutions.

### **16. Data Management for AI and ML**

- Supporting AI and ML applications with robust data management.

## **Elective Modules**

### **17. Data Ethics and Privacy**

- Ethical considerations, privacy laws, compliance strategies.

### **18. Predictive Analytics with Data Management**

- Building and validating predictive models.

### **19. AI for Data Management**

- Implementing AI solutions in data management.

## **20. Advanced Data Warehousing Techniques**

- Optimizing data warehousing solutions.

## **21. Data-Driven Decision Making**

- Using data to inform and drive business strategies.

## **22. Cloud Data Management Solutions**

- Deploying data management systems on cloud platforms.

## **23. Data Management Project Management**

- Leading data management projects, ensuring successful delivery

## **17. Big Data Security**

- Securing data in big data environments.

## **18. Data Management for IoT**

- Managing data generated by IoT devices.

### **Websites:**

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