

Emerging Technologies

Data Governance and Stewardship Professional (DGSP)

Curriculum

Program Outline:

Module 1:Fundamentals of Data Governance

- 1. Introduction to Data Governance
 - Core principles, tools, and industry applications.
- 2. Basics of Data Stewardship
 - 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 Stewardship 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.

24. Big Data Security

• Securing data in big data environments.

25. Data Management for IoT

• Managing data generated by IoT devices.

Websites:

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