COURSE CONTENT:
DATA & AI DRIVEN POLICY MAKING IN GOVERNMENT SECTOR
(11th to 22nd January 2027)

1: Introduction to Data-Driven Governance
- Evolution of data in public policy
- Role of data in evidence-based decision-making
- Overview of AI in governance
- Case studies from Indian and global governments

2: Data Ecosystem in Government
- Types of government data (structured/unstructured)
- Data sources: administrative data, Government Repositories, open data platforms
- Data governance, privacy, and security
- Introduction to Public Key Infrastructure

3: Fundamentals of Data Analytics
- Data lifecycle and data preparation
- Data cleaning and transformation
- Introduction to descriptive and diagnostic analytics
- Hands-on with Advance Excel for data analytics

4: Data Visualization for Policy Insights
- Principles of effective data visualization
- Dashboards and storytelling for policymakers
- Hands-on analytical tools (Tableau)

5: Introduction to AI & Machine Learning
- Basics of Artificial Intelligence and Machine Learning
- Types: supervised, unsupervised learning
- Applications in governance (fraud detection, targeting beneficiaries)
- Hands on: AI integrated analytical tool: Power BI

6: Predictive Analytics for Policy Making
- Regression and forecasting techniques
- Hands-on exercises using real datasets
- AI in healthcare, education, agriculture, and finance

7: Policy Design Using Data & AI
- Translating data insights into policy decisions
- Monitoring & evaluation using analytics
- Group activity: Designing a data-driven policy

8: Capstone Project & Presentations

- Group project presentations
- Evaluation and feedback