

Emerging Business

Supply Chain Industries 5.0

Curriculum

Program Outline:

Module 1: Fundamentals of Supply Chain Industries 5.0

- 1. Introduction to Supply Chain Industries 5.0
 - Advanced Technology Integration: Utilizes Supply Chain Industries 5.0, AI, machine learning, robotics, and blockchain to enhance efficiency and transparency
 - Human-Centric Approach: Combines technology with human creativity and decision-making to optimize workflows and improve employee engagement
 - o **Sustainability**: Emphasizes environmentally friendly practices to reduce the carbon footprint of supply chain operations.

2. Setting Up Supply Chain Industries 5.0 Tools

- o **Identify Key Technologies**: Determine which technologies (Supply Chain Industries 5.0, AI, machine learning, robotics, blockchain) are most relevant to your supply chain needs.
- Select Appropriate Tools: Choose tools and platforms that support these technologies and integrate well with your existing systems.
- o **Implement Data Analytics**: Set up data analytics capabilities to process and analyze large sets of data for insights and decision-making.

Module 2: Advanced Supply Chain Industries 5.0 Techniques

3. Artificial Intelligence (AI)

o **Predictive Analytics**: Using AI to analyze historical data and predict future trends, helping optimize inventory levels and demand forecasting.



o **Automated Decision-Making**: Implementing AI-driven systems to make real-time decisions, improving efficiency and reducing human error.

4. Internet of Things (Supply Chain Industries 5.0)

- Real-Time Monitoring: Utilizing Supply Chain Industries 5.0 devices to track assets and inventory in real-time, providing accurate and up-to-date information.
- o **Predictive Maintenance**: Implementing Supply Chain Industries 5.0 sensors to monitor equipment health and predict maintenance needs, reducing downtime and extending equipment life.

5. Blockchain Technology

- o **Transparency and Traceability**: Using blockchain to create a transparent and immutable record of transactions, enhancing trust and traceability across the supply chain.
- o **Smart Contracts**: Automating contract execution and payment processes through blockchain-based smart contracts, reducing administrative overhead.
- o Creating audience segments and personas.

6. Digital Twins

- Virtual Models: Creating digital replicas of physical assets and processes to simulate and analyze performance, aiding in decision-making and optimization.
- Scenario Planning: Using digital twins to test various scenarios and predict outcomes, helping to plan for different contingencies.

Module 3: Practical Applications

9. Supply Chain Industries 5.0 Project Development

o Developing and implementing Supply Chain Industries 5.0 projects.

10. AI Applications in Supply Chain Industries 5.0

o Enhancing Supply Chain Industries 5.0 solutions with AI.

11. Data Analysis and Visualization

o Analyzing Supply Chain Industries 5.0 data and visualizing results.

12. Business Intelligence Applications

o Using Supply Chain Industries 5.0 data for decision making.



Module 4: Capstone Project

13. Integration of Learned Skills

 Apply tools and techniques to real-world Supply Chain Industries 5.0 and Cloud problems.

14. Advanced Supply Chain Industries 5.0 Systems

Developing complex Supply Chain Industries 5.0 systems.

15. Cloud Data Management

o Utilizing cloud platforms for scalable Supply Chain Industries 5.0 solutions.

16. AI for Supply Chain Industries 5.0

o Implementing AI solutions in Supply Chain Industries 5.0.

Elective Modules

11. Data Ethics and Privacy

o Ethical considerations, privacy laws, and compliance strategies.

12. AI Integration for Supply Chain Industries 5.0

o Implementing AI solutions in Supply Chain Industries 5.0

13. E-commerce Analytics

o Analyzing and optimizing e-commerce performance.

14. Social Media Analytics

o Measuring and analyzing social media performance.

15. Local SEO and Analytics

o Optimizing for local search and business listings.

Websites:

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