

Emerging Technologies

IoT Wireless & Cloud Computing Emerging Technologies Program

Curriculum

Program Outline :

Module 1:Core Technologies of IoT and Clouds

- 1. Introduction to IoT and Cloud Computing**
 - Core principles, tools, and industry applications.
- 2. IoT Device Management**
 - Working with Arduino, Raspberry Pi, sensors, and actuators.
- 3. Data Communication Protocols**
 - Managing data transmission in IoT systems.
- 4. Introduction to Cloud Computing**
 - Utilizing cloud platforms for IoT.

Module 2: Advanced Tools and Techniques

- 5. Advanced AI Techniques**
 - Implementing machine learning, computer vision, and NLP.
- 6. Cloud Platforms**
 - Working with AWS, Azure, and other cloud platforms.
- 7. Data Storage and Management**
 - Storing and managing IoT data efficiently.

8. IoT Security

- Securing IoT systems and data.

Module 3: Practical Applications

9. IoT Project Development

- Developing and implementing IoT projects.

10. AI Applications in IoT

- Enhancing IoT solutions with AI.

11. Data Analysis and Visualization

- Analyzing IoT data and visualizing results.

12. Business Intelligence Applications

- Using IoT data for decision making.

Module 4: Capstone Project

13. Integration of Learned Skills

- Apply tools and techniques to real-world IoT and Cloud problems.

14. Advanced IoT Systems

- Developing complex IoT systems.

15. Cloud Data Management

- Utilizing cloud platforms for scalable IoT solutions.

16. AI for IoT

- Implementing AI solutions in IoT.

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. IoT Project Management

- Leading IoT projects, ensuring successful delivery.

24. Big Data Security

- Securing data in big data environments.

25. IoT for Smart Cities

- Developing IoT solutions for smart city applications.

Websites:

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