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INTRODUCTION TO IOT & AI CLOUD PROFESSIONAL

Welcome, future IoT and AI expert! The Internet of Things & AI Cloud Professional certification teaches you concepts and tools related to IoT and AI Cloud, enabling the connection, communication, and intelligence of devices and data on the internet. This course will teach you how to create IoT products and services using technologies such as Arduino, Raspberry Pi, sensors, actuators, communication protocols, and cloud platforms. You will also learn how to use AI tools like machine learning, computer vision, and natural language processing, and applications such as Python, AWS, and Azure to enhance your IoT solutions.



Why Choose Chools?

Numbers That Speak for Themselves:

- 10,000+ Successful Alumni: Join a network of impactful professionals.
- 95% Job Placement Rate: Secure your future with Chools' proven track record.
- 20+ Years of Excellence: Trust in a legacy of education and industry expertise.
- 200+ Industry Partnerships: Leverage our connections for real-world insights and opportunities.

What Sets Us Apart?

- **Expert Instructors:** Learn from industry veterans with hands-on experience.
- Hybrid Learning Model: Balance online flexibility with in-person engagement.
- Comprehensive Curriculum: Stay ahead with courses designed meet market demands.
- Community and Networking: Be part of an active community of learners and professionals.

WhCan Apply?

Eligibility Criteria:

- A bachelor's degree or equivalent in computer science, information systems, electronics, electrical, or instrumentation.
- At least one year of relevant work experience.
- Good command of English.



Ideal Candidates:

 Working professionals looking to advance their careers in IoT and Al Cloud technologies.

Program Overview

The IoT & AI Cloud Professional Program provides extensive education in IoT and AI Cloud. Our curriculum ensures a comprehensive understanding through four progressive stages, combining theoretical knowledge with practical, hands-on experience.

Learning Mode:

- Hybrid Learning Model: Combines online learning with in-person sessions for flexibility and interactive engagement.
- Interactive Sessions: Includes live webinars, workshops, and Q&A forums with expert instructors and peers.
- Self-paced Learning: Access course materials anytime, allowing you to learn at your own pace.



Skills Learned

- IoT Development: Building IoT products and services.
- Al Integration: Enhancing IoT solutions with Al.
- Cloud Computing: Utilizing cloud platforms for IoT.
- Machine Learning: Applying ML algorithms to IoT.
- Data Analysis: Analyzing data from IoT devices.
- Computer Vision: Implementing vision-based AI solutions.
- Natural Language Processing: Using NLP for IoT.
- Data Ethics: Understanding responsible data use.
- Communication Protocols: Managing data communication.
- **System Integration:** Combining multiple systems into one cohesive unit.

Job Positions and Opportunities

- Career Paths: IoT Developer, AI Specialist, Cloud Engineer, Machine Learning Engineer, Data Analyst, Data Scientist, IoT Architect.
- Industry Demand: High demand across various sectors, competitive salaries, and strong growth potential.

Key Industry Verticals

Skill Application Areas: Healthcare, Technology,
Manufacturing, Energy, Telecommunications, Logistics, Smart
Cities, Automotive, Retail, Finance.

Curriculum Highlights:

- Fundamental Knowledge: Core principles of IoT and Al Cloud.
- Advanced Techniques: In-depth understanding of advanced tools.
- Real-World Applications: Practical projects and case studies to apply your learning.
- Capstone Project: A final project that integrates all your skills and knowledge, showcasing your proficiency in IoT and Al Cloud.

Professional Development:

- Continuous Learning: Stay updated with the latest trends and advancements in IoT and AI Cloud.
- Networking Opportunities: Connect with industry experts, peers, and alumni to advance your career.
- Ethical Considerations: Learn about data ethics, privacy, and compliance to maintain the integrity of your practices.

Program Objectives

- Master technical skills in IoT and Al Cloud.
- Implement advanced techniques and tools.
- Explore IoT frameworks and best practices.
- Address real-world challenges in IoT and Al Cloud.
- Understand ethical considerations in data governance.
- Foster continuous learning.
- Encourage teamwork and collaboration.
- Prepare for advanced roles in IoT and Al Cloud.

Expected Outcomes

- Proficiency in IoT and AI Cloud tools and techniques.
- Practical experience through hands-on projects.
- Strong analytical and problem-solving skills.
- Application of ethical practices.
- Innovation in IoT and Al Cloud solutions.





PROGRAM OUTLINE

Stage 1: Fundamentals of IoT and AI Cloud

1. Introduction tloT and Al Cloud

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 tCloud Computing

• Utilizing cloud platforms for IoT.

Stage 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 lot data efficiently.

8. IoT Security

Securing IoT systems and data.

Stage 3: Practical Applications

9. IoT Project Development

Developing and implementing IoT projects.

10. Al Applications in IoT

• Enhancing IoT solutions with Al.

11. Data Analysis and Visualization

Analyzing IoT data and visualizing results.

12. Business Intelligence Applications

• Using IoT data for decision making.

Stage 4: Capstone Project

13. Integration of Learned Skills

 Apply tools and techniques treal-world loT and Al problems.

14. Advanced IoT Systems

Developing complex IoT systems.

15. Cloud Data Management

Utilizing cloud platforms for scalable IoT solutions.

16. Al for loT

Implementing Al solutions in IoT.





PROGRAM OUTLINE

Elective Modules

17. Data Ethics and Privacy

• Ethical considerations, privacy laws, compliance strategies.

Predictive Analytics Data Management

 Building and validating predictive models.

19. Al for Data Management

 Implementing AI solutions in data management.

20. Advanced Warehousing Data **Techniques**

· Optimizing data warehousing solutions.

21. Data-Driven Decision Making

 Using data tinform 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.

Enrollment Now Open!

Take the first step towards becoming a certified IoT and AI Cloud Professional. Enroll in our program and enhance your career.