

# **CWISA® - Certified Wireless IoT Solutions Administrator (CWSA-101 or CWISA-101)**

## **Course outline –**

### **Wireless Technologies**

- Maintain continued awareness of wireless technologies and applications of those technologies.
- Understand industry standard, certification and regulatory organizations and standards development processes.
- Define wireless network types.

### **Radio Frequency Communications**

- Explain the basic RF wave characteristics, behaviors and measurements used for wireless communications.
- Describe the fundamentals of modulation techniques used in wireless communications.
- Explain the basic capabilities of components used in RF communications.
- Describe the basic use and capabilities of the RF bands and other wireless carriers (light and sound) used for communications.

### **Planning Wireless Solutions**

- Identify and document the wireless system requirements.
- Identify and document system constraints.
- Select appropriate wireless solutions based on requirements and constraints
- Implement effective project management practices for wireless solution planning and implementation
- Understand the wireless solution and consider key issues related to automation, integration, monitoring, and management
- Administer the wireless solution while considering the implications of various vertical markets
- Plan for the technical requirements of the wireless solution
- Understand the basic features and capabilities of common wireless solutions and plan for their implementation

### **Implementing Wireless Solutions**

- Use best practices in wireless solution implementations
- Validate wireless solution implementations including RF communications and application functionality
- Understand and implement basic installation procedures
- Implement best practices in knowledge transfer and hand-off

### **Supporting Wireless Solutions**

- Troubleshoot common problems in wireless solutions
  - Understand and determine the best use of scripting and programming solutions for wireless implementations
- Understand application architectures and their impact on wireless solutions