

Course: **EDU-AWMN** (Aruba Wireless Mesh Networks)  
Duration: 3 (three) days

## COURSE OVERVIEW

This three-day instructor led course provides instruction on the technology, design, and deployment of outdoor wireless mesh networks using Aruba's new Adaptive Wireless Routing™ (AWR™) technology. This includes products such as the MSR4000/2000 Wireless Mesh Routers and supporting devices. Class labs are designed to reinforce the learning process and offer practice with the essential skills required to successfully design and deploy an Aruba wireless mesh network.

## COURSE CONTENT

This course covers the following topics:

### Outdoor and Mesh Overview

Covers the usage of an outdoor wireless mesh network, also covers the Aruba AirMesh product family and offers example applications and deployment typologies.

### RF Concepts & Antennas and Communications

RF Concepts explains various RF components essential for the understanding of an outdoor mesh deployment. This defines terms, characteristics and behaviors of wireless technologies. Wireless concepts such as isotropic radiation, polarization, absorption, reflection and scattering of RF waves comprise part of this module.

Antennas and Communications describe the various considerations of antenna selection and operation. Topics include link budgets, understanding antenna polar plots and radiation patterns, down tilt, Fresnel zones as well as antenna and AP mounting.

### Aruba Mesh Architecture

The flexibility and options of a mesh topology creates many path options in a mesh network. This chapter describes the dynamics of mesh path selections and optimizations. How the mesh node selects its neighbor, as well as other mesh infrastructure settings are discussed.

### Configuration and Administration

Basic administration methods are presented in this module. Both CLI and WebUI approaches are demonstrated.

### MeshConfig

The mesh network configuration and provisioning tool is covered in this module.

### Network Tuning and Troubleshooting

Many options exist for fine tuning the behavior of the mesh network. This chapter covers some of these options such as black-listing, preferred link designations, long-distance tuning, as well as useful troubleshooting commands.

### Designing a Wireless Mesh Network

Best design practices are explored. How to choose the best equipment for the deployment need is discussed.