



# iBwave CERTIFICATION COURSE SYLLABUS

## LEVEL 1: iBwave DESIGN ENTERPRISE NETWORK PLANNING

Note: Course syllabus is subject to change

### LEARNING OBJECTIVES

At the end of this certification program, you will be able to:

- ✓ Describe an in-building network project design process
- ✓ Design in-building projects using plans, systems and components
- ✓ Configure and generate reports
- ✓ Manage components using the Database Editor

### PRE-COURSE FUNDAMENTALS

(to be completed through the Learning Center)

- ✓ In-Building Project Review
- ✓ Project Deployment Process

### INTRODUCTION TO iBwave DESIGN

- ✓ In-building design challenges
- ✓ iBwave Design features and benefits
- ✓ iBwave Design workspace

### CREATING PROJECTS

- ✓ Starting a project
  - Best practices: how to start a project
  - Key project properties
- ✓ Modeling a building
  - Set up page layouts
  - Create, import, scale and duplicate floor plans
  - Set reference point
  - Setup building configuration: order of floors, assignment of ground floor, building properties
- ✓ Components used in in-building networks
  - Types of components: system sources, antennas, splitters/combiners, fiber parts, cables
  - Subparts, component groups, preferred parts
- ✓ Designing in-building networks
  - Position components
  - Define cable routes
  - Add systems
  - Change floor or component heights
  - Replace or clone components
  - Search for and find components
  - Assign components to floor plans
- ✓ Design plan and other plan features
  - Setup design plan organizer
  - Display siblings
  - Align vias
  - Automation: parts placement, splitter balancing and cable replacement
  - Antenna contours
  - Debug message list
  - Adjust labels
- ✓ Preparing for reports - graphical elements and page setup
  - Add text boxes, legends, and annotations
  - Modify images with image tools (crop, rotate, flip, etc.)
  - Adjust page setup and border
- ✓ Other useful settings
  - Project properties: error/warnings, calculations, preferences
  - Utilities
  - Options and default settings

### REPORTS

- ✓ Report types: equipment list, link budget, antennas, etc.
- ✓ Set report options, print and export
- ✓ Customizing reports

### DESIGN VALIDATION

- ✓ Common mistakes and pitfalls in designing
  - Floor plan - incorrect order or missing floors
  - Location of reference point on floors
  - Verifying the debug message list
  - Replacing cables after project clean-up
  - Unbalanced power distribution
  - Cable connectors

### COMPONENTS DATABASE EDITOR

- ✓ Components DB Editor workspace
- ✓ Database setup/configuration
- ✓ Exporting & importing VEX files and XML files
- ✓ Edit connector assignments, debug messages and customer lists
- ✓ Creating components: antenna, splitter, cable, etc.

### DESIGN FROM SCRATCH WORKSHOP

- ✓ Creating a new project: set up project properties and add floors
- ✓ Designing a network: add systems and components according to specifications
- ✓ Cleaning up the design: use design plan organizer and automation tool to clean up the design and balance the network output power

### FINAL EXAM

(2.5 hours)