



iBwave CERTIFICATION COURSE SYLLABUS

iBwave Wi-Fi® (PC version)

Note: Course syllabus is subject to change

LEARNING OBJECTIVES

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

- ✓ Design in-building Wi-Fi projects using plans, access points, and other network components
- ✓ Add specific project details using annotations and mark-ups
- ✓ Model a building incorporating walls and surfaces composed of various materials
- ✓ Optimize the network design by running and analyzing predictions
- ✓ Collect, import and modify survey data
- ✓ Modify project components using Components Database Editor
- ✓ Configure and generate reports

EXPLORING iBwave Wi-Fi®

- ✓ Menus, Buttons and Tabs
- ✓ Information Panels
- ✓ Plans and Parts Panel
- ✓ Utilities
- ✓ iBwave Wi-Fi® Help

STARTING A PROJECT

- ✓ Setting Project Properties
 - > General Settings
 - > Initial Requirements
- ✓ Setting Project Preferences
 - > Company Information
 - > Units
- ✓ Setting Calculations Properties
 - > Mobile Signal
 - > Building
 - > EMF Limits

LAYOUT, DESIGN & PICTURE PLANS

- ✓ Layout Plans
- ✓ AutoCAD Floor Plans
- ✓ Adjust Layout Plan Image
- ✓ Reference Point
- ✓ Scale Layout Plan Methods
- ✓ Compass - Set to True North
- ✓ Duplicate Plan
- ✓ Modifying Wall Properties
- ✓ Editing Walls
- ✓ Horizontal Surfaces
- ✓ Creating Horizontal Surfaces
- ✓ Creating Walls Above or Around Horizontal Surface
- ✓ Inclined Surfaces
- ✓ Drawing Tools
- ✓ Prediction Areas
- ✓ Environment Types
- ✓ 3D Viewer
- ✓ Design Plans
- ✓ Picture Plans

DESIGNING Wi-Fi NETWORK

- ✓ Design on Layout Plan
- ✓ Add Access Point
- ✓ Access Point Properties
- ✓ Access Point Sources Properties
- ✓ Components and Connections
- ✓ Design for Multiple Floors: VIAs
- ✓ Automatic Access Point Placement
- ✓ Automatic Channel Assignment
- ✓ Annotations

PREDICTING CAPACITY AND COVERAGE

- ✓ Capacity Requirements and Definition
- ✓ Market Share
- ✓ Usage Profiles
- ✓ Subscriber Service
- ✓ Capacity Requirement
- ✓ Setting Equipment Limits
- ✓ Defining Capacity Zones
- ✓ Propagation Models
- ✓ Fast Ray Tracing Propagation Model
- ✓ Variable Path Loss Exponent Propagation Model
- ✓ Process for Running Predictions
- ✓ Configure Prediction Properties
- ✓ General Settings
- ✓ Advanced Settings
- ✓ Types of Propagation Maps (Signal Strength Map, Best AP Map, Best Channel Map, Co-Channel Interference (CCI) Map, Overlap Zone Map, Signal to Noise Ratio (SNR) Map, Capacity Map, Average Downlink Data Rate Map)
- ✓ Add Propagation Output Maps
- ✓ Run Propagation Output Maps and View Results
- ✓ Viewing Prediction and Compliance Results
 - > Displaying Indoor Prediction Legend

DATA COLLECTION

- ✓ Importing Survey Data
- ✓ Generating Wi-Fi Survey Data
- ✓ Viewing and Filtering Wi-Fi Survey
- ✓ Editing Trace Route and Survey Data

REPORTS

- ✓ Creating Reports
- ✓ Types of Reports

COMPONENTS DATABASE EDITOR

- ✓ Introduction to the Components Database Editor
- ✓ DB Editor Workspace
- ✓ Local vs Shared Databases
- ✓ Shared Database Settings
- ✓ Export Components to VEX/XML
- ✓ Access and Download Components Online
- ✓ Import Components (VEX, XML)

Wi-Fi DESIGN FROM SCRATCH WORKSHOP

- ✓ Design Criteria
- ✓ Start a Project from Scratch

EXAM

(2 hours)