



iBwave CERTIFICATION COURSE SYLLABUS

iBwave PRIVATE NETWORKS Wi-Fi®

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
- ✓ Configure and generate reports

EXPLORING iBwave PRIVATE NETWORKS

- ✓ Menus, Buttons and Tabs
- ✓ Information Panels
- ✓ Plans and Parts Panel
- ✓ Utilities

STARTING A PROJECT

- ✓ Best practices for creating a project in iBwave Private Networks
- ✓ Define key project properties

BUILDING MODELING

- ✓ Import walls and Floor Plans
- ✓ Draw and edit walls
- ✓ Scale Floor Plan and Set Reference Point
- ✓ Set up horizontal surfaces
- ✓ Set up simple inclined surfaces
- ✓ Building Configuration
- ✓ View a project in 3D

PREDICTION: COVERAGE AND CAPACITY

- ✓ Propagation Models
 - Fast Ray Tracing Propagation Model
 - Variable Path Loss Exponent Propagation Model
- ✓ Antenna Contours
- ✓ Process of Running Predictions
 - Configure area, prediction, and propagation model properties
 - Define Plan/Prediction Area, Environment Type, and Body Loss Zones
 - Add Propagation Output Maps
 - Run Propagation Output Maps and View Results
- ✓ Capacity Requirements and Definition
- ✓ Capacity Analysis

DESIGNING Wi-Fi NETWORKS

- ✓ Work with the Parts Toolbox
- ✓ Add Access Points
- ✓ Access Point Properties
- ✓ Automatic Access Point Placement and Automatic Wi-Fi Channel Assignment
- ✓ Output Maps for Wi-Fi

DESIGN PLAN AND OTHER PLAN FEATURES

- ✓ Interconnect components
- ✓ Organize the Design Plan
- ✓ Design for Multiple Floors: Risers
- ✓ Design for Multiple Buildings: Vias
- ✓ Component Database Editor

DATA COLLECTION

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

REPORTS

- ✓ Types of Reports
- ✓ Preparing for Reports
- ✓ Generate, View, Export, and Print Reports

Wi-Fi DESIGN FROM SCRATCH WORKSHOP

- ✓ Design Criteria
- ✓ Start a Project from Scratch

EXAM (2 hours)

- Upon successful completion of this exam, the student will be awarded a Certificate for iBwave Private Networks Certification (Wi-Fi)