



iBwave CERTIFICATION COURSE SYLLABUS

LEVEL 1: iBwave DESIGN ENTERPRISE NETWORK PLANNING

Note: Course syllabus is subject to change

PRE-COURSE FUNDAMENTALS

(to be completed through the Learning Center)

- ➔ Getting Started with iBwave Design (video)
- ➔ In-Building Project Review
- ➔ Project Deployment Process

INTRODUCTION

- ✓ The in-building wireless world
- ✓ In-building wireless applications
- ✓ Wireless technologies evolution
- ✓ System architectures
- ✓ Passive DAS
- ✓ Hybrid DAS
- ✓ In-building design tools
- ✓ In-building design components
- ✓ Link budgets
- ✓ Noise modeling
- ✓ Propagation basics

PHASE 1: COLLECTING INFORMATION

- ✓ Site visit preparation
- ✓ Site survey
- ✓ Signal measurement

PHASE 2: DESIGN, ENGINEERING & EQUIPMENT SELECTION

- ✓ Understanding project requirements
- ✓ 2D modeling
- ✓ System architecture selection:
 - Vendor selection
 - Cost optimization
 - Design layout
- ✓ Creating preliminary designs
- ✓ Business case validation
- ✓ Installation validation:
 - Real estate owner and lease validation/negotiation
- ✓ Creating final designs

PHASE 3: SOLUTION IMPLEMENTATION

- ✓ Equipment delivery and installation
- ✓ System commissioning
- ✓ System integration
- ✓ System validation
- ✓ System optimization
- ✓ Acceptance and sign-off

iBwave DESIGN ENTERPRISE INTRODUCTION

- ✓ In-building design challenges
- ✓ What is iBwave Design Enterprise?
- ✓ iBwave Design Enterprise features and benefits
- ✓ iBwave Design Enterprise environment and navigation
- ✓ Demonstration of utilities, tips and best practices

DESIGN, LAYOUT & PICTURE PLANS

- ✓ Acquire knowledge of the three types of plans in iBwave Design Enterprise
- ✓ Procedures and tools to design on each plan
- ✓ How to create various types of RF systems, add components, scale and manipulate floor plans
- ✓ How to design in-building networks using the three types of plans, purpose and features
- ✓ Understand design consistency and information display
- ✓ Design plan and mini quiz
- ✓ Layout plan and mini quiz
- ✓ Picture plan and mini quiz
- ✓ Workshop on creating a project using the three types of plans

PROJECT & APPLICATION SETTINGS

- ✓ Creating and saving project properties
- ✓ Page and print setup
- ✓ Workspace customization and setting templates
- ✓ Workshop to set up project properties (hands-on exercises)
- ✓ Demonstration of workshop solution

iBwave DESIGN REPORTS

- ✓ Purposes and functionalities of reports
- ✓ How to create, customize and change parameters in reports
- ✓ How to export reports
- ✓ Reports workshop

PROBLEM-BASED WORKSHOP

- ✓ Common mistakes and pitfalls in designing
- ✓ Workshop on project enhancement

COMPONENTS DATABASE EDITOR

- ✓ Network component database management
- ✓ Database editor workspace features
- ✓ How to create, edit, delete and share components
- ✓ Troubleshooting component errors
- ✓ Workshop on creating components

DESIGNING A PROJECT FROM SCRATCH

- ✓ Review of steps to design a project from start to finish
- ✓ Demonstrations using sample files
- ✓ Exercises for students to practice and refresh prior to exam

PRACTICAL EXAM

(2.5 hours)

CONCLUSION

(30 minutes)