

ECSE Design Course Agenda

	Day 1	Day 2	Day 3	Day 4
9:00 - 10:30	<ul style="list-style-type: none"> • Introductions • Ekahau Connect & Product Family • Ekahau Guide to Awesome Wi-Fi • Intro to Optimizer • Wi-Fi Timeline • RF Fundamentals 	<ul style="list-style-type: none"> • Gathering Requirements • Group Exercise Review • Group Assignment • Ekahau AI Pro Design Demonstration 	<ul style="list-style-type: none"> • Outdoor Design • Validate with Sidekick • Different Types of Wi-Fi Surveys • Types of Survey Data Collection 	<ul style="list-style-type: none"> • Wi-Fi Troubleshooting Theory • Ekahau Capture • Ekahau AI Pro Reporting
10:30 - 10:45	Break			
10:45 - 12:30	<ul style="list-style-type: none"> • Modulations • Spread Spectrum • Wi-Fi Channels 2.4 GHz 5 GHz 6 GHz 	<ul style="list-style-type: none"> • American Football Field • Small Office Design • University Dorm Rooms Design 	<ul style="list-style-type: none"> • Passive vs. Active Wi-Fi Site Surveys • Ekahau's 6 Steps for Accurate Wi-Fi Site Surveys • Survey Exercise • Zero-Touch Provisioning • Ekahau Optimizer 	<ul style="list-style-type: none"> • Tools you Need to Succeed as a Wi-Fi Engineer • Spectrum Analysis Theory • Spectrum Analysis Demo
12:30 - 13:15	Lunch			
13:15 - 15:00	<ul style="list-style-type: none"> • Inverse Square Law • Free Space Path Loss • dB Math • 802.11 Fundamentals • Association Process 	<ul style="list-style-type: none"> • Antenna Fundamentals • Warehouse Design • Large Office Design - Coverage • Large Office Design - Capacity 	<ul style="list-style-type: none"> • Ekahau Insights • Ekahau Auto Wall Calibration • Network Simulator 	<ul style="list-style-type: none"> • ECSE Design Exam Review • ECSE Design Practical Exam
15:00 - 15:15	Break			
15:15 - 17:00	<ul style="list-style-type: none"> • Roaming in Wi-Fi • Channel Contention • Capacity Planning • Contention Process • Wi-Fi Security • Least Capable, Most Important Device 	<ul style="list-style-type: none"> • 3D Building: Designing for Multiple Floors • Human vs. Machine: AI Auto-Planner 	<ul style="list-style-type: none"> • Health Checks • Analyzing Survey Data • Troubleshooting Exercise 1 - Ekahau AI Pro • Troubleshooting Exercise 2 - Ekahau Survey App 	<ul style="list-style-type: none"> • ECSE Design Multiple Choice Exam