CERTIFICATE IN DRIVE TEST AND NETWORK OPTMIZATION

Drive Test and Network Optimization Training, designed to equip participants with practical skills and knowledge in optimizing telecommunication networks. This hands-on training will cover key aspects such as RF drive testing, analyzing network performance, troubleshooting, and optimization techniques.

Module 1: Introduction to Mobile Networks

- Basics of cellular networks (2G, 3G, 4G, 5G)

- Key concepts: frequency bands, cell structure, and sectors

- Overview of network optimization and its importance

Module 2: Drive Testing Fundamentals

- Purpose and types of drive tests

    o Route drive test

    o Cluster drive test

    o Indoor testing

- Equipment and tools used in drive testing

    o Drive test kits

    o GPS, scanners, and analyzers

- Introduction to drive test software (e.g., TEMS, Nemo, NetAct)

Module 3: Key Performance Indicators (KPIs)

- Understanding RF KPIs: RSRP, SINR, CQI, etc.

- Throughput, latency, and call drop rate analysis

- Benchmarking competitors

Module 4: Practical Drive Testing

- Planning drive routes

- Setting up drive test equipment

- Conducting the test: step-by-step guide

- Troubleshooting common challenges

Module 5: Network Optimization Techniques

- Signal quality improvement

- Handover optimization

- Interference management

- Capacity planning and load balancing

Module 6: Tools and Software for Optimization

- Common network optimization software: NetAct, iBwave, Atoll

- Using GIS tools for mapping and analysis

Module 7: Data Analysis and Reporting

- Extracting and analyzing logs

- Creating professional drive test reports

- Identifying and addressing network issues

Module 8: Advanced Topics

- Optimization for emerging technologies (e.g., VoLTE, 5G)

- Understanding MIMO and beamforming

- Introduction to AI in network optimization

Module 9: Certification Preparation

- Mock tests

- Case studies and real-world scenarios

- Final project: Analyze and optimize a sample network

Hands-on Experience

- Real-world drive tests

- Network troubleshooting tasks

- Collaborative optimization pro

- REQUIREMENTS

1. SMART PHONE
2. PERSONAL COMPUTER (OPTIONAL)

COURSE COST: 400,000/= (108 DOLLARS)