

Szkolenie: Huawei  
HCNA-LTE Long Term Evolution



FORMA SZKOLENIA	MATERIAŁY SZKOLENIOWE	CENA	CZAS TRWANIA
Stacjonarne	Tradycyjne	2000 USD NETTO*	5 dni
Stacjonarne	Tablet CTAB	2130 USD NETTO*	5 dni

\* (+VAT zgodnie z obowiązującą stawką w dniu wystawienia faktury)

## LOKALIZACJE

Kraków - ul. Tatarska 5, II piętro, godz. 9:00 - 16:00

Warszawa - ul. Bielska 17, godz. 9:00 - 16:00

## Cel szkolenia:

Such training aims to provide guidance to participants in learning contents related to the HCNA for LTE specialization H31-411-ENU exam and basic knowledge of Long Term Evolution (LTE)/Evolved Packet Core(EPC) networks and device maintenance.

With HCNA-LTE certification, you demonstrate a good grasp of the LTE/EPC network structure, the functions of all network elements, the basic principle of the LTE air interface, the business process of the EPC network, and basic concepts about QoS.

After the completion of this program, participants will be able to understand:

- Outline principle of LTE
- Describe the procedure of eNodeB Field Maintenance
- Use M2000/U2000 to do the commissioning and operation
- Operate eNodeB initial configuration and reconfiguration
- Describe and analyse the trouble of site, familiar with eNodeB site solution Duration

## Target Audience:

This training program is intended for those who are to take the Huawei Certified Network Associate - LTE certification exam and those who hope to learn about basic LTE/SAE principles and Huawei LTE equipment.

## Plan szkolenia:

- OEA02 LTE System Overview

- LTE System Overview
  - Network Architecture
  - Evolution of Cellular Networks
  - 3GPP Releases
  - E-UTRAN Architecture
  - E-UTRAN Interfaces and Protocols
  - EPC Architecture
  - EPC Interfaces and Protocols
  - LTE Air Interface Principles
  - Radio Interface Techniques
  - Principles of OFDM
  - LTE Channel Structures
  - LTE Frame Structure
  - Downlink OFDMA
  - Uplink SC-FDMA
  - Multiple Input Multiple Output
  - Multimedia Broadcast Multicast Service
  - eNodeB Product Overview
  - The Huawei eNodeB family
  - Products and application scenarios
  - Operation and Maintenance
- OEB80 eNodeB V100R008C10 Product Description
  - eNodeB LTE V100R008C10 Product Description
    - eNodeB System Overview
    - eNodeB System Structure
    - eNodeB Auxiliary Devices
    - eNodeB Typical Networking
- OEB82 eNodeB V100R008C10 Field Maintenance
  - eNodeB LTE V100R008C10 Field Maintenance
    - Local Operation and Maintenance Introduction
    - check the status of board by LEDs
    - Routine Operation and Maintenance
    - Replacing boards and optical module of eNodeB
    - Routine Maintenance items for eNodeB
    - Practice
- OEB83 eNodeB V100R008C10 Equipment Commissioning

- eNodeB LTE V100R008C10 Equipment Commissioning
  - eNodeB Commissioning Overview
  - eNodeB Remote Commissioning on the M2000
- LTE eRAN8.1 Automatic OMCH Establishment
  - Automatic OMCH establishment phase during base station deployment by PnP
  - DHCP introduction
  - Schemes for Obtaining VLAN Information
  - Procedure for Obtaining Configuration Information in different Scenarios
- OEB74 eNodeB V100R008 Operation
  - eNodeB LTE V100R008 Operation
    - Structure of operation and maintenance system
    - Login eNodeB O&M system
    - eNodeB equipment management
    - eNodeB transport management
    - eNodeB Radio Management
    - eNodeB clock management
    - eNodeB inventory and report management
    - Software Management
- OEB851 eNodeB V100R008C10 Data Introduction for Initial Configuration
  - eNodeB LTE V100R008C10 Data Introduction for Initial Configuration
    - eNodeB Data Configuration Introduction
    - Common Data Parameters Introduction
    - Data Preparation in Specific Scenarios
  - eNodeB LTE V100R008C10 Initial Configuration by MML Practice Guide
    - Practice on
      - a).eNodeB data configuration preparation
      - b).MML for common data
      - c).MML for device data
      - d).MML for transmission data
      - e).MML for radio data
      - f).MML for specific scenario
- OEB852 eNodeB LTE V100R008C10 Initial Configuration by CME
  - eNodeB LTE V100R008C10 Initial Configuration by CME
    - eNodeB Data Configuration by CME Introduction
    - Preparing eNodeB Data
    - Creating eNodeB Data

- Adjusting eNodeB Data
- Checking eNodeB Data
- Exporting eNodeB Data
- eNodeB LTE V100R008C10 Initial Configuration by CME Practice Guide
  - Practice on eNodeB data configuration file preparation by CME
- OEB87 eNodeB V100R008C10 Reconfiguration
  - eNodeB LTE V100R008C10 Reconfiguration
    - Reconfiguration Working Flow
    - Reconfiguration Tools and Operation
    - Radio/Device/Transmission Data Reconfiguration
    - Data Reconfiguration in Typical Scenarios
  - eNodeB LTE V100R008C10 Reconfiguration Practice Guide
    - Data preparation Practice on typical reconfiguration scenarios
- OEB86 eNodeB V100R008C10 Troubleshooting
  - eNodeB LTE V100R008C10 Troubleshooting
    - Troubleshooting Overview
    - Troubleshooting Cell Unavailable Faults
    - Troubleshooting IP Transmission Faults
    - Troubleshooting Application Layer Faults
    - Troubleshooting Synchronization Faults
    - Troubleshooting Transmission Security Faults
    - Troubleshooting RF Unit Faults
    - Troubleshooting License Faults
  - eNodeB LTE V100R008C10 TOP Alarm Handling
    - The TOP N alarms are picked from the engineering projects. By presenting the description, system impact, possible causes, and handling procedure of the TOP N alarms, give an overview of how to recognize and analyze alarms. Finally, cases about alarms handling are given for trainees to have a reference in practical maintenance work about alarms.
  - LTE Troubleshooting Practice Guide Student Book (LTEStar6.0)
    - LTE common fault analysis methods and process steps
    - Help trainees understand LTEStar troubleshooting process and grasp LTEStar troubleshooting methods through Practice
- OEB00 eNodeB V100R008C10 Site Solution
  - eNodeB LTE V100R008C10 Site Solution
    - Huawei LTE Product Introduction
    - Typical Out Door Site Coverage Solution

- Typical In Door Site Coverage Solution
- High-Speed Railway and Road Coverage Solution
- FDD+TDD Site Solution
- Easy Marco Site Solution
- Tower Solution
- Related Cable Solution

## Wymagania:

A general knowledge in cellular systems and radio technology.

## Poziom trudności



## Certyfikaty:

The participants will obtain certificates signed by Huawei.

This course prepares you for the HCNA Huawei Certified Network Associate certification for LTE specialization H31-411-ENU exam. HCNA certification exams are offered worldwide through the Prometric test centers. More information about Huawei certification program and available specializations you can find on the

<http://support.huawei.com/learning/NavigationAction!createNavi?navId=CERTIFICATE&lang=en>

## Prowadzący:

Huawei Certified Trainer.