

ICT264 HCIA – Datacom

Level: 2

Credit Units: 10 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY SEMESTER

Synopsis:

ICT264 HCIA – Datacom introduces basic knowledge of network technologies, including routing and switching, wireless local area network (WLAN) principles, network security, network management and O&M, and software defined network (SDN) and programming automation. In particular, this course focuses on the application of data communication technologies in real-world scenarios. It combines theories and experiments, so that students can obtain an in-depth understanding of the subject. Students will be trained to design, deploy, operate, maintain, and optimize a network throughout the network lifecycle.

Topics:

- Data communication and network basics
- Building IP networks with interconnection and interworking
- Ethernet switching network
- Cyber security infrastructure
- Network access
- Network services and applications
- Wireless Local Area Network (WLAN)
- Wide Area Network (WAN)
- Network management and O&M
- IPv6 principles
- Software Defined Network (SDN)
- Programming automation basics

Learning Outcome:

- Describe networking fundamentals
- Explain network routing and switching protocols
- Discuss wireless communication technologies
- Assess network management and security issues
- Practice configuration of network switches and routers
- Implement enterprise networking technologies
- Demonstrate data communication competency by being certificated by HCIA certification exam.

Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Examinable Components	Online Exam	100

Total	100
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