DRAFT

E.C.N.L.

Certificate of Course Completion

CWAND&A

Certified WAN Designer and Administrator

The **Certified Wan Designer and Administrator** has all abilities provided by CLAND&A, extended to a Wan environment. While a CLAND&A certified person can install and manage the whole local area network for a small industry, CWAND&A certification allows to design, install and maintain more than one LAN, joined together with WAN links. For this reason he/she is able to choose and use several kinds of Wan solutions. Wireless networks are also considered, both for local and wide area networks.

During the Certified WAN Designer and Administrator course, administered by the undersigned instructor, the student demonstrated the following competencies:	1. Beginner	2. Intermediate	3. Advanced
❑ - set wireless network for home and small office	❑	❑	❑
❑ - set Wi Fi network for small public hot spots	❑	❑	❑
❑ - combine wired and Wi - Fi network for home and office	❑	❑	❑
❑ - install and use wireless backbone (or wired backbone)	❑	❑	❑
❑ - install a LAN based on IEEE 802.11, in particular with point to point and access	❑	❑	❑
❑ - point based connection; also security aspects will be considered	❑	❑	❑
❑ - describe router functions in details	❑	❑	❑
❑ - evaluate and compare in detail different routing protocols	❑	❑	❑
❑ - distinguish between interior and exterior routing protocols	❑	❑	❑
❑ - describe about the several WANs architectures, standards, technologies, services and applications	❑	❑	❑
❑ - recognize the different protocols used about each WAN and the PDUs for each protocol (to use network analyzer)	❑	❑	❑
❑ - describe internet multimedia architecture and protocols	❑	❑	❑
❑ - configure multiple routing protocols and describe their data flow	❑	❑	❑
❑ - configure multiple routed protocols and describe their data flow	❑	❑	❑
❑ - troubleshoot routing and routed protocol problems	❑	❑	❑
❑ - identify and describe the function of router components	❑	❑	❑
❑ - configure router serial interfaces, using PPP encapsulation and authentication	❑	❑	❑
❑ - configure internet device to route IP traffic using the IGRP, EIGRP, OSPF routing protocols	❑	❑	❑
❑ - design and apply network security with IP Access Control Lists	❑	❑	❑
❑ - monitor and troubleshoot network traffic using different tools	❑	❑	❑
❑ - troubleshoot router configuration, physical connectivity problems, password recovery, etc	❑	❑	❑

Student's name _____ Score _____

Instructor _____ Location _____

Institution's name _____ Instructor's signature _____

Istruzione e cultura
Leonardo da Vinci

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