COURSE: <u>Network Virtualization and Softwarization</u>

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WEB PAGE:

COURSE DESCRIPTION
This course describes the evolution of computing and networking platforms, with emphasis on the requirements of a service provider. Specific attention will be devoted to Data Center architectures and to the concept of virtualization (processing, storage, networking aspects). The course will then address the Software Defined Networking and Network Function Virtualization concepts and their impact on the design, deployment and management of ICT services

LEARNING OUTCOMES
- ✓ Understanding of fundamental concepts of Network Vitualization and Softwarization

METHODOLOGY
The course combines both frontal lectures as well as laboratory activities.

ASSESSMENT
Written test with closed answers / synthetic answers (60%) – Laboratory project (40%)

OUTLINE
- ➢ Introduction to Data center networking.
- ➢ Virtualization.
- ➢ Virtual Data Center: storage, network and applications
- ➢ SDN - Software Defined Networking, proprietary and standard solutions; OpenFlow; controllers
- ➢ Virtualization in a provider network; NFV - Network Function Virtualization.
- ➢ ETSI NFV model
- ➢ Orchestration and Orchestrators

TEXTBOOKS

Course material is provided by the instructor

ADDITIONAL SUGGESTED READING