


Telecoms & Tech Academy

SCHOOL OF ADVANCED
COMMUNICATIONS
TECHNOLOGIES



COURSE DESCRIPTION **NFV & SDN FOR TELECOMS**

Format:
Classroom

Duration:
2 Days

**KNect365
Learning**
an informa business

COURSE SUMMARY

HIGHLIGHTS

- **Highly focused and in-depth training from the experts – including relevant updates from Informa’s extensive research team**
- **Expert trainers and programme directors who are industry experienced, and highly accomplished training professionals**
- **Training outcomes and competency development designed to meet industry and organisational requirements**



“The course was good and very helpful, the teacher was well up to the task!”

GCL, Econet

Book online
telecomstechacademy.com

Book over the phone
+44 (0)20 7017 4144

Book via email
training@telecomstechacademy.com

COURSE SUMMARY

Communications Service Providers (CSPs) are currently being forced through a period of business and network transformation, in order to realise greater efficiencies and build a next-generation framework on which new opportunities and revenues can be maximised. Software Defined Networking (SDN) and Network Function Virtualisation (NFV) are key technologies in realising this process.

The two areas of transformation are linked at both technical and conceptual levels. The combination of SDN and NFV is enabling a revolutionary change in telecommunications architecture.

This programme focuses squarely on the technical aspects of this network transformation and how it can support wider transformation within the business. Specifically, we look at the underlying concepts facilitated through the use of SDNs, NFV, and Cloud techniques. Conceptual models, architectures, best practice, operation, and deployment issues are explored in detail.

Case studies show how companies around the world are already utilising virtualisation, and the evolving industry standards are used to demonstrate how interoperability will be maintained.

AVAILABILITY

All our programmes are available on a customer-specific basis:

- Fully customisable
- Range of delivery formats available
- PACE-enabled to maximise learning
- ROI experienced consultants

OUTCOMES & COMPETENCY DEVELOPMENT

Participants will develop or be able to:

- Explain how software defined networking and network function virtualisation are transforming the telecommunications industry
- Recommend areas that could gain from the application of SDN and NFV techniques
- Make well-grounded and realistic judgements on the limitations of virtualisation
- Explain how the judicious use of virtualisation enables new business models and creates new opportunities
- Apply effective techniques to evaluate the performance of transformational projects
- See where companies fit within the SDN and NFV supply chains
- Make well-judged decisions on the security implications of virtualisation

COURSE CONTENTS

SDN AND NFV CONCEPTS

- Layered architectures; management overview and control of network traffic
- SDN over multiple network domains
- NFV Features and benefits
- Virtualised fixed and mobile network use cases
- Software based solutions for business agility
- Hybrid SDN and NFV

SDN ARCHITECTURE AND APPLICATION

- SDN evolution
- Routing and network forwarding
- SDN for Datacentre, Transport, SD-WAN edge, and NFV/NSH Virtualised services
- SDN Layering, Openflow and Open Daylight
- Networking for Virtualised Servers
- Cloud based Control Plane
- SDN Management Plane
- SDN Controller requirements

NFV ARCHITECTURE AND APPLICATION

- Functional delivery from Appliance to Orchestrated VNFs
- NFV Evolution
 - ETSI Architecture and Standardisation
- NFV Security
- ETSI Management and Orchestration
- Enhanced Platform Awareness
- Dataplane Acceleration and DPDK
- ETSI Management and Orchestration
- VNF Integration
- NFV Use cases, and virtualised Customer Premises Equipment
 - Integration with the legacy Network and OSS/BSS
 - Operational implications; Procurement and Skills considerations
 - Open Source and OPNFV

INDUSTRY ACTIVITY

- NFV Maturity stages
- SDN industry groups; OpenFlow, OpenStack, and OpenDaylight
- NFV Industry groups;
 - ETSI NFV, OSM, MEC, and ENI;
 - OCP and the Telecom Infra Project
 - Linux ONAP, OPNFV, OpenvSwitch, and DPDK/FDiO;
 - MEF LSO;
 - ATIS
 - TMForum Zoom
- Leading Operator Initiatives;
 - AT&T Open CORD,
 - Deutsche Telekom Terastream and Future N&SM
- Leading Vendor activities

INDUSTRY TRENDS AND ANALYST PREDICTIONS

- The SDN and NFV market:
 - Segmentation and Revenues
 - Professional Services
- From NFV to Cloud Native microservices
- 5G and Network Slicing

COSTS AND BENEFITS OF SDN/NFV

- Total cost of ownership
- Time to market advantages
- Transformation initiatives
- CAPEX/OPEX impacts

OUR TRAINING SERVICES

TELECOMS & TECH ACADEMY STRUCTURE

Our training programmes are delivered worldwide as part of the training and development plans of many operators, vendors, and service providers. The programmes cover a wide range of competency development requirements.

To ensure we meet the training needs of the industry as effectively as possible, we operate three schools:

School of Telecoms & Tech Business

Business training tailored to the telecoms industry, ranging from the intensive 5-day Telecoms Mini MBA to specialist leadership and marketing training.

School of Advanced Communication Technologies

Covering a multitude of technologies, these courses range from overviews aimed at non-technical staff to in-depth engineering training.

Distance Learning

Our comprehensive suite of Distance Learning programmes provides an excellent opportunity to expand knowledge and build confidence.

OUR TRAINERS

We only use trainers and programme directors that satisfy the following three criteria:

- Experts in their field
- High level of Industry Experience
- Expert facilitators and training professionals

All our trainers have undergone a rigorous selection process and are subject to continuous monitoring and evaluation. Each trainer is accredited for specific courses or topic areas. Whether engineers or business experts, all our trainers are required to continue their own development within their specialist areas, and to broaden their Industry view of trends, best practice and technology.

This is achieved by our ongoing work with many tier 1 operators and vendors, and by full exposure to Ovum research and KNext 365 TMT worldwide events.

UNIVERSITY ACCREDITATION

Some of our programmes have been accredited by the University of Derby Corporate, a UK-based university highly acclaimed in the area of employer engagement. The University of Derby Corporate is at the forefront of the drive to integrate highly focused industry-led training with the academic rigour and quality control of university-based education. Our comprehensive Advanced Telecoms Management Series has been accredited as Postgraduate Level, with our extensive suite of Distance Learning at Undergraduate Level.

We would be happy to discuss extending accreditation to tailored ATMS or programmes based on our Distance Learning modules. Although accreditation is specific to these programmes, the work we do with the University of Derby enables us to develop and apply best practice across our portfolio.

CUSTOMISED IN-HOUSE TRAINING

Telecoms & Tech Academy has worked with countless companies to deliver customised training programmes. We take time to understand your requirements, you'll work with our specialist training team to ensure that we deliver your perfect training programme for your business.

A customised training programme from Telecoms & Tech Academy ensures you get a course that precisely matches your organisation's needs, presented by a first-rate training organisation, with access to all the latest industry research and analysis.

WHY CHOOSE IN-HOUSE TRAINING FROM TELECOMS & TECH ACADEMY?

- Content can be customised to focus on the issues you want – work with us to develop the training course to match your exact needs
- Unique industry research – from Ovum's team of industry leading analysts
- Expert trainers – our team of versatile trainers has the knowledge and experience to deliver a highly effective learning experience
- The most efficient way to train your staff – at the time and location to minimise disruption
- Flexible delivery options – with a range of instructor-led, distance learning and virtual classroom formats available you can build a blended solution to maximise long-term training effectiveness
- Pre- and post-course assessment – can be included in programmes to measure competencies and check on the required progress.

Contact us to discuss how we can build your perfect programme.



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