

3 MONTH DISTANCE LEARNING PROGRAMMES

- 4G/LTE RADIO PLANNING & OPTIMISATION
- DIGITAL SERVICES & TECHNOLOGY TRANSFORMATION
- EVOLVING THE CORE NETWORK – EPC, PCC, IMS & VOLTE
- FINANCE IN TELECOMS
- FOUNDATION IN TELECOMS
- TELECOMS MARKETING & DEVELOPING THE CUSTOMER PROPOSITION

Format:
Distance Learning

Duration:
3 Months

Delivered by
KNect365
TMT

3 MONTH DISTANCE LEARNING PROGRAMMES

WHY STUDY BY DISTANCE LEARNING?

- **Delivered by Telecoms Academy, part of KNect365 TMT an Informa Business, specialists in high quality training for the communications industry – both business and technology**
- **Uniquely includes strategic insight, key market data and forecasts provided by Ovum's 180 global analysts**
- **Tried and tested, fully supported blended learning that works, including soft copy course notes, video modules, live webinars and tutorials and full tutor access throughout your studies**



“The course has so much depth that it demystified telecoms technology for all to understand, the textbooks, webinar sessions, learning material were excellent.... The tutors were magnificent, they explained in detail and they gave real practical examples

JN

Book online

[Telecomsacademy.com](https://www.telecomacademy.com)

Book over the phone

+44 (0)20 7017 4144

Book via email

training@telecomacademy.com

THE PROGRAMME FORMAT

Our fully supported, 3 month Distance Learning programmes provide an in-depth understanding of key communication industry topics.

These assessed courses consists of 3 highly focussed modules, each lasting 4 weeks and incorporating comprehensive courseware, exercises, self-test assessments and live tutor led webinars to help you gain a thorough understanding of the subject matter.

Each module is designed to be studied over a period of a month and requires 20 hours of direct learning. Comprehensive courseware comprise written modules, self-test exercises, video tutorials, Live on Web tutor support, topic-specific webinars, supporting material, best practice discussion groups, and comprehensive learning packs.

Assessment is online and can be done in your place of work or study and requires both short/multiple choice answers as well as longer written essay submissions.

KEY BENEFITS

- 1) The courses are examined and qualifications awarded by the biggest global provider of research, intelligence, events and training to the telecoms industry.
- 2) You decide where and when to study and then set your own pace.
- 3) Through our mix of learning delivery methods and online support, we keep you fully engaged
- 4) Regular webinars are provided, covering the latest technologies, business processes and industry developments – with real subject matter experts who thoroughly understand the topics and their relevance to the industry.
- 5) Each course has been developed with input from the Ovum research teams to ensure the courseware is stimulating and engaging.
- 6) You will have full tutor support from a dedicated tutor – all our tutors have a wealth of real-life industry experience and are now dedicated training professionals, they are available to give help and advice throughout your studies

ENHANCED LEARNING SOLUTIONS

Managed Learning System

This has been developed in order to offer convenient and flexible access to resources such as course material, frequently asked questions, practice examinations and tutor support.

Fully illustrated Courseware

Soft Copy course notes, delivered in context and full regard to current trends, data and analysis from the Ovum research team, practical exercises and self-assessment tests in preparation for exams.

Regular Newsletters

We keep you up-to-date with your studies and major events in the industry through regular newsletters available throughout the duration of your course.

Tutorials

Regular informal tutorials to discuss the programme, ideas and progress, they give a chance to meet with tutors and other students online.

Video Lessons

Informative videos used to outline key study points and to set the context for study and consolidate ideas. The lessons compliment the study material to maximise learning and engagement.

Live Webinars

Enhance your learning with live webinars, bringing the latest technologies and business management topics that allow you to consolidate your learning.

FOUNDATION IN TELECOMS

PROGRAMME SUMMARY

This in-depth introductory programme is ideal for those new to the industry needing a good grounding in the modern communications industry.

The Foundation in Telecoms programme covers the evolving telecoms business environment, technology issues and the telecoms customer proposition. It will benefit those looking to start a career in the telecommunications industry, or those looking to consolidate their existing knowledge in order to lay a firmer foundation in their chosen career. It is especially suitable for graduates looking to take the first step towards a career in communications. Those who choose to take the exam will be awarded a certificate on successful completion. Nominally a four month course, including examination preparation and examination time required.

M1 TELECOMS INDUSTRY AND BUSINESS ENVIRONMENT

This module provides a comprehensive look at the evolving telecoms world. It highlights the key business goals, the changing competitive landscape and the underlying technology – as an enabler for the customer proposition (services, products and applications). The module sets the context for the programme, and covers key elements of the telecoms environment. The requirements and position telecom operators, vendors, service providers, partners, regulators and very importantly, the customer, within the industry are all examined.

- Telecoms Networks
- Fixed, Radio, Core
- Network Components
- Telecoms Services
- Operating Environment
- Business Models
- Trends

M2 TELECOMS TECHNOLOGIES

Technology underpins all business activity within the various Telecoms sectors, and all professionals working within the industry should understand the impact of technology evolution on company strategy and positioning. This module outlines the fundamental technology concepts and explores the various technologies that support modern communication services, including those that underpin next generation mobile, fixed, and converged networks and services. This module looks at technology as an enabler, providing an excellent grounding in modern techniques – including capabilities, limitations, and basic operation. It is broken down into the fundamental building blocks that enable even complex systems to be easily understood at an overview level.

- Technology Principles
- Information Transfer
- Services, Transmission, Signalling
- Fixed Systems
- Radio and Cellular Systems
- Accessing the Internet
- Network Evolution

M3 TELECOMS CUSTOMER PROPOSITION (SERVICES, MARKETING, BRANDING)

Ensuring the provision of a viable and competitive customer proposition is vital to the success of a telecoms operator, and in turn, the telecoms vendors (handset and network), and service providers. A key element of ensuring that success is communicating the proposition effectively. This module provides useful insights into marketing and positioning strategies employed within the telecommunications industry. It focuses on the products that are developed within different market environments, and the marketing communications techniques that are employed.

- Marketing Goals and Metrics
- The Customer Proposition
- Telecoms Marketing Principles
- Marketing Segments and Brands
- Pricing and Bundling Services
- Promoting and Launching Services
- Trends and Challenges

4G/LTE RADIO PLANNING & OPTIMISATION

PROGRAMME SUMMARY

This in-depth programme significantly improves your understanding of the issues and techniques used to effectively plan an efficient and advanced 4G cellular network.

This assessed course is split into 3 comprehensive modules, each lasting 4 weeks, and incorporating extensive courseware, live tutor-led webinars, exercises, self-test assessments, and hands-on planning simulations using an industry-leading radio planning tool – Mentum Planet from InfoVista.

M1 THE LTE AIR INTERFACE

Looks at the LTE Air Interface, including an in-depth look at the OFDMA Physical Layer and the techniques that are used to maximise LTE radio performance and planning efficiency when compared to previous cellular technologies. Layer 2 and relevant procedures are also looked at.

- Overview of the 3GPP Architecture
- LTE Protocol Stack Overview
- The Physical Layer
- LTE Layer 2
- The Packet Data Protocol (PDCP)
- RRC Messages and Procedures
- Basic LTE Message Flows and Procedures
- EXERCISES: LTE Radio Concepts and Techniques

M2 LTE RADIO NETWORK PLANNING

Exploring LTE radio planning techniques, including the planning process, propagation modelling, link budgets, antenna techniques, radio KPIs, coverage and capacity planning, and hands-on planning simulation using the software tool.

- Review of Wireless Principles and Propagation
- Antenna Systems
- Link Budgeting
- Propagation Models
- Radio Interface KPIs
- Capacity Planning for LTE
- Using Software for Network Planning
- EXERCISES: Including hands-on planning experience using the Mentum Planet planning tool from InfoVista

M3 MAXIMISING PERFORMANCE & EFFICIENCY

Looking at techniques and technologies that further improve the performance of LTE networks – radio network optimisation, mobility and interworking optimisation, LTE Advanced features, and LTE planning in a small cells / HetNets environment. This module also incorporates hands-on optimisation using the software tool.

- Network Optimisation
- LTE Advanced
- Small Cells and HetNets
- EXERCISES: Including hands-on optimisation experience using the Mentum Planet planning tool from InfoVista

DIGITAL SERVICES & TECHNOLOGY TRANSFORMATION

PROGRAMME SUMMARY

This programme examines in detail the changing nature of the telecoms industry and the technologies and strategies operators need to deploy to capture new digital services opportunities.

This looks at the changing role of Telecommunication Operators – and how they are responding to changing market conditions and customer expectations by repositioning as Communications Service Providers; adopting a range of digital services and undergoing major transformation initiatives. We focus primarily on the services, service delivery and control, and technology transformation – firstly in support of the new service environment, but secondly from the wider perspective of efficiency, capability, scaling and maximising ROI (return on investment) through techniques such as virtualisation (including NFV and SDN, and cloud).

M1 ICT, UNIFIED COMMUNICATIONS & ADVANCED DIGITAL SERVICES

Module 1 looks at the new service landscape and the impact on the Telecoms Operator/Communication Service Provider. We examine the move to advanced services and evaluate the impact of those on the customer proposition, looking at the services in detail, including deployment options (using Information Communications Technology – ICT – techniques), and related business models. Support for B2B, enterprise, and Machine to M2M, IoT is explored in detail.

- Unified Communications and Collaboration (UCC)
- Advanced Digital Services

M2 TECHNOLOGY TRANSFORMATION – VIRTUALISATION, CLOUD AND CONVERGENCE

The second Module looks at the technologies and systems used to deliver services through the core network. We look in detail at Service Delivery platforms and techniques used within modern networks. Content and advanced IP-based networks are examined in detail, as well as the supporting technologies in order to gain a comprehensive picture of the requirements as well as the capabilities and limitations of existing service delivery systems.

- Convergence
- Cloud
- Virtualisation

M3 MANAGING SERVICES, PCC AND BILLING

Module 3 examines service delivery and control within the advanced network. We look in detail at Service Delivery techniques, latest Operational and Business Support System (OSS and BSS) requirements, Policy Control and Charging (PCC), and advanced billing systems. Quality of Service (QoS) control through PCC and Diameter techniques is looked at in detail. In particular, we explain how services are delivered, controlled and monetised holistically using modern techniques and systems, including end to end procedures.

- An Overview of Billing
- Billing in the Broader BSS/OSS Context
- PCC (Policy Control & Charging) & Diameter
- IP Multimedia Subsystem (IMS)

EVOLVING THE CORE NETWORK— EPC, PCC, IMS & VOLTE PROGRAMME SUMMARY

The programme is designed for those looking to develop an in-depth working knowledge of the core network and its likely evolutionary path.

It looks at the core network technologies and architectures currently being adopted by telecommunication Operators/Communication Service Providers (CSPs) worldwide. We start by looking at existing core network requirements and architectures – as the foundation from which operators evolve, before looking at a range of service delivery techniques, and finally examining how best practice techniques are developed through the Evolved Packet Core and a range of advanced systems such as PCC, IMS, & VoLTE (Voice over LTE).

M1 CORE NETWORK TECHNOLOGIES

Module 1 looks at traditional core network architectures and technologies for both circuit and packet switched domains. We include the techniques common to fixed, mobile and converged networks – switching, transmission, and quality of services; as well as the features and functions that need to be supported by specific network types – such as mobility, roaming and security. Capabilities, limitations and procedures are all examined in detail.

- The Core Network
- IP in the Core Network
- SIP and IMS

M2 DELIVERING ADVANCED SERVICES

Module 2 looks at the technologies and systems used to deliver services through the core network. We look in detail at Service Delivery platforms and techniques used within modern networks – for both circuit-switched and packet switched domains. Content and advanced IP-based networks are examined in detail, as well as the supporting technologies in order to gain a comprehensive picture of the requirements as well as the capabilities and limitations of existing service delivery systems.

- Introducing Service Delivery in Converging Networks
- Service Delivery Standards and Technologies
- IP Multimedia Subsystem and Converged Devices

M3 THE LTE CORE NETWORK (EVOLVED PACKET CORE)

Module 3 looks at the Evolved Packet Core (EPC) and associated technologies / systems. We examine how best practice concepts are applied to the EPC to maximise capability, flexibility, scalability, and ROI (Return on Investment), whilst ensuring (as far as possible) simplicity and interoperability with legacy systems and complementary technologies, as well as facilitating convergence. Associated systems such as IMS, PCC and techniques used to deliver Voice over LTE (VoLTE) are illustrated in order to build a complete picture of the evolving core network, technologies, as well as facilitating convergence. Associated systems such as IMS, PCC and techniques used to deliver Voice over LTE (VoLTE) are illustrated in order to build a complete picture of the evolving core network.

- Introduction to SAE and the EPC
- The EPC (Evolved Packet Core)
- EPC Protocols
- EPC Procedures
- IMS (IP MULTIMEDIA SUBSYSTEM)

FINANCE IN TELECOMS

PROGRAMME SUMMARY

This programme looks at the financial aspects of running a successful business, focusing squarely on the Telecoms/Communications Industry.

The main financial concepts and accounting documents are explained in detail, with examples taken from within the industry, and financial jargon demystified. Effective financial control is explored, where budgeting, financial processes, and forecasting techniques, are presented and evaluated in order to develop a financial toolkit that can be used back in the workplace. Finally, we use financial data and reports to analyse and make sense of the business, using appropriate financial KPIs to evaluate performance and then looking at how the right KPIs can be used to underpin key strategic decisions.

M1 FINANCE FOR TELECOMS PROFESSIONALS

Focused on examples from within the telecoms industry, Module 1 looks at the primary accounting documents and the financial principles that underpin them. We explore their use within telcos and vendors, discuss best practice and international accounting practices, and demystify the jargon – including jargon that is specific to the industry.

By the end of the module, you will be able to interpret the main messages from financial documents and reports, making sense of current financial positions, income statements and cash flow – all in the context of the telecoms industry.

- How a company is financially structured
- The Financial Statements
- Return On Investment
- Essential Ratios – Working Capital

M2 BUDGETING AND FORECASTING IN TELECOMS

This Module explores the techniques and strategies for marketing both traditional telecoms services in a dynamic and rapidly changing market, as well as emerging and advanced digital services. We examine the marketing issues arising from convergence and the bundling of multi-play services as well as the role of the regulator.

Effective segmentation strategies and the shift in focus to B2B and enterprise is looked at before we conclude with in-depth case studies.

- Cash and Accrual Accounting
- Preparing the Budget
- Analysing and Budgeting
- Against Forecasting
- Building the Business Case

M3 KPIS & FINANCIAL ANALYSIS

Module 3 takes a comprehensive look at financial data and KPIs, including the key ratios that are used to analyse, predict, and compare performance – from the purely financial point of view, as well as the overall business. Focusing on the telecoms industry, we analyse the data and information holistically, allowing us to build a comprehensive view of the business, including past performance and likely future performance. We consider how the analysis should be used to drive strategic decisions and measure success in terms ROI)

TELECOMS MARKETING AND DEVELOPING THE CUSTOMER PROPOSITION

PROGRAMME SUMMARY

This highly focused distance learning programme looks at the role, techniques and implementation of marketing practices within Telecoms Operators/Communication Service Providers (CSPs).

We examine the changing telecoms marketplace and the evolution business models; evaluate the developing customer proposition(s); and discuss how effective segmentation and successful customer engagement allow operators to maximise both B2C and B2B opportunities.

M1 THE TELECOMS BUSINESS ENVIRONMENT

The first module looks at the Telecoms Business Environment including a detailed evaluation of the key trends in fixed, mobile and converged broadband markets.

We include current and future business models and the strategic challenges facing operators. The requirements of key stakeholder groups are explored (Shareholders, Customers and Third Parties), along with the rapidly changing customer service proposition, in order to build a clear picture of the evolving business environment

- Telecoms Operating Environment
- Telecoms Stakeholder Requirements
- The Customer Service Proposition
- Strategic Challenges for Telecoms Operators

M2 MARKETING TELECOMS & DIGITAL SERVICES

This module 2 explores the techniques and strategies for marketing both traditional telecoms services in a dynamic and rapidly changing market, as well as emerging and advanced digital services. We examine the marketing issues arising from convergence and the bundling of multi-play services as well as the role of the regulator.

Effective segmentation strategies and the shift in focus to B2B and enterprise is looked at before we conclude with in-depth Operator case studies.

- Telecommunication Networks
- Convergence Issues
- Operator Case Studies
- Status of Telecoms Customer Engagement

M3 CUSTOMER ENGAGEMENT AND BRANDING IN TELECOMS

The final module examines Customer Engagement and Branding within the Telecoms and Communications Service Provider (CSP) environment, including a detailed look at the definition and role of customer engagement and the development, implementation and measurement of various marketing communications and customer engagement programmes.

- Status of Telecoms Customer Engagement
- Definition and Role of Customer Engagement
- The Customer Engagement Toolbox
- Implementing and Measuring Telecoms Customer Engagement

OUR TRAINING SERVICES

TELECOMS 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 Management

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 nontechnical staff to in-depth engineering training.

Distance Learning

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

PACE ENABLED TRAINING

Our programmes are PACE Enabled – a training method that optimises both training value and student engagement. It delivers highly efficient competency development that is focused squarely on practical application in the work place. It is simple in concept and comprises four key elements;

- **Preparation** – Pre-course preparation in order to “hit the ground running”
- **Application** – Applied Learning that focuses on practical application in order to maximise both training value
- **Consolidation** – Post-course continuing competency development, access to resources and on-going support
- **Experience** – An outstanding end-to-end training experience designed to develop competences as effectively as possible

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 on-going work with many tier 1 operators and vendors, and by full exposure to Ovum research and KNet 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. They are at the forefront of the drive to integrate highly focused industry-led training with the academic rigor and quality control of university-based education. Our comprehensive Advanced Telecoms Management Series have been accredited Post-Graduate 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 enable us to develop and apply best practice across our portfolio.

CUSTOMISED IN-HOUSE TRAINING

Telecoms 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 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 Academy?

- Content can be customised to focus on the issues you want – work with us to develop the training course to match the exact needs.
- Unique industry research – from Ovum's team of industry leading analysts
- Expert trainers – our team of versatile trainers have 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 training effectiveness over the long term
- 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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