DCT
Datacomms
Training®

DCT Project Management for Infrastructure and Data Center Managers (PMIDC)

The DCT PMIDC course gives project managers the skills to handle complex projects with defined methodology from start to finish.

Duration
5 days

DOWNLOAD PDF >

DCT Data Center Design

The DCT Data Centre Design DCTDCD content has evolved over the years based on knowledge and competency to reflect the In-dustry recognized Building Industry Consulting Service International (BICSI) standards and exams

Duration
5 Days

DOWNLOAD PDF >

DCT Data Centre Essentials

This program has been designed to help de-mystify the complex world of data centers. It provides an overview of what data centers are, what they do and why we need them. Key aspects relating to basic design and design philosophies are also examined and the essential considerations of data center management such as operational processes, energy management and facility management are explored along with their relationships to overall business strategy.

Duration
1 Day

DOWNLOAD PDF >

DCT Essentials, power and Cooling

This program aims to simplify the intricate realm of data centers. With data centers consuming approximately 5% of the world's energy and their continuous expansion, these power systems are constantly evolving and advancing. As data center power and density increase each year, effectively managing the generated heat has become a crucial aspect in designing and operating these facilities.

Duration
3 Days

DOWNLOAD PDF >

DCT Data Center Power

With data centers using about 5% of the world's energy and growing, these power systems are ever-expanding and improving. The Course covers the many aspects of the most typical electrical systems and equipment for data centers, including terminology, standards, acronyms, operation, efficiency, and more.

Duration
1 Day

DOWNLOAD PDF >

DCT Data Center Cooling

As the data center power and density has increased every year, the need to remove the heat generated has become a more important factor for the design and operation of the facility.

Duration
1 Day

DOWNLOAD PDF >

Data Center Training

Infrastructure Training

DCT Wireless essentials

The DCT Wireless Essentials is a practical course for companies and Individuals planning to deploy a secured Enterprise Wireless System . The Wireless technology has evolved over the years with main trends being security , speed and Frequencies. The current wireless technology are 801.11ax (wi-fi 6) and 801.11be (wi-fi 7). The benefits of newer Enterprise Wireless systems are higher throughput , increased capacity , improved performance with many connected devices , improved power efficiencies , lower latency and support for IoT devices. The new Wireless technology is ideal for video streaming, cloud computing, video calling, video conferencing, remote office etc.
The DCT Wireless Essential Wireless Labs incorporate Physical Wireless Devices connected to a cloud-based Controller which can be managed from any location with a single pane of glass dash board showing all wireless access points deployed in the network. The theory and the practical session includes design , Install and deployment of efficient secured wireless in any environment.

Duration
2 Days

DOWNLOAD >

DCT Cloud Essentials

DCT Cloud Computing Essentials gives an insight into how Cloud computing helps individuals and organizations to take advantage of the cost / benefit of moving from on premises equipment to cloud computing with faster and reliable internet. The course is suitable for people planning to migrate to cloud and helps to understand concepts of cloud computing on compute and storage.
Cloud computing provides a superior alternative to traditional on premises Server , Networking and storage equipment . The benefits are reduced costs , speed , scalability , productivity, and reliability . Cloud computing allows users to remotely access unlimited data storage and software over the internet without the need for expensive hardware in every business location.

Duration
2 Days

DOWNLOAD >

DCT Cybersecurity awareness

Designed to give learners an understanding of how to secure their data and devices while using organizational or personal resources.

Duration
2 Days

DOWNLOAD >

DCT Security Management, Planning & Asset Protection

Security and Management are two key elements for the successful development and progression of any leading business. Effective security management, personnel, and systems must integrate and support the business to secure key assets, rather than restrict its operation.

Duration
5 Days

DOWNLOAD >

DCT IP Surveillance, Storage & Access Control

This is Practical oriented course which covers the principles, Installation and integration of IP Surveillance, Storage & Network Video Recorder(NVR) and access control to give a unified solution on physical security.

Duration
5 Days

DOWNLOAD >

DCT Structured Cabling & Advanced Fiber Optics Training

DCT Structured cabling is a unique Multi-vendor course that introduces Structured Cabling standards for both Copper & Fibre installations

Duration
5 Days

DOWNLOAD >

DCT Unified Communications & Video Conferencing.

DCT Unified Communications is a unique Multi-vendor course that introduces IP Telephony, Unified Messaging, Unified Presence and Unified mail to ICT Professional who are interested in venturing into the world of IP communications

Duration
5 Days

DOWNLOAD >

DCT Advanced Fiber Optics

DCT Advanced Fibre Optic course begins with a review of fiber optic theory, products, and procedures. Then you wiill focus on advanced skill development in three days of hands-on exercises that include preparing indoor, outdoor cabling and routing through splice closures, patch panels and splice trays, fusion and mechanical splicing, testing and troubleshoot-ing optical links, setting up and calibrating an OTDR, performing a cable acceptance test, and measuring optical return loss and reflectance using an OTDR

Duration
5 Days

DOWNLOAD >

DCT IP Surveillance, Storage & Access Control

Duration : 5 Days

Course Code: DCT - INFR - AC-CCTV

Overview:

This is Practical oriented course which covers the principles, Installation and integration of IP Surveillance, Storage & Network Video Recorder(NVR) and access control to give a unified solution on physical security.

Target Audience:

Contractors, Installers of CCTV and Access Control

Pre-requisite

🔶 Basic networking skills and IP

Course Outline

🔶 Module 1: Fundamental Concepts

🔶 Module 2: From Analog to IP Surveillance

🔶 Module 3: Camera Technical Specifications

🔶 Module 4: Video Images and Audio Features

🔶 Module 5: Camera Form Factors

🔶 Module 6: Video Recording Systems

🔶 Module 7: IP Surveillance System Integration

🔶 Module 8: Network & Security in IP Video Surveillance

🔶 Module 9: Design and Deployment of IP Surveillance System

🔶 Module 10. Access Control Fundamental Concepts

🔶 Module 11: Life Safety

🔶 Module 12 Doors and Locks

🔶 Module 13: Credentials Readers.

🔶 Module 14: Controllers and Management Software

🔶 Module 15: Storage Concepts

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DCT Unified Communications

Duration: 5 Days

Course Code: DCT -INFR - UC

Overview:

DCT Unified Communications is a unique Multi-vendor course that introduces IP Telephony, Unified Messaging, Unified Presence and Unified mail to ICT Professional who are interested in venturing into the world of IP communications The class based training offers advanced hands on experience labs to prepare students for any deployment scenarios.

Target Audience:

- Network Engineers

Objectives:

- Describe the components of IP Telephony.
- Describe PSTN components and technologies.
- Describe how to interconnect VoIP with service provider networks.
- Implement a Unified Communication Systems PBX
- Implement phone provisioning to support endpoints.
- Implement Basic Voicemail and IVR an IP PBX platform.
- Implement Voice Gateways and analogue Phone integration with IP Systems

Pre-requisite

Those attending this course require basic understanding of IP Basic Knowledge of telephony desired but not compulsory.

Course Content

- Introduction to unified communications.
- Design a UC solution _Vendor Offering.
- Migration option from legacy to IP.
- Basic configuration hand on lab.
- Integrated IP telephony PSTN.
- Integrated IP telephony Legacy PBX and analogue Phones.
- Advanced configuration, call restriction ,call routing and QOS.

LABS

- LAB 1: Configuring CUCME on Cisco 2900 Router.
- LAB 2: Configuring Avaya IP Office 500.
- LAB 3: Configuring Huawei eSpace U19100.
- LAB 4: Installing and configuring asterisk open source IP PBX. LAB 5: Integration of VOIP gateways to IP Systems..

Content: Copper

Introduction to Balanced Twisted-Pair Cables Connecting Hardware
- Telecommunications Outlets
- Patch panels
- Wiring Blocks

Networks
- Local and Wide Area Networks
- Pros and Cons of a Network
- Network Topologies
- Generic (Structured) Cabling

Cabling Standards
- ANSI/TIA/EIA Standards
- ISO/IEC Standards
- CENELEC Standards
- Cable Categories

Horizontal Cabling
- Horizontal Channels
- Open Office Cabling
- Channel Lengths
- Horizontal Pathways
- Maximum Pathway Fill

Backbone Cabling
- Backbone Cabling Systems
- Backbone Cabling Distance Limitations

Work Area Cabling
- Work Area Components
- Telecommunications Outlets
- Work Area Cable Termination

Telecommunications Spaces
- Equipment Rooms
- Telecommunication Rooms
- Entrance Facilities

Electromagnetic Interference (EMI)
- EMI
- Power Separations

Installation Practices
- Cable Management
- Bend Radius
- Cable Stacking Height
- Cable Stress
- Cable Support
- Rack Clearance
- Equipment Locations
- Mounting Connecting Hardware
- Earthling And Bonding
- Cable Pulling
- Cable Termination

Testing
- Permanent Link Testing
- Channel Testing
- Test Parameters

Administration
- Labels
- Records
- Administration Classes (1-4)

Warranties
- Test Results
- Warranty Registration Form

Content: Fibre

Introduction to Fibre Optics
- What is Optical Fibre?
- Optical Fibre Construction
- Fibre Sizes

Optical Fibre Transmission
- Fibre Optic Transmission Systems and Data Links
- Fibre Optic Transceivers
- Types of Fibre
- Electromagnetic Spectrum and Wavelength

Fibre Optic Transmission Windows
- Fibre Optic Cable Types
- Loose tube and Tight Buffer
- Simplex and Duplex
- Distribution and Break-out cables
- Indoor/Outdoor Cables
- Self-Supporting
- Armoured

Fibre Splicing and Terminating
- Mechanical and Fusion Splicing
- Types of Fibre Connectors
- Hot and Cold Cure Termination
- Mechanical Termination

Signal Degradation
- Dispersion
- Attenuation
- Scattering
- Absorption
- Factors affecting Slice points

Implementing Fibre Optic Cabling in the LAN •Fibre vs Copper
- Fibre in the LAN
- Channel Classification
- Optical Fibre Categories
- Fibre Cannel Classification
- Fibre Channel Length
- Optical Fibre Applications
- Fibre Cabling Design
- Fibre Optic in the Work Area

Fibre Optic Safety
- Chemical Hazards
- Optical Hazards
- Fibre Fragments
- Environment
- Safety for Everyone

Fibre Optic Cable Installation
- Cable Pulling
- Maximum Pulling Load
- Bend Radius
- Pulling Cables in Ducts
- Colour Codes

Fibre Optic Testing
- Types of Test Required
- Flashlight and Visual Fault Locator
- Fibre Microscope
- Attenuation Testing Using LSPM
- Channel Attenuation Calculations
- Optical Time Domain Reflectometer

Warranty Registration Form

Labs

Terminations, Troubleshooting and testing on:
- Category 6 UTP Cabling system
- Category 6A FTP Cabling system
- Trouble shooting and Testing of both Cat 6 and Cat 6A cabling
- Fibre Field terminations
- Fibre splicing
- Fibre Trouble shooting and Testing

DCT Advanced Fibre Optics

Duration: 2 Days

Overview:

DCT Advanced Fibre Optic course begins with a review of fiber optic theory, products, and procedures. Then you wiill focus on advanced skill development in three days of hands-on exercises that include preparing indoor, outdoor cabling and routing through splice closures, patch panels and splice trays, fusion and mechanical splicing, testing and troubleshoot-ing optical links, setting up and calibrating an OTDR, performing a cable acceptance test, and measuring optical return loss and reflectance using an OTDR

Target Audience:

The course is for anyone who is interested in learning how to become a fiber optic installer.

Objectives:

- PON and ACTIVE Network Designs
- How TDM and WDM is used in FTTH Applications
- In-depth use of an OTDR for Testing and Troubleshooting Understanding Probable
- Faults in a Fiber System Attenuation, Return Loss, Back Reflection, Refraction
- Active/PON(FTTx) Qualification and Troubleshooting

Pre-requisite

- Those attending this course require basic understanding of network topology.
- Must have attended the DCT Structured Cabling Fibre Optics Course.

Testing and Certification

- Exam: DCT Structured Cabling Systems Installer
- Certificates :DCT Advanced Fibre Optic Certified Installer

Content:

- Introduction to Fibre Optics
  - What are Optical Fibres?
  - Optical Fibre Construction
  - Fibre Sizes
- Optical Fibre Transmission
  - Fibre optic transmission systems and data links
  - Transmitting and receiving devices
  - Transmission over different types of fibre
  - Electromagnetic Spectrum and Wavelengths
  - Fibre Optic Transmission Windows
  - Fibre Optic Cable Types
- Loose-Tube and Tight Buffered
  - Simplex and Duplex
  - Distribution and Break-out cables
  - Indoor/Outdoor
  - Self-supporting
  - Armoured
  - Fibre Splicing and Terminating
- Mechanical and Fusion Splicing
  - Types of fibre connector
  - Hot and Cold Cure Termination
  - Mechanical Termination
  - Passive Optical Networks (PONs)
  - Optical Line Terminal (OLT)
- Optical Network Terminal (ONT)
  - Optical Network Unit (ONU))

- Signal Degradation
  - Dispersion
  - Attenuation
  - Scattering
  - Absorption
  - Factors Affecting Splice Points
- Designing Fibre Optic Cabling in the Local Area Network
  - Fibre in the LAN
  - Channel Classifications
  - Channel Attenuation
  - Optical Fibre Categories
  - Fibre Cable Classifications
  - Fibre Channel Lengths
  - Optical Fibre Applications
  - Fibre Cabling Design
  - Fibre in the Work Area
- Fibre Optic Safety
  - Chemical Hazards
  - Optical Hazards
  - Fibre Fragments
  - Environment
  - Safety for Everyone
- Fibre Optic Cable Installation
  - Conduct a thorough site survey prior to cable placement.
  - Develop a cable pulling plan.

- Follow proper procedures.
- Do not exceed cable minimum bend radius.
- Do not exceed cable maximum recommended load.
- Document the installation.
- Fibre Optic Testing Methods •Pre-installation testing
  - Acceptance testing
  - Configuration testing
  - Preventive maintenance testing
- Fibre Optic Testing Equipment's
- Types of test required
  - Flashlight and Visual Fault Locator
  - Fibre Microscope
  - Attenuation testing using Light Source and Power Meter
  - Channel Attenuation Calculation
  - Optical Time Domain Reflectometer
- Fiber Troubleshooting
  - Verifying the problem.
  - Isolating the source of the problem.
  - Repairing the problem.
  - Testing the repaired system to ensure that it functions correctly.

DCT Datacomms Training®

DCT Project Management for Infrastructure and Data Centre Manager

Duration: 5 Days

Course Code: DCT-DC-PMID

Overview:

Develop a skill set to deliver intricate Infrastructure and Data Centre Projects within budgets and defined times scales. Having skills on project management from feasibility study , definition , design , implementation and evaluation ensures that projects are successfully delivered on time every time and within budgets. The DCT PMIDC course gives project managers the skills to handle complex projects with defined methodology from start to completion.

Target Audience:

This course is suitable for people implementing building Infrastructure and data center projects .

Objectives:

- A certified PMIDC ® helps to understand and comply with international recognized standards for Intelligent smart building infrastructure and data centres.

Pre-requisite

This course is suitable for people implementing building Infrastructure and data centre projects .

Content:

- Project Management
  - •What is a Project?
  - •Defining Project constraints
  - •Roles of a Project Manager
  - •Overview of Project documentation
- Integration Management
  - •Combining Project areas
  - •Producing the Project plan
  - •Planning the execution
  - •Mastering change control
- Scope Management
  - •Defining the scope
  - •Producing the scope of works
  - •Verification of scope
    - •Preventing scope creep with effective change control
- Quality Management
  - •Quality concepts
  - •Quality definition
  - •Quality control
  - •Quality planning
  - •Quality assurance

- Risk Management
  - •Defining risk
  - •Risk Identification
  - •Quantifying risk
  - •Developing risk responses
  - •Devising risk response controls
- Human Resource Management
  - •Organisational planning
  - •Leading teams
  - •The psychology of teams
  - •Team development
  - •Motivating teams
- Time Management
  - •Defining the tasks
  - •Task estimation
  - •Scheduling tasks
  - •Resource Allocation
- Cost Management
  - •Resource planning
  - •Cost Estimating
  - •Cost budgeting
  - •Cost control
  - •Use of budgeting tools

- Communications Management
  - •Developing communication strategies
  - •Conflict resolution
  - •Stakeholder analysis
  - •Communications planning
  - •Effective information distribution

DCT STRUCTURED CABLING COPPER & FIBRE OPTICS

About this course

DCT Structured cabling is a unique Multi-vendor course that introduces Structured Cabling standards for both Copper & Fibre installations. The class-based training offers advanced hands on experience labs to prepare students for any deployment scenarios for structured cabling. It's a three-day course (Day1- Copper cabling systems, Day2- 4Fibre cabling systems and Day 5-Labs and Exam.

Objective

Delegates are equipped with the knowledge, skills and expertise to competently undertake the installation of the Structured Cabling Solutions

Course Pre-requisite
Those attending this course require basic understanding of network topology

Labs
Terminations, Troubleshooting and testing on:
• Category 6 UTP Cabling system
• Category 6A FTP Cabling system
• Trouble shooting and Testing of both Cat 6 and Cat 6A cabling
• Fibre Field terminations
• Fibre splicing
• Fibre Trouble shooting and Testing

Certificate
• Giganet Certified Installer
• Siemon RI (Registered Installer)
• DCT Certified Installer

Course Outline

COURSE CONTENT- COPPER
Introduction to Balanced Twisted-Pair Cables
Connecting Hardware
• Telecommunications Outlets
• Patchpanels
• Wiring Blocks
Networks
• Local and Wide Area Networks
• Prons and Cons of a Network
• Network Topologies
• Generic (Structured) Cabling
Cabling Standards
• ANSI/TIA/EIA Standards
• ISO/IEC Standards
• CENELEC Standards
• Cable Categories
Horizontal Cabling
• Horizontal Channels
• Channel Lengths
• Horizontal Pathways
• Maximum Pathway Fill
Backbone Cabling
• Backbone Cabling Systems
•   Backbone   Cabling   Distance
Limitations **Work Area Cabling**
• Work Area Components
• Telecommunications Outlets
• Work Area Cable Termination
Telecommunications Spaces
• Equipment Rooms
• Telecommunication Rooms
• Entrance Facilities
Electromagnetic Interference (EMI)

Content fiber optics

Introduction to Fibre Optics
– What are Optical Fibres?
– Optical Fibre Construction
– Fibre Sizes
Optical Fibre Transmission
– Fibre optic transmission systems and data links
– Transmitting and receiving devices
– Transmission over different types of fibre
– Electromagnetic Spectrum and Wavelengths
– Fibre Optic Transmission Windows
Fibre Optic Cable Construction
– Loose-Tube and Tight Buffered
– Simplex and Duplex
– Distribution and Break-out cables
– Indoor/Outdoor
– Self-supporting
– Armoured
Fibre Splicing and Terminating
– Mechanical and Fusion Splicing
– Types of fibre connector
– Hot and Cold Cure Termination
– Mechanical Termination
Fiber Connector Types (Styles)
– Flat Fiber Connector
– PC Fiber Connector
– UPC Fiber Connector
– APC Fiber Connector
FIBER OPTICS CONTENT
Inspecting and Cleaning Optical Fiber

Connectors
– Core alignment.
– Physical contact.

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• **EMI** – Pristine connector interface

• **Power Separations Signal Degradation**

Installation Practices – Dispersion
• Cable Management – Attenuation
• Bend Radius – Scattering
• Cable Stacking Height – Absorption
• Cable Stress – Factors Affecting Splice Points
• Cable Support

Designing Fibre Optic Cabling in the Local Area Network
• Rack Clearance
• Equipment Locations – Fibre vs Copper
• Mounting Connecting Hardware – Fibre in the LAN
• Earthling And Bonding – Channel Classifications
• Cable Pulling – Channel Attenuation
• Cable Termination – Optical Fibre Categories

Testing – Fibre Cable Classifications
• Permanent Link Testing – Fibre Channel Lengths
• Channel Testing – Optical Fibre Applications
• Test Parameters – Fibre Cabling Design

Administration – Fibre in the Work Area
• Labels

Fibre Optic Safety
• Records – Chemical Hazards
• Administration Classes (1-4) – Optical Hazards

Warranties – Fibre Fragments
• Test Results – Environment
• Warranty Registration Form

– Safety for Everyone

Fibre Optic Cable Installation
– Conduct a thorough site survey prior to cable placement.
– Develop a cable-pulling plan.
– Follow proper procedures.
– Do not exceed cable minimum bend radius.
– Do not exceed the cable maximum recommended load.
– Document the installation.

Fibre Optic Testing
– Types of tests required
– Flashlight and Visual Fault Locator
– Fibre Microscope
– Attenuation testing using Light Source and Power Meter
– Channel Attenuation Calculation
– Optical Time Domain Reflectometer

Fiber Troubleshooting
– Verifying the problem.
– Isolating the source of the problem.
– Repairing the problem.

– Testing the repaired system to ensure that it functions correctly.

DCT Data Center Power

Duration: 1 Da y

Overview:

The DCT Data Center Power course dives more deeply into the electrical and power systems and components that support data centers. With data centers using about 5% of the world's energy and growing, these power systems are ever-expanding and improving. The Course covers the many aspects of the most typical electrical systems and equipment for data centers, including terminology, standards, acronyms, operation, efficiency, and more.

Target Audience:

- Architects
- Engineering design professionals
- Facilities operations
- Contractors
- Technicians
- Electrical engineers, technicians, operators

Objectives:

- Introduction to data center electrical and power systems
- Redundancy concepts for electrical distribution and equipment
- Understanding of electrical equipment, systems, and controls
- How differing priorties and data center types change the electrical design

Pre-requisite

- Basic understanding of data centers, layouts, and common terms.

Course Outline

- Concepts, path of power, and diagrams - typical electrical terms, power path from grid to chip, and redundancy levels
- Voltages and primary equipment - AC/DC power, the major electrical equipment that supports all of the data center power needs
- UPS systems and components - primary & secondary purposes, types, operations, and efficiencies
- Power distribution - PDUs, RPPs, power monitoring, controls, receptacles & plugs
- Conductors, conduits and breakers - protection devices, standards, sizing, switches and other devices

DCT Data Center Essentials

Duration: 1 Day

Course Code: DCT-DC-ESS

Overview:

Data centers play such significant roles in our business and personal lives, yet not many people really know what they are. Often referred to as "the cloud" where our data is stored and processed, they are much more than this; they power the internet giving us the ability to pay bills online, access our emails, obtain money from ATM machines, watch movies, communicate around the world and to carry on what is now considered a normal, fiercely technological lifestyle.

This program has been designed to help de-mystify the complex world of data centers. It provides an overview of what data centers are, what they do and why we need them. Key aspects relating to basic design and design philosophies are also examined and the essential considerations of data center management such as operational processes, energy management and facility management are explored along with their relationships to overall business strategy.

Target Audience:

This program has been designed for individuals who are either new to the data centre sector (technicians with limited experience or exposure to data centre facilities) or for those who sell products and services to the data centre sector.

Objectives:

Different factors drive the need for a data center: •Driving factors for a data center

•Data center standards

•Data center availability models and cons

Pre-requisite

There are no specific pre-requisites for this program however some awareness of the data centre industry would be advantageous.

Content:

MANAGING A DATA CENTER

For a data center to be effective and efficient in its operations, management is key, consider:
•Regulations, best practices, and operational processes
•Change management processes -MAC's.
•Efficient & efficient energy management
•Commissioning & decommissioning processes
•Information Technology & physical security management

FACTORS ENHANCING DEPENDABILITY OF A DATA CENTER

- Ability to be relied upon
- Ability to be available as and when needed.
- Duplication of components
- Classification of data center - Tier levels

MAIN COMPONENTS OF DATA CENTER

- I.T components
- Power components
- Cooling components
- Auxiliary components – fire, security, BAS

DATA CENTER ACTIVE EQUIPMENTS SPACES

- Data center spaces
- Recommended Layouts
- Space cleaning
- Approach to commissioning

MANAGING DATA CENTER SUPPORTING SPACES

- Cooling system spaces
- Power system spaces
- Fire protection spaces
- Network infrastructure spaces
- General offices & security spaces

MANAGING DATA CENTER SECURITY, SAFETY, NETWORK & I.T

•Safety precaution measures
•Managing Security
•Managing Fire protection
•Managing network
•Managing I.T infrastructure

DCT Security Management, Planning & Asset Protection

Course Code: DCT - INFR - SM-PAP

Overview:

Security and Management are two key elements for the successful development and progression of any leading business. Effective security management, personnel, and systems must integrate and support the business to secure key assets, rather than restrict its operation. As quickly as companies develop, so too do the risks and threats that they face. These risks and threats can primarily stem from internal sources such as Personnel and Information Technology/Systems or external sources such as environmental disasters or terrorism. Some of these threats, security management can directly control, others it cannot. Successful security management will ensure that the company assets have been identified, evaluated for risk, and appropriate safeguards implemented to address the identified threats, such as Crisis Management Planning and Business Continuity Plans. Risk Analysis and Security Surveys are essential tools for security and management professionals. Objective ways of identifying and quantifying risk on a strategic, management, or operational level is a persuasive tool to gain senior executive support. This course will identify and provide the delegates with the leading practices for risk assessment and quantification, key asset identification, vulnerability assessment, and how to document appropriate safeguards in relevant plans, to mitigate risk and liability. Leading companies can no longer view their security departments and employees as lower tier functions. To ensure departments function effectively within the realm of the larger corporate objectives, manage and lead their teams to achieve effective security plans and programs that can be implemented successfully. To achieve a consistent level of best practice the security professional needs to understand the needs of his industry, his team, and his security projects. The course is structured to equip delegates with the specialist security knowledge to perform their management and supervisory duties to international standards in both security planning and asset protection

Target Audience:

Security Supervisors and Managers ,HSSE & Fire Personnel ,Facility or Building Managers

Objectives:

- Learn the best management practice and how to apply these principles
- Plan security projects and implement them effectively
- Create a protection program to protect intellectual property in addition to physical
- assets Run a proactive professional security team

Content:

Unit 1: Issues of Security Management:
- Strategic and Operation Management
- The Management of Risk
- Crime Management and Prevention
- Management Standards

Unit 2: The Importance of Security Planning:
- Legal Obligations
- Loss of Reputation
- Planning and Managing Security Projects
- Principles of Emergency Response and Recovery

Unit 3: Threats to Assets:
- Understanding Loss
- Key Point Identification
- Risk Analysis
- Security Survey
- Intellectual Property / Computer Security
- Evacuation Planning

Unit 4: Principals of Asset Protection:
- Physical Security
- Perimeter Security and Access Control
- Security Lighting
- Communication and Control Centres
- Investigations / Interviewing
- Special Risks

Unit 5: Implementing Asset Protection Program:
- Crisis Management Plans
- Business Continuity Plans
- Mutual Aid
- Communication Strategies
- Dealing with the Media

DCT Data Center Cooling

Duration: 1 Day

Course Code: DCT-DC-COOL

Overview

The DCT Data Center Cooling course, covers the mechanical cooling systems that support data centers and prevent them from overheating. As the data center power and density has increased every year, the need to remove the heat generated has become a more important factor for the design and operation of the facility.

Target Audience:

- Architects
- Engineering design professionals
- Facilities operations
- Contractors
- Technicians
- Mechanical engineers

Objectives:

- Introduction to data center cooling and mechanical systems
- Redundancy concepts for mechanical and cooling systems
- Understanding of mechanical & plumbing systems and controls
- How differing priorities, locations, and more change the cooling design

Pre-requisite

- Basic understanding of data centers, layouts, and common terms.

Course Outline

- Concepts, definitions, operating conditions - the typical mechanical terms, cooling operations, and redundancy levels
- Air cooling solutions - air cooling and operating parameters for typical and atypical data centers
- Computational Fluid Dynamics - what it is, how these tools are used, and what to look for when analyzing a data center flow model
- Water cooling solutions - water cooling components, circulation, and typical arrangements for modularity and redundancy
- Water system operations - operating the data center cooling systems efficiently and effectively, including water cooled servers and immersion cooling

DCT END-USER CYBERSECURITY AWARENESS

Duration: 2 Days

COURSE CODE: DCT - INFR - EU-CA

Overview

Designed to give learners an understanding of how to secure their data and devices while using organizational or personal resources.

- Introduction to Cybersecurity
  What is Cybersecurity?
  Understanding the Security Triangle:
  Confidentiality, Integrity, Availability
  Non-Repudiation
  - A look at major Data Breaches across the globe and their impacts
  Common forms of security breaches
  Social engineering
  Password breaches
  Phishing
  Malware breaches, Ransomware, Spyware, and viruses
  Insider threats
  Identity Theft

- Legal, ethical, and professional practices
  Cyber Security laws
  Data protection Laws
  Legal liability
  - Security policies in organizations

- Indicators of Compromise
  Detecting breaches
  Reporting breaches
  Setting up your cyber security
  Password Security
  Physical Security
  Data protection on decommissioned devices
  Data Backup
  Security on wireless Networks
  Mobile devices security
  - Family Online Safety and Parental Control

Certified in Cybersecurity
Course outline

- ### Chapter 1: Security Principles
  - • Module 1: Understand the Security Concepts of Information Assurance • Module 2: Understand the Risk Management Process
  - • Module 3: Understand Security Controls
  - • Module 4: Understand Governance Elements and Processes
  - • Module 5: Understand (ISC)² Code of Ethics

- ### Chapter 2: Incident Response, Business Continuity and Disaster Recovery Concepts
  - • Module 1: Understand Incident Response
  - • Module 2: Understand Business Continuity • Module 3: Understand Disaster Recovery

- ### Chapter 3: Access Controls Concepts
  - • Module 1: Understand Access Control Concepts Module 2: Understand Physical Access Controls
  - • Module 3: Understand Logical Access Controls

- ### Chapter 4: Network Security
  - • Module 1: Understand Computer Networking
  - • Module 2: Understand Network (Cyber) Threats and Attacks • Module 3: Understand Network Security Infrastructure

- ### Chapter 5: Security Operations
  - • Module 1: Understand Data Security
  - • Module 2: Understand System Hardening
  - • Module 3: Understand Best Practice Security Policies • Module 4: Understand Security Awareness Training

DCT Cloud Essentials

Duration: 2 Days   **Course Code: DCT - INFR - CE**

Overview:

DCT Cloud Computing Essentials gives an insight into how Cloud computing helps individuals and organizations to take advantage of the cost/benefit of moving from on-premises equipment to cloud computing with faster and reliable internet. The course is suitable for people planning to migrate to the cloud and helps to understand concepts of cloud computing on computing and storage.

Cloud computing provides a superior alternative to traditional on-premises Server, Networking and storage equipment. The benefits are reduced costs, speed, scalability, productivity, and reliability. Cloud computing allows users to remotely access unlimited data storage and software over the internet without the need for expensive hardware in every business location.

Target Audience:

This program has been designed for individuals who are either new to the data centre sector (technicians with limited experience or exposure to data centre facilities) or for those who sell products and services to the data centre sector.

Course Outline:

- What is Cloud computing
- Cloud Models
- Cloud Service Models
- Current cloud technologies
- Cloud Business Value
- Cloud Infrastructure Planning
- Strategies for cloud Adoption
- Applications in the cloud
- Cloud service Rollout
- Cloud   Service   Level
- Management Security in the
- cloud
  Privacy and compliant

DCT Wireless Essentials

Duration: 2 Days

Course Code: DCT - INFR - WE

Overview:

The DCT Wireless Essentials is a practical course for companies and Individuals planning to deploy a secured Enterprise Wireless System. Wireless technology has evolved over the years with the leading trends being security, speed and Frequency. The current wireless technology is 801.11ax (wi-fi 6) and 801.11be (wi-fi 7). The benefits of newer Enterprise Wireless systems are higher throughput, increased capacity, improved performance with many connected devices, improved power efficiencies, and lower latency and support for IoT devices. The new Wireless technology is ideal for video streaming, cloud computing, video calling, video conferencing, remote office etc.

The course incorporates Physical Wireless Devices connected to a cloud-based Controller which can be managed from any location with a single pane of glass dashboard showing all wireless access points deployed in the network. The theory and the practical session include designing, installing and deploying efficient secured wireless in any environment.

Target Audience:

This program has been designed for individuals who are either new to the data centre sector (technicians with limited experience or exposure to data centre facilities) or for those who sell products and services to the data centre sector.

Content:

Main Areas Covered by DCT Wireless Essentials :

- Radio Frequency (RF) Technologies
- Antenna Concepts
- Wireless LAN Hardware and Software
- Network Design, Installation, and
- Management Wireless Standards and
- Organizations
- 802.11 Network Architecture
  Wireless LAN Security

www.dct-training.com