



المركز العالمي للتدريب والتطوير
International Centre For Training & Development



Registered Communications Distributions Designer



Course Introduction:

The Registered Communications Distribution Designer (RCDD) training course is designed to provide professionals with an in-depth understanding of telecommunications and structured cabling system design. This course covers key principles, industry standards, and best practices required to design and implement efficient and scalable communications infrastructure. With a focus on theoretical knowledge, participants will gain insights into network architecture, cabling design, and project planning in accordance with BICSI and other international standards.

Throughout this five-day training, participants will explore critical topics such as structured cabling standards, telecommunications spaces, grounding and bonding, and data center infrastructure. This course is ideal for professionals looking to strengthen their expertise in communications distribution design.

Course Objectives:

Upon completion of this course, participants will:

- Understand the fundamental principles of structured cabling system design.
- Learn industry standards, including BICSI, ANSI/TIA, and ISO/IEC regulations.
- Identify different types of network media and their applications.
- Design telecommunications rooms, pathways, and spaces.
- Develop structured cabling solutions for enterprise, data center, and industrial environments.
- Understand grounding, bonding, and firestopping requirements.
- Learn about wireless and emerging networking technologies.
- Gain insights into RCDD certification requirements and exam preparation.

Who Should Attend?

This course is designed for professionals and individuals such as Network and telecommunications engineers, IT and infrastructure professionals, Structured cabling designers and installers, Data center managers and consultants, Electrical and low-voltage contractors, Project managers in network infrastructure, and Professionals preparing for the RCDD certification exam.

Course Outline:

Day 1: Introduction to Structured Cabling and Standards

- Overview of RCDD certification and its significance.
- Introduction to structured cabling and its components.
- Industry standards: BICSI, ANSI/TIA, ISO/IEC, and NEC codes.
- Cabling pathways and spaces: Conduit, raceways, and cable trays.
- Telecommunications rooms and equipment spaces.

Day 2: Network Media and Infrastructure Planning

- Copper cabling (Twisted Pair: Cat 5e, Cat 6, Cat 6A, Cat 8).
- Fiber optic cabling (Multimode vs. Single-mode, MPO/MTP connections).
- Wireless infrastructure considerations.
- Network topology and design principles.
- Planning and designing structured cabling systems.

Day 3: Grounding, Bonding, and Data Center Infrastructure

- Importance of grounding and bonding in telecommunications.
- Electrical protection and firestopping considerations.
- Data center infrastructure design and best practices.
- Power distribution and redundancy in network systems.
- High-density cabling and cooling considerations.

Day 4: Special Environments and System Integration

- Cabling in healthcare, industrial, and high-security environments.
- Integration of audiovisual, security, and building automation systems.
- Testing and troubleshooting structured cabling systems.
- Maintenance and lifecycle management of structured cabling.
- Emerging technologies and trends in telecommunications design.

Day 5: Review and Case Study Discussions

- Recap of key topics covered in the training.
- Common challenges and best practices in structured cabling design.
- Case study discussions and theoretical problem-solving.
- Exam preparation tips and study strategies.
- Course conclusion and RCDD certification pathway discussion.

Course Methodology:

A variety of methodologies will be used during the course that including:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work
- Discussion
- Presentation

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Fees:

To be advised as per course location. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session