BICSI ICT Education

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BICSI's Mission

- Lead the information and communications technology community with excellence in **publications**, **education** and **knowledge assessment**.
- Advance our members' ability to deliver the highest quality products and services.
- Provide our members with opportunities for continual improvement and enhanced professional stature.

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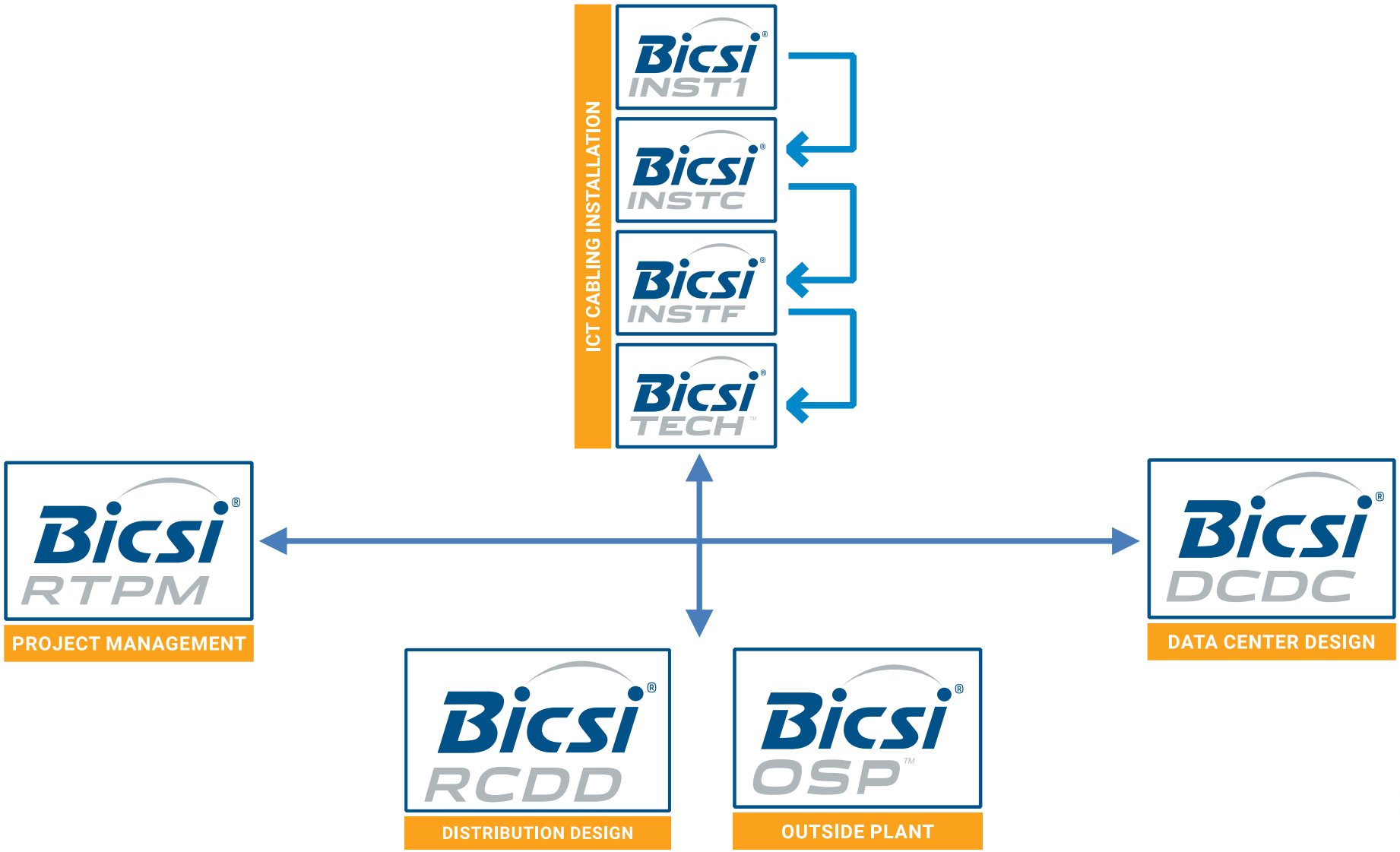
BICSI's Credentialing Programs



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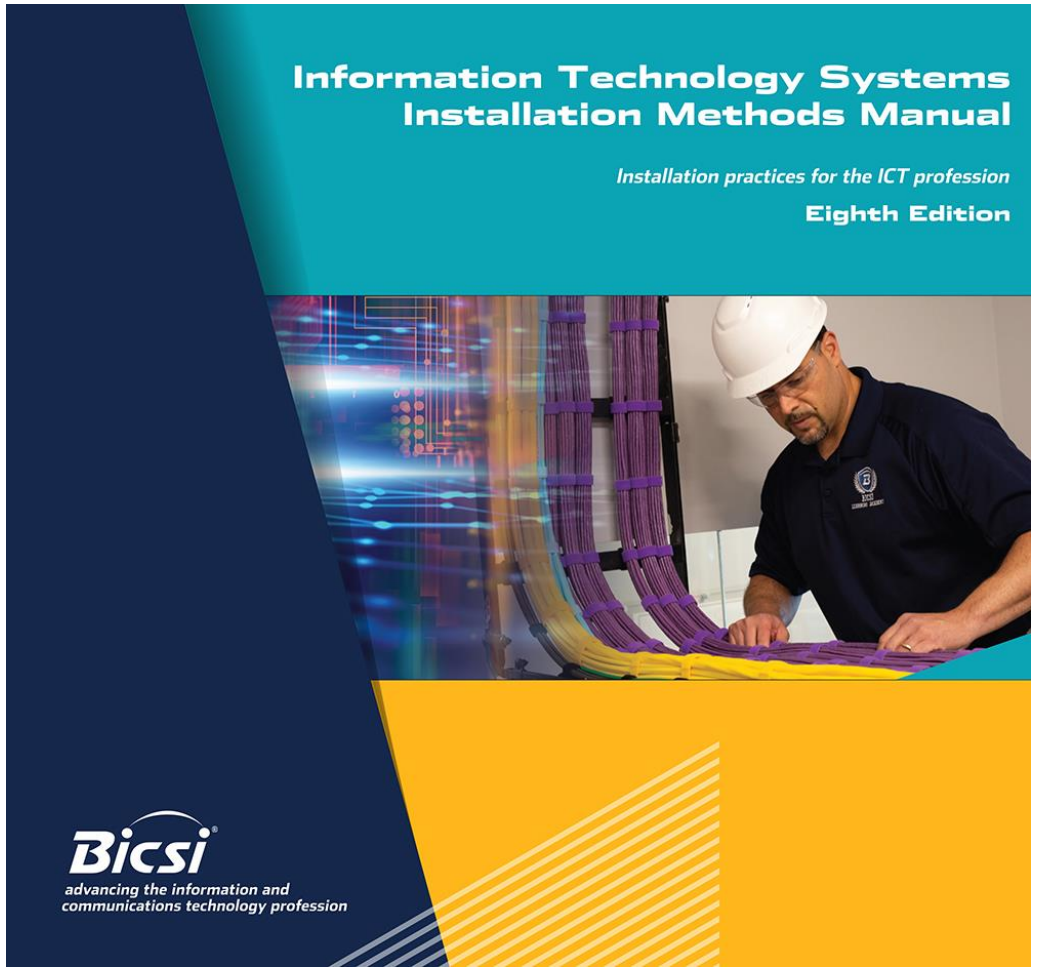
ICT Cabling Installation Program



The *ITSIMM*, 8th edition

11 chapters

3 appendices

Glossary

Chapter-specific bibliography

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Areas of Knowledge

- Professionalism
- Codes, standards and regulations
- Principles of transmission
- Cabling media and connectors
- Structured cabling systems (SCS)
- Telecommunications spaces and pathways
- General safety practices
- Space preparation and cabling support systems
- Pulling cable
- Cable terminations and splicing
- Testing and troubleshooting
- Fire stopping practices
- Bonding and grounding (earthing) and electrical protection
- Specialty systems installation
- Project management
- Retrofits and upgrades

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Cabling Installation Credentials

Certificate Exam is conducted in two parts

1 Hands-on exam
on the last day of class

2 Written exam
at a Pearson VUE Testing Center
of examinee's choosing.

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Installer 1® Program

Non-Renewable

Provides the **fundamentals of cabling installation**, including **introductory knowledge and basic skills**.

An exam is offered to those who wish to earn the Installer 1 certificate.*

Experience Requirement (Installation):

None

Who Will Benefit:

- Those looking for a career in cabling installation
- Individuals with little or no cabling experience who want to know more about cabling installation
- Candidates preparing for the Installer1 exam

Suggested Training & Study Materials:

- IN101: Installer1 Training
- *Information Technology Systems Installation Methods Manual (ITSIMM)*
- Installer 1 Exam Study Aid Package

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Installer 2, Copper ® Program

Valid 3 Years

Provides an **overview of transmission principles** related to **copper**, **professionalism**, **safety** and **industry best practices**.

Installer 2, Copper credential holders can effectively perform all installation tasks specific to copper.

Experience Requirement (Installation):

One year of experience

Who Will Benefit:

- Installers seeking to learn new copper installation skills
- Level1 Installers seeking the Installer 2, Copper credential
- Candidates preparing for the Installer 2, Copper exam

Suggested Training & Study Materials:

- IN101: Installer 1 Training
- IN225: Installer 2, Copper Training
- *Information Technology Systems Installation Methods Manual (ITSIMM)*
- Installer 2, Copper Exam Study Aid Package

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Installer 2, Optical Fiber ® Program

Valid 3 Years

Provides an **overview of transmission principles** related to **optical fiber**, **professionalism**, **safety** and **industry best practices**.

Installer 2, Optical Fiber credential perform all installation tasks specific to optical fiber.

Experience Requirement (Installation):

Two years of experience

Who Will Benefit:

- Installers seeking to learn new optical fiber installation skills
- Level1 Installers or Level 2, Copper Installers seeking the Installer 2, Optical Fiber credential
- Candidates preparing for the Installer 2, Optical Fiber exam

Suggested Training & Study Materials:

- IN101: Installer 1 Training
- IN250: Installer 2, Optical Fiber Training
- *ITSIMM*
- Installer 2, Optical Fiber Exam Study Aid Package

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BICSI Technician® Program

Valid 3 Years

Prepares individuals to become **team leaders.** BICSI Technicians demonstrate effective **project management skills**, including adapting and adjusting to overcome issues that arise during installation.

BICSI Technicians can move into design or ICT project

Experience Requirement (Installation):

Three years of experience

Who Will Benefit:

- Highly experienced cabling installers who oversee the planning and management of installation projects
- Installers seeking to expand their knowledge and learn advanced copper and optical fiber installation skills
- Candidates preparing for the Technician exam

Suggested Training & Study Materials:

- IN101: Installer 1 Training
- IN225: Installer 2, Copper Training
- IN250: Installer 2, Optical Fiber Training
- TE350: Technician Training
- *ITSIMM*
- Technician Exam Study Aid Package

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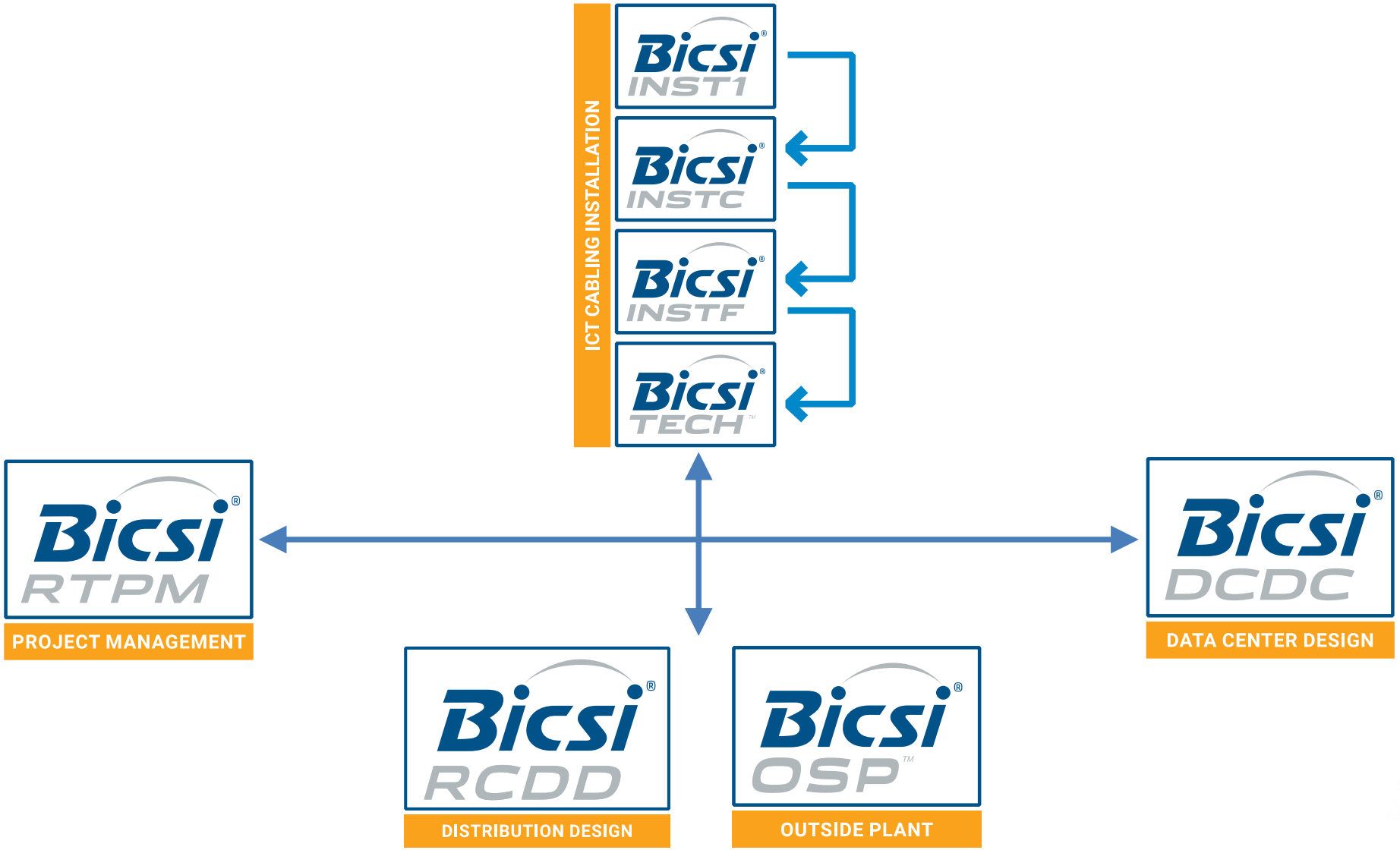
BICSI's Credentialing Programs



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ICT Communications Design Program

- The BICSI ICT Communications Design Program is comprised of:
  - courses
  - specialty reference manuals
  - certifications
- Programs help individuals advance professionally
  - distribution design
  - data center design
  - outside plant design
- A specialized ICT/telecommunications project management program is also offered, providing a valuable skillset for ICT cabling installers and designers.

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Design Credentials

Exams are conducted online

At a Pearson VUE Testing Center of examinee's choosing.

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Registered Communications Distribution Designer® (RCDD®) Program

RCDD® is the **most prestigious** of all BICSI credentials.

RCDDs have demonstrated their ability to **design**, **integrate** and **implement ICT** and related **infrastructure components** and apply their knowledge to **any industry** or **application**.

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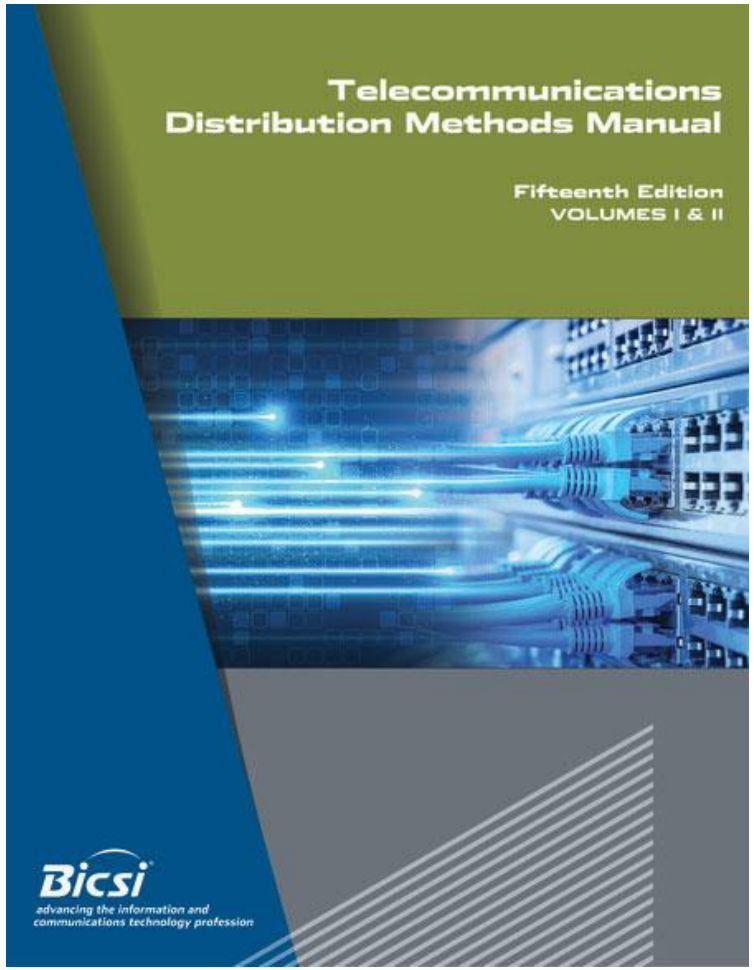
RCDD® Program



The *TDMM*, 15th edition

22 chapters (2 volumes)

2 appendices

Glossary

Detailed bibliography

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Areas of Knowledge

- Principles of transmission and electromagnetic compatibility
- Structured cabling systems and components
- Firestop systems
- Bonding and grounding (earthing) of ICT infrastructure
- Power distribution
- Testing and administration of structured cabling
- Wireless LAN and distributed antenna system (DAS) networks
- Outside plant and campus cabling
- IP-enable building systems
  - Audiovisual systems
  - Building automation systems
  - Electronic safety and security
- Applied ICT facility design
  - Data centers
  - Health care
  - Residential cabling
- Project management

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RCDD® Program

Valid 3 Years

Experience Requirement (ICT Design):

- Five years of experience **OR**
- Two years of experience plus three years' additional ICT equivalents

Who Will Benefit:

- Planners, designers and operators
- ICT designers and integrators
- IT campus and facility managers
- Technical and executive management
- ICT field and sales engineers

Suggested Training & Study Materials:

- DD101: Foundations of Telecommunications Distribution Design (online)
- DD102: Designing Telecommunications Distribution Systems
- RCDD Test Preparation Course (online)
- *TDMM* Flash Cards (online)
- *Telecommunications Distribution Methods Manual (TDMM)*

Registered Communications Distribution Designer® BICSI® CERTIFIED RCDD®

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Data Center Design Consultant® (DCDC®) Program

DCDC® credential is awarded to those individuals who demonstrate knowledge across all facets of **data center design**, including **mechanical**, **electrical** and **ICT systems**.

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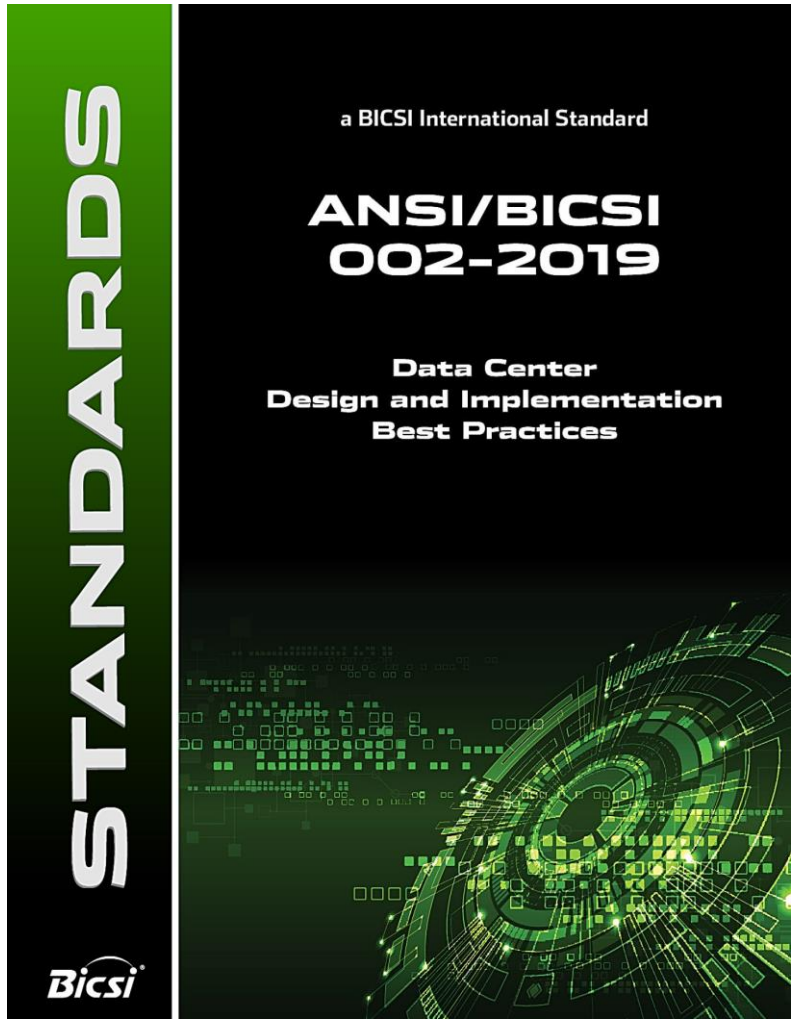
DCDC® Program



ANSI/BICSI 002-2019
Stadndard

17 chapters

9 appendices

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Areas of Knowledge

- Design methodology
- Site selection and space planning
- Structural and architectural
- Electrical systems
- Mechanical systems
- Security and fire
- Facility and building systems
- Telecommunications infrastructure
- Network infrastructure
- Data center commissioning & maintenance
- Energy efficiency
- Multi-site data center architecture
- Colocation Planning

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DCDC® Program

Valid 3 Years

Experience Requirement (Data Center Design):

- Current RCDD® credential **OR**
- Two years of experience and TECH, RTPM or OSP certification or an ICT-related degree **OR**
- Three years of experience

Who Will Benefit:

- Data center planners and designers
- Construction managers
- Operations managers
- Systems and equipment integrators

Suggested Training & Study Materials:

- DC101: Introduction to Data Center Design (online)
- DC102: Applied Data Center Design and Best Practices
- DCDC Test Preparation Course (online)
- BICSI Data Center Flashcards (online)
- ANSI/BICSI002-2019, *DataCenter Design and Implementation Best Practices*
- *Essentials of Data Center Projects*

Data Center BICSI CERTIFIED DCDC Design Consultant

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Outside Plant Designer™ (OSP™) Program

The OSP™ credential recognizes individuals with extensive knowledge and experience in designing new and integrating existing **OSP systems** to meet codes, standards, and performance requirements

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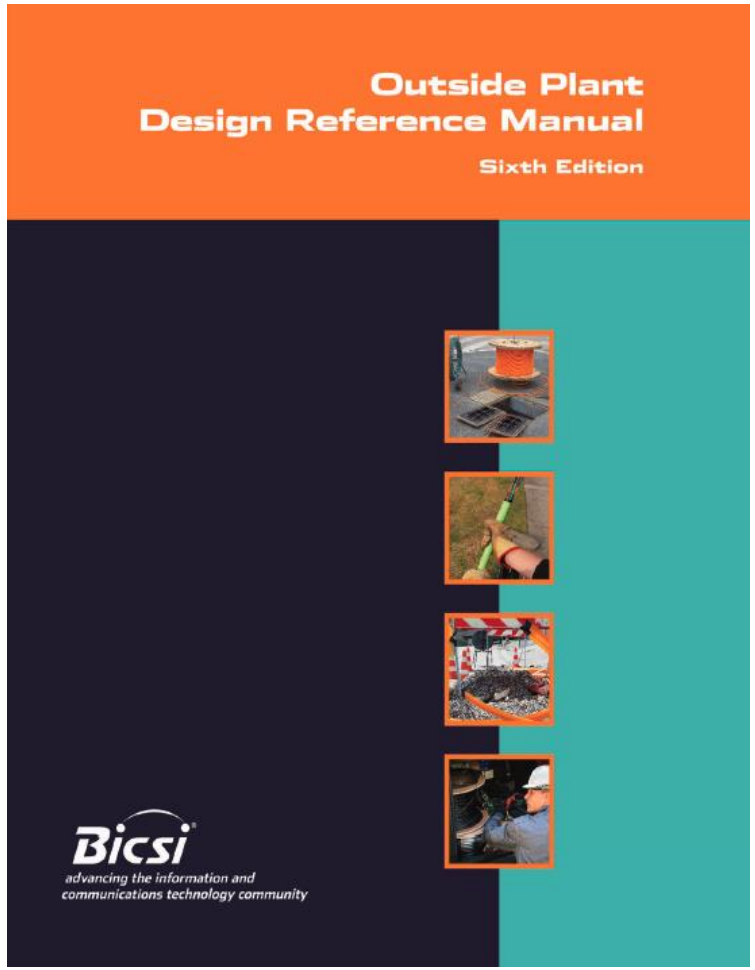
OSP™ Program



The *OSPDRM*, 6th edition

10 chapters

4 appendices

Glossary

Detailed bibliography

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Areas of Knowledge

- Pre-design Preparation
- Perform Site Survey
- Select Media, Platform, and Cables
- Design Underground Platform and Spaces
- Design Buried Platform and Spaces
- Design Aerial Platform and Spaces
- Prepare Design
- Quality Control Process
- Professional Responsibilities

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OSP™ Designer Program

Valid 3 Years

Experience Requirement (OSP Design and/or Installation):

- Current RCDD® credential **OR**
- Two years of experience plus 32 hours of OSP education

Who Will Benefit:

- ICT designers and integrators
  Data center planners, designers and operators
- IT campus and facility managers
- OSP field and sales engineers

Suggested Training & Study Materials:

- OSP101: Introduction to Outside Plant Design (online)
- OSP102: Applied Outside Plant Design
- *Outside Plant Design Reference Manual(OSPDRM)*
- A Deep Dive Into the *OSPDRM*, 6th Ed.(online)

Outside Plant Bicsi CERTIFIED OSP™ Designer

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Registered Telecommunications Project Manager® (RTPM®) Program

RTPM® credential—often sought by design and installation professionals alike—demonstrates knowledge in **project management** concepts and tools in the ICT industry, critical to the outcome of any successful project.

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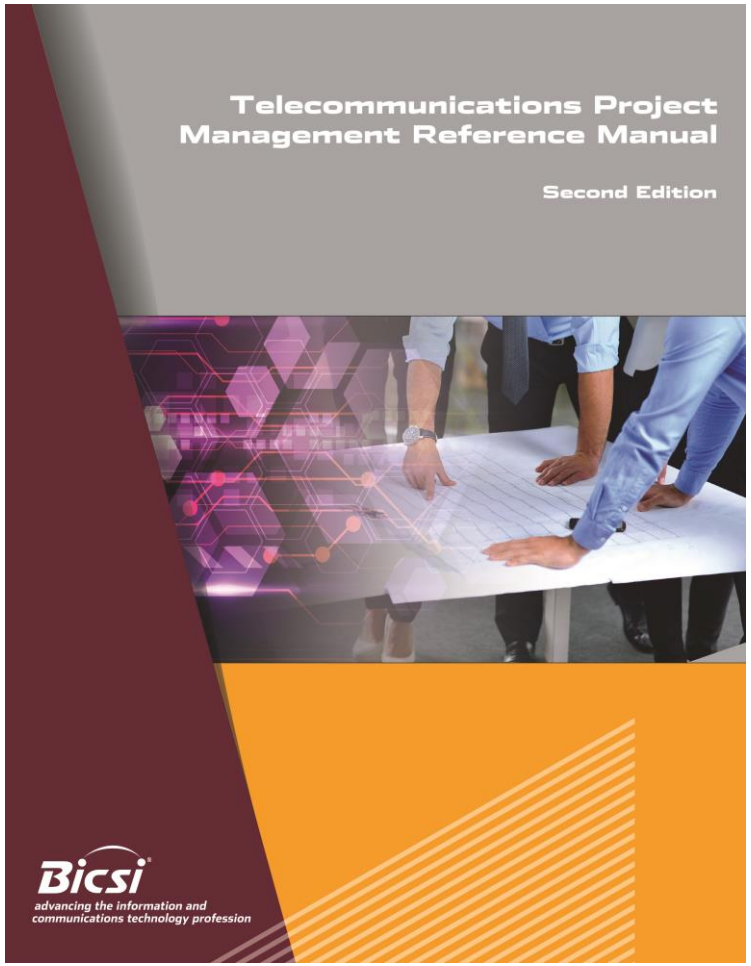
RTPM® Program



The *TPMRM*, 2nd edition

5 chapters

4 appendices

Glossary

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Areas of Knowledge

- Cost management
- Procurement management
- Vendor and contractor coordination
- Commissioning
- Risk management
- Safety plan development
- Sustainable methods
- OSP project management methods
- Construction administration
- Client needs assessments

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RTPM™ Program

Valid 3 Years

Experience Requirement (Project Management):

- Two years of experience

Who Will Benefit:

- Project managers and coordinators involved with ICT systems
- Installation lead technicians and crew supervisors
- ICT systems integrators and commissioning agents
- Siteand facilityconstruction personnel

Suggested Training & Study Materials:

- PM101: Introduction to Project Management (online)
- PM102: Applied Telecommunications Project Management
- PM103: Advanced Tools for ICT Project Management (online)
- *Telecommunications Project Management Manual (TPMM)*
- RTPM Study Aid

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Specialized Courses

- Fundamentals of ICT Series
  - Structured Cabling Systems
  - Telecommunications Media
  - Bonding and Grounding
  - Network Design
  - Project Management

- Individual Fundamentals of ICT Courses

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Training Delivery

- BICSI Learning Academy
- Authorized Training Facilities
- Authorized Design Training Providers

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Save With BICSI Membership

- Membership is **not required** for any of the credential programs
- Becoming a BICSI Member can save you
  - On publications
  - On exam fees
  - On training fees

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Continuing Education Credit (CEC)

- CECs are required for the renewal of credentials
- The credential holders are required to continue their education in order to recertify their credentials
- Get CECs
  - BICSI Education
  - Authorized Training Facilities
  - Authorized Design Training Providers
  - Corporate / Industry Courses Recognized for BICSI CECs

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Conference Attendance

- The credential holders update their knowledge by participating in BICSI Conferences

- Required to attend at least one BICSI-recognized conference during the renewal
  - that will satisfy the mandatory conference attendance credit as outlined in the CEC Policy

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Questions?

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Thank You

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