

# **Cabling Designer's Guide to Education**

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#### **Important Note**

This is a "living document" created for cabling designers' community. Please feel free to send your suggestions and additions to info@cabling-design.com

#### Credits:

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http://www.cabling-design.com tel/fax 1 (661) 760-8137

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#### 1 Essential Instructor-led Courses

#### 1.1 BICSI courses

BICSI is a reputable and well-known not-for-profit telecommunications association. It provides many instructor-led courses dedicated to cabling and network design and hosts three major design conferences and a cabling workshop in North America each year. International conferences are also held as interest and occasion arise.

For more information contact BICSI directly:

BICSI World Headquarters 8610 Hidden River Pkwy. Tampa FL 33637-1000 USA

tel:. 800-242-7405 or 813-979-1991

fax: 813-971-4311 email: bicsi@bicsi.org web site: http://www.bicsi.org

#### 1.2 ACP (Association of Cabling Professionals) courses

The ACP offers several courses that may be of interest to cabling designers' community and sponsors the "Cabling the Workplace" Conference.

For more information contact the ACP directly:

12035 Shiloh Road, Suite 350 Dallas, Texas 75228 tel: (214) 328-1717 fax: (214) 319-6077

#### 1.3 Manufacturer's Courses

Many cabling manufacturers provide cabling courses. In most cases, these courses are aimed at teaching the manufacturer's products, but some of them provide overview and technology-oriented information. Please visit Web sites of appropriate manufacturers like Lucent Technologies or Siemon.

### 2 Self-study training

- NetCBT provides several computer-based self-study products that may be of interest to the cabling designers' community. For more details, visit <a href="http://www.netcbt.com">http://www.netcbt.com</a>.
- The Light Brigade provides many fiber optic training on Video and CD-ROM. For more details, visit http://www.lightbrigade.com.
- FOTEC provides fiber optic training in different formats. For more details, visit http://www.fotec.com.



### **Essential Books**

Author	Title	Description	Where to buy
BICSI	Telecommunications Distribution Methods Manual (TDMM) 8 <sup>th</sup> Edition	This manual is an invaluable resource for any person who is involved in cabling system design. It includes two huge volumes with over 1550 pages and filled with useful and concise information. This manual forms the education basis for Registered Communications Distribution Designer (RCDD) designation.	Directly from BICSI, http://www.bicsi.org
BICSI	BICSI Customer-Owned Outside Plant Design Manual	If you are involved in outside plant design, this manual provides all the necessary information for correct and accurate design of outside cabling links. Contains detailed analysis and reference information.	Directly from BICSI, http://www.bicsi.org,
Donald J. Sterling, Jr.	Premises Cabling	If you are new to structured cabling, it is the best book. After reading it, you will understand all the basic principles of premises cabling. Highly recommended.	Cabling-Design.com Bookstore, http://www.cabling-design.com
National Fire Protection Association (NFPA)	National Electrical Code 1999	The National Electric Code (NEC) is the most widely used and accepted criteria for all electrical installations. It is adopted as law by most states cities and municipalities. It contains special articles describing mandatory requirements for premises communications wiring and pathways. If you are a cabling designer, you *MUST* own this book.	Cabling-Design.com Bookstore, http://www.cabling-design.com
Joseph F. McPartland, Brian J. McPartland	McGraw-Hill's National Electrical Code Handbook (23rd Edition)	This Handbook clarifies and makes the National Electric Code (NEC) more approachable for the normal people. It explains, clarifies and gives pictures. To fully understand the NEC, it is highly recommended to own this Handbook.	Cabling-Design.com Bookstore, http://www.cabling-design.com
Jeff Hecht	Understanding Fiber Optics	This book alone may be used as a complete fiber optics training course for those, who wants to know all practical aspects of using fiber optics in structured cabling environment.	Cabling-Design.com Bookstore, http://www.cabling-design.com



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### 4 Essential Standards

Author	Title	Description	Where to buy
TIA/EIA	TIA/EIA Standard TIA/EIA-568-A (October 1995) "Commercial Building Telecommunications Cabling Standard"	The purpose of this standard is to enable the planning and installation of a structured cabling system for commercial building. This standard establishes performance and technical criteria for various cabling system configurations.	Directly from Global Engineering Documents, http://global.ihs.com
TIA/EIA	TIA/EIA-568-A-1 (Addendum N 1 to TIA/EIA-568-A) (September 1997) "Propagation Delay and Delay Skew Specifications for 100 Ohm 4-pair Cable"	This document specifies propagation delay and delay skew for 100 Ohm 4-pair cables for all recognized cabling categories.	Directly from Global Engineering Documents, http://global.ihs.com
TIA/EIA	TIA/EIA-568-A-5 (Addendum N 5 to TIA/EIA-568-A) (November 1999) "Transmission Performance Specifications for 4-pair 100 Ohm Category 5e Cabling"	This standard specifies minimum requirements for 100 Ohm 4-pair Category 5e cabling. It also specifies laboratory measurement methods, component and field test methods, and computation algorithms.	Directly from Global Engineering Documents, http://global.ihs.com
TIA/EIA	TIA/EIA Telecommunications Systems Bulletin (TSB) TSB67 (October 1995) "Transmission Performance Specifications for Field Testing of Unshielded Twisted-Pair Cabling Systems"	This bulletin specifies the electrical characteristics of field testers, test methods and minimum transmission requirements for UTP cabling. The purpose of this bulletin is to specify transmission performance requirements for UTP cabling links consistent with the three categories of UTP cable and connecting hardware specified in TIA/EIA-568-A. This bulletin contains additional specifications for verification of installed cabling and is not intended to replace the requirements of TIA/EIA-568-A.	Directly from Global Engineering Documents, http://global.ihs.com
TIA/EIA	TIA/EIA Telecommunications Systems Bulletin (TSB) TSB72 (October 1995) "Centralized Optical Fiber Cabling Guidelines"	This bulletin contains information and guidelines for centralized optical fiber cabling in addition to the horizontal cabling requirements and optical connecting hardware requirements in TIA/EIA-568-A standard.	Directly from Global Engineering Documents, <a href="http://global.ihs.com">http://global.ihs.com</a>



TIA/EIA	TIA/EIA Telecommunications Systems Bulletin (TSB) TSB75 (August 1996) "Additional Horizontal Cabling Practices for Open Offices"	This bulletin specifies optional practices for open office environments, for any horizontal telecommunications cabling recognized in TIA/EIA-568-A. It specifies optional connection schemes and topologies. This document is intended for designers and users of open offices and telecommunications cabling systems.	Directly from Global Engineering Documents, http://global.ihs.com
TIA/EIA	TIA/EIA Standard TIA/EIA-569-A (February 1998) "Commercial Building Standard for Telecommunications Pathways and Spaces"	The purposes of this standard is to standardize specific design and construction practices (in support of telecommunications media and equipment) within and between (primarily commercial) buildings. Standards are given for spaces (rooms or areas) and pathways into and through which telecommunications equipment and media are installed.	Directly from Global Engineering Documents, http://global.ihs.com
TIA/EIA	TIA/EIA Standard TIA/EIA-607 (August 1994) "Commercial Building Grounding and Bonding Requirements for Telecommunications"	The purpose of this standard is to enable the planning, design, and installation of telecommunications grounding systems within a building with or without prior knowledge of the telecommunications systems that will subsequently be installed.	Directly from Global Engineering Documents, http://global.ihs.com
TIA/EIA	TIA/EIA Standard TIA/EIA-606 (February 1993) "Administration Standard for the Telecommunications Infrastructure of Commercial Buildings"	The purpose of this standard is to provide a uniform administration scheme that is independent of applications. This standard establishes guidelines for the administration of the telecommunications infrastructure.	Directly from Global Engineering Documents, http://global.ihs.com
TIA/EIA	TIA/EIA Standard TIA/EIA-758 (April 1999) "Customer-Owned Outside Plant Telecommunications Cabling Standard"	The purpose of this standard is to provide requirements used in the design of the telecommunication pathways and spaces, and the cabling installed between buildings or points in a customer-owned campus environment ("outside plant").	Directly from Global Engineering Documents, http://global.ihs.com
TIA/EIA	TIA/EIA Standard TIA/EIA-570 (June 1991) "Residential and Light Commercial Telecommunications Wiring Standard"	This standard describes a premises wiring system intended for connecting one to four exchange access lines to various types of customer premises equipment.	Directly from Global Engineering Documents, http://global.ihs.com



### 5 Magazines

There are several printed magazines dedicated to cabling issues. The most important are:

- Cabling Installation and Maintenance (published in the USA, <a href="http://www.cable-install.com">http://www.cable-install.com</a>)
- Cabling Business Magazine (published in the USA, <a href="http://www.cablingbusiness.com">http://www.cablingbusiness.com</a>)
- Cabling Systems (published in Canada, http://www.cablingsystems.com)
- Structured Cabling and Connecting Systems (published in Canada, <a href="http://www.cablemag.com">http://www.cablemag.com</a>)

All or the most of these magazines are free to qualified subscribers.

### 6 News, white papers and other information

For actual news, white papers, Web links and other useful information for premises wiring users and professionals, please visit Cabling-Design.com Web site at <a href="http://www.cabling-design.com">http://www.cabling-design.com</a>.

### 7 Free Technical Support for Cabling Issues

Cabling-Design.com Team consisting of highly qualified professionals provides FREE technical support for network and structured cabling issues. To take full advantage of it please visit:

 Cabling-Design.com 'Ask an Expert' section at http://www.cabling-design.com/interaction/ask.shtml

or

 Cabling-Design.com 'Forum' section at http://www.cabling-design.com/interaction/wwwboard/wwwboard.shtml

### **8 Internet Newsgroups**

There are several Internet newsgroups that may be of interest to cabling designers' community. The most important are:

- comp.dcom.cabling
- comp.dcom.lans.ethernet
- comp.dcom.lans.misc
- comp.os.ms-windows.networking.win95
- comp.os.ms-windows.networking.windows
- comp.sys.ibm.pc.hardware.networking
- microsoft.public.win95.networking
- microsoft.public.win98.networking

All these newsgroups can also be accessed via World Wide Web (WWW) at http://www.deja.com.



## 9 About Cabling-Design.com

Cabling-Design.com is the leading online resource dedicated to the needs of cabling professionals and users.

Please visit us at <a href="http://www.cabling-design.com">http://www.cabling-design.com</a>.

#### **Contact information:**

#### Cabling-Design.com

phone/fax: 1 (661) 760-8137

email: <a href="mailto:info@cabling-design.com">info@cabling-design.com</a>
web: <a href="http://www.cabling-design.com">http://www.cabling-design.com</a>