



## Course Name:

### Copper Cabling Basics

## Course Description:

**Copper Cabling Basics** is offered under the **Corning Network IQ** education program to train students and professionals on basics of copper twisted pair cabling communication. It combines the real-world experience of working professionals, Corning's latest technology, and blended learning specialists – as well as taking into account the needs of companies employing installers and telecommunications engineers. It has been developed following instructional design guidelines that encourage interactive and practical learning.

## Target Audience

- **Teachers and students** of telecommunications, electricity and computer science at vocational and higher education institutions.
- **Engineers and professional installers** to update their knowledge and skills in Cabling technologies.

## Objective

The main objective of the course is to provide a **comprehensive learning in copper twisted pair cabling** so as to provide participants with the knowledge and skills base in communications cabling infrastructure installation.

## Course Content Structure

### Chapter 1. Copper Basics

Conductors and transmission lines  
Twisted pair and balanced lines  
Datacom cable construction  
Cable classes to standard  
Transmission protocols and encodings  
Balanced cable characteristic parameters

### Chapter 2. Copper Cable Constructions and 10 GBASE-T

Cable classes and cable constructions  
FuturCom Cables  
Advantages of S/FTP Cables

### Chapter 3. Copper Systems & Standards


Structured cabling standards for copper systems:  
-ISO/IEC 11801 classes & categories  
-ISO/IEC 11801 new definitions Amendment 1 (2008)

## Fiber Optics Basics

### Course DataSheet

#### Learning Content Sample



The learning content is available through TechClass.Academy "TCA Campus", the eLearning platform selected by Corning to deliver this course content. It is presented as eLearning material that can be used in different learning environments such as Classroom Instructor Led Training, individual distance learning, and blended learning. The following image is an example of how the learning content looks on screen. The learning resources are highly interactive to stimulate the course participants to get the knowledge and skills.






### Cable Classes & Cable Constructions

*Nomenclature to ISO/IEC 11801 Ed. 2.2 (2011)*


Glossary | Help

U/UTP (UTP) Unshielded core/Unshielded Twisted Pair	 <p><b>U/FTP (STP)</b></p>	
F/UTP (FTP) Foiled core/Unshielded Twisted Pair		
SF/UTP (S-FTP) Shielded Foiled core/Unshielded Twisted Pair		
U/FTP (STP) Unshielded core/Foiled Twisted Pair		
F/FTP (STP) Foiled core/Foiled Twisted Pair		
S/FTP (S-STP) Shielded core/Foiled Twisted Pair		



Network IQ Programme



© Corning Incorporated 2015 | 3 of 23

#### Learning Outcomes

At the end of the course the students will have a general idea of the process of twisted copper cable installation, including the following competencies:

- To define a solution according to a scenario given
- To design the installation depending on the context
- To identify troubleshooting's and be able to know how to solve them
- To carry out the installation
- To carry out the process of measurement and testing

#### Professional opportunities

- Network installers
- Information Technology installation technician
- Cabling Specialist
- Networking Associates
- Network Designers
- System administrator
- Network maintenance technician
- Domestic telecommunications installation technician

For more information, visit our website at <http://techclass.academy> or contact us by email - [info@techclass.academy](mailto:info@techclass.academy) / telf - (+34) 933 554 970  
 If you are an instructor register for free at <https://techclass.academy/Registro-de-Instructores-y-Profesores> and have a look at the learning content.

## Fiber Optics Basics

### Course DataSheet

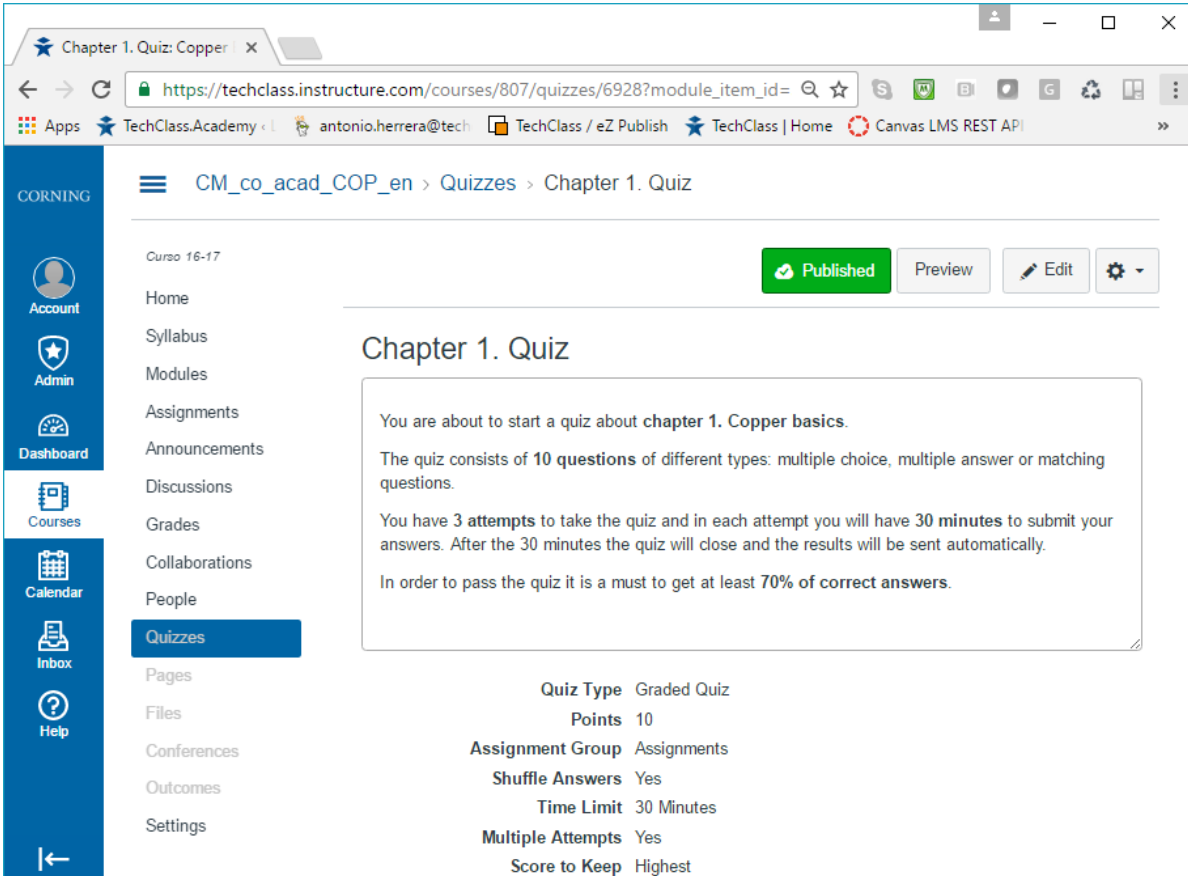
#### Supplemental learning resources

These are the supplemental learning resources available to students:

- Technical description of products
- Frequently asked questions list developed by Corning: <http://www.corning.com/opcomm/nafta/en/products/faqs.aspx> (Links to an external site.)
- Videos from Corning Youtube Channel (Links to an external site.)
- Technology examples from Corning and other companies such as FlukeToolkits and lab equipment for real practice with fibre optics

#### Assessment question banks

This course contains assessment question banks to help instructors evaluate the student progress and allow participants to self assess their achievements.



The screenshot shows a web browser window with the URL [https://techclass.instructure.com/courses/807/quizzes/6928?module\\_item\\_id=](https://techclass.instructure.com/courses/807/quizzes/6928?module_item_id=). The page title is "Chapter 1. Quiz: Copper". The interface includes a sidebar with navigation options like Account, Admin, Dashboard, Courses, Calendar, Inbox, and Help. The main content area displays the quiz details:

**Chapter 1. Quiz**

You are about to start a quiz about **chapter 1. Copper basics**.

The quiz consists of **10 questions** of different types: multiple choice, multiple answer or matching questions.

You have **3 attempts** to take the quiz and in each attempt you will have **30 minutes** to submit your answers. After the 30 minutes the quiz will close and the results will be sent automatically.

In order to pass the quiz it is a must to get at least **70% of correct answers**.

<b>Quiz Type</b>	Graded Quiz
<b>Points</b>	10
<b>Assignment Group</b>	Assignments
<b>Shuffle Answers</b>	Yes
<b>Time Limit</b>	30 Minutes
<b>Multiple Attempts</b>	Yes
<b>Score to Keep</b>	Highest

Sample assessment cover page