

Instructor: TBD  
 Phone: TBD  
 E-mail: TBD

**TEXTBOOK AND SUPPLIES:**

- BICSI Information Technology Systems Installation Methods Manual (ITSIMM), 8<sup>th</sup> Edition

**PREREQUISITE:** 1) Six months of verifiable full-time equivalent structured cabling systems (SCS) field experience through an on-the-job, trade school, or an apprenticeship program, and 2) Passed the BICSI instructor-led hands-on training Installer 1 certificate program, or 3) Instructor approval

**OTHER REGISTRATION RESTRICTION(S):** It is highly recommended that students be registered with DOL by their Sponsor (employer)

**COURSE DESCRIPTION:** In this course, students will be introduced to performing copper cable installations according to accepted best practices from the information & communication technology (ICT) industry. Students will also prepare to take the credentialing exam. *SLCC is a BICSI-authorized training facility.*

**Upon successfully completing this course, students should be able to:**

1. Conduct field planning, implementation, and design, including types of copper and fiber cable, interpreting blueprints, inventory, complying with site safety, and labeling scheme
2. Establish pathways and space for building telecommunication spaces, installing cable support systems, and preparing telecommunication outlets
3. Set-up, pull, terminate, splice, and test copper cable
4. Perform copper cable troubleshooting and retrofits, including identifying active circuits, performing cutovers, and removing abandoned cables
5. Apply concepts of physical network topologies, systems, and components
6. Install wireless systems
7. Provide sture cabling systems (SCS) to support installation of other sytems (e.g., paging, nurse call, life safety, elevator)
8. Adhere to local, state, and federal fire and building codes and standards

**COURSEWORK:**

- **Weekly Homework:** You are expected to come to class prepared with your weekly readings and assignments.
- **Weekly Quizzes:** Take and submit online in Canvas.
  - Weekly quizzes will be taken online in Canvas. You are allowed two attempts with the higher score recorded.
- **Attendance/Participation:** Attendance is expected and crucial to understanding the material and participating in classroom activities. Attendance and participation will be recorded daily and included as part of your coursework grade. 95% attendance is required, which means you are allowed one excused absence.
- **Final Exam:** The final exam will be comprehensive.

- **Lab Projects:** Completion of related lab projects will be required. Missed projects must be coordinated with the instructor and made up.

**GRADES:** Final grades will be calculated using the following scale and weights.

A	93% and above	C	73% – 78.9%
A-	90% – 92.9%	C-	70% – 72.9%
B+	87% – 89.9%	D+	67% – 69.9%
B	83% – 86.9%	D	63% – 66.9%
B-	80% – 82.9%	D-	60% – 62.9%
C+	77% – 79.9%	E	below 60%

Homework	20%
Quizzes	20%
Final exam	25%
Weekly lab activities	25%
Attendance/participation	10%

**Schedule** (Subject to change)

WEEK	DAY 1	DAY 2	ASSIGNMENTS
1	<ul style="list-style-type: none"> <li>• Codes and Standards</li> <li>• Safety</li> <li>• Structure Cabling Systems (SCS)</li> <li>• Types of copper cable</li> </ul>	Field Planning, Implementation, and Design <ul style="list-style-type: none"> <li>• Blueprints</li> <li>• Inventory job supplied and materials</li> <li>• Labeling scheme</li> </ul>	TBD
2	Establish Pathways and Spaces <ul style="list-style-type: none"> <li>• Build telecommunication spaces (e.g., TRs, ERs, EFs, TEs)</li> <li>• Install bonding infrastructure</li> <li>• Install cable support systems</li> </ul>	Establish Pathways and Spaces <ul style="list-style-type: none"> <li>• Prepare a telecommunication outlet at wall</li> <li>• Install cut-in rings (cavity box)</li> </ul>	TBD
3	Establish Pathways and Spaces <ul style="list-style-type: none"> <li>• Prepare a telecommunication outlet at floor</li> <li>• Prepare telecommunication outlet at utility column, and modular furniture</li> <li>• Prepare telecommunication outlet at other locations (e.g., ceilings, hazardous, exterior)</li> </ul>	Establish Pathways and Spaces <ul style="list-style-type: none"> <li>• Install sleeves, cores, and slots</li> <li>• Install poke throughs</li> <li>• Install cable trays, ladder racks and continuous cable support systems</li> <li>• Install non-continuous cable supports</li> </ul>	TBD
4	Establish Pathways and Space <ul style="list-style-type: none"> <li>• Install raceways</li> <li>• Install cable support systems under the floor</li> <li>• Install firestop and smoke barrier system</li> </ul>	Pull Copper and Fiber Cable <ul style="list-style-type: none"> <li>• Set up cable pulling</li> <li>• Installing pull string or rope in conduit</li> </ul>	TBD

WEEK	DAY 1	DAY 2	ASSIGNMENTS
5	Pull Copper and Fiber Cable <ul style="list-style-type: none"> <li>• Pull horizontal telecommunication outlet cable (conduit) and cable in an open ceiling</li> </ul>	Pull Copper and Fiber Cable <ul style="list-style-type: none"> <li>• Pull backbone - riser from the top down</li> <li>• Pull backbone – riser from bottom up</li> <li>• Pull backbone - horizontal backbone</li> </ul>	TBD
6	Terminate Copper and Fiber Cable <ul style="list-style-type: none"> <li>• Pre-termination function</li> <li>• Install correct connecting hardware for copper terminations</li> </ul>	Terminate Copper and Fiber Cable <ul style="list-style-type: none"> <li>• Copper IDC termination (multi-pair)</li> <li>• Copper IDC termination (four-pair)</li> <li>• Coax termination</li> <li>• Copper crimp termination – modular plugs</li> </ul>	TBD
7	Splicing <ul style="list-style-type: none"> <li>• Copper splicing</li> </ul>	Test Copper Cable <ul style="list-style-type: none"> <li>• Copper cable testing</li> </ul>	TBD
8	Troubleshooting/Retrofits <ul style="list-style-type: none"> <li>• Copper cable troubleshooting</li> <li>• Activity circuits</li> <li>• Cutovers</li> <li>• Abandoned cable</li> </ul>	<ul style="list-style-type: none"> <li>• Wrap-up</li> <li>• Final</li> </ul>	TBD

**WITHDRAWAL POLICY:** The College's withdrawal schedule is followed. No withdrawals will be approved beyond the drop date.

**COMMUNICATION and FEEDBACK EXPECTATIONS:** Email is the best way to communicate with your instructor through the Canvas Inbox. You can expect to receive responses to emails within 24 business hours. You can expect that projects and exams will be graded and recorded within one week of when the assignment was submitted. Keep the line of communication open to avoid any misunderstandings.

**ELECTRONIC DEVICES IN THE CLASSROOM:** No video or audio recording in the classroom is allowed without written authorization from the instructor. Cell phones and other electronic devices should be silent and off the desk during class except to take notes if it is not distracting to classmates. In case of an emergency, exit the classroom to use your cell phones. Disruptive behavior will cause you to be excused from class and lose participation points. Please let your instructor know of any special circumstances at the start of the semester.

**SAVE YOUR WORK:** In case of human or computer errors, it is recommended that you save all coursework until you have received a final grade.