

# BICSI Installer 2, Copper Examination Content Outline

BICSI's credentialing programs are a gold standard in the information & communications technology (ICT) industry. The Installer2, Copper credential validates that an installer has mastery of knowledge and skills to perform copper cable installations according to accepted best practices from the ICT cabling installation industry. Every three to five years the Registration and Credentials Supervision Committee (RCSC) oversees a job task analysis (JTA) of this credentialing program to ensure the program is current, relevant and held to the highest standard. Based on this analysis, 11 core competencies were identified as essential to copper cable installation.

The content below outlines the competency areas covered on the Installer 2, Copper exam.

	Area of Expertise	% of Exam
<b>A</b>	<b>General Knowledge, Planning and Field Engineering</b>	13-14%
	Demonstrate knowledge of copper cable	
	Interpret blueprints	
	Verify and comply with site safety plan	
	Perform labeling according to a labeling scheme	
	Perform site survey (onsite start-up)	
<b>B</b>	<b>Pathways and Spaces</b>	28-29%
	Build closets, telecom rooms, entrance facilities, equipment rooms and data centers	
	Install grounding infrastructure	
	Install cable support systems	
	Prepare station location—wall	
	Prepare station location—floor	
	Prepare station location—Power Pole/Modular Furniture	
	Install fire stop	
	Install sleeves	
	Install cable trays, ladder racks and continuous cable support systems	
	Install non-continuous cable supports	
	Install surface raceways	
	Install cable supports when cable is under the floor	
	Install poke throughs	
	Install cut-in rings (cavity box)	
<b>C</b>	<b>Pull Cable and Fiber</b>	12-13%
	Perform cable pulling setup	
	Pull horizontal station cable (conduit)	
	Pull horizontal station cable open ceiling	
	Pull backbone—riser from top down	
	Pull backbone—riser from bottom up	
	Pull backbone—horizontal backbone	

	Area of Expertise	% of Exam
<b>D</b>	<b>Terminate Cable</b>	11-12%
	Perform pre-termination functions	
	Install correct connecting hardware for copper terminations	
	Perform copper IDC termination (four pair)	
	Perform coax termination	
<b>E</b>	<b>Performing Splicing</b>	2-3%
	Perform copper splicing	
<b>F</b>	<b>Testing Cable</b>	2-3%
	Perform copper cable testing	
<b>G</b>	<b>Perform Troubleshooting</b>	2-3%
	Perform copper cable troubleshooting	
<b>H</b>	<b>Perform Retrofits</b>	
	Perform site survey (retrofit)	
	Remove abandoned cable	
<b>I</b>	<b>Integration/Convergence</b>	2-3%
	Demonstrate basic knowledge of physical network topologies	
	Demonstrate knowledge of installing wireless systems	
	Demonstrate knowledge of DAS systems	
<b>J</b>	<b>Codes and Standards</b>	8-9%
	Adhere to local, state and federal fire/building codes/standards	
	Demonstrate basic knowledge of NEC, NFPA, ADA and OSHA codes	
	Demonstrate basic knowledge of TIA, ANSI, IEEE and BICSI standards	
<b>K</b>	<b>Data Centers</b>	3-4%
	Install cable for new data centers	
	Demonstrate knowledge of unique layout and configurations of data centers	