

## PHASE 2: PREPARE

### Exam Blueprint

BICSI's credentialing programs are a gold standard in the ICT industry. The OSP credential validates that the credential holder has mastery of knowledge and skills to perform outside plant design according to accepted best practices in the ICT industry. Every three to five years the Registration & 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, nine core competencies were identified as essential to an Outside Plant Designer; these core competencies are outlined below:

### OSP EXAM CONTENT OUTLINE

AREA OF EXPERTISE	% OF EXAM
<b>Pre-design Preparation</b>	<b>11-12%</b>
<ul style="list-style-type: none"> <li>• Research types and capabilities of existing technology</li> <li>• Research existing infrastructure/Information gathering</li> <li>• Research geography</li> <li>• Determine financial parameters</li> <li>• Comply with local, state and national regulations</li> <li>• Assess program/client requirements and forecast for the future</li> <li>• Interpret customer's I.T. and facility master plan</li> </ul>	
<b>Perform Site Survey</b>	<b>9-10%</b>
<ul style="list-style-type: none"> <li>• Perform pre-job assessment for new and existing construction</li> <li>• Perform additional pre-job assessment for existing construction</li> <li>• Determine easements and requirements for right-of-way</li> <li>• Determine proposed routing</li> <li>• Verify network topology</li> </ul>	
<b>Select Media, Platform and Cables</b>	<b>13-14%</b>
<ul style="list-style-type: none"> <li>• Select appropriate media</li> <li>• Select copper AWG &amp; sizing</li> <li>• Select fiber mode and type</li> <li>• Select coax</li> <li>• Select splicing hardware</li> <li>• Select termination hardware</li> <li>• Select splitters</li> <li>• Select alternative media</li> </ul>	

AREA OF EXPERTISE	% OF EXAM
<p><b>Design Underground Platform and Spaces</b></p> <ul style="list-style-type: none"> <li>• Design underground support structure—conduit</li> <li>• Design underground support structure—maintenance hole</li> <li>• Design underground support structure—hand hole/pull box</li> <li>• Design underground support structure—contained environmental vault</li> <li>• Design underground grounding systems</li> <li>• Design utility tunnels pathways</li> <li>• Design transition structures</li> </ul>	14-15%
<p><b>Design Buried Platform and Spaces</b></p> <ul style="list-style-type: none"> <li>• Design buried application—trench</li> <li>• Design buried application—plowed</li> <li>• Design buried application—bore</li> <li>• Design buried grounding systems</li> </ul>	14-15%
<p><b>Design Aerial Platform and Spaces</b></p> <ul style="list-style-type: none"> <li>• Design aerial support structure—existing</li> <li>• Design aerial support structure—new construction</li> <li>• Design aerial support structure—messenger</li> <li>• Design aerial support structure—anchors and guys</li> <li>• Design aerial structure grounding—multiground neutral distribution system</li> <li>• Design aerial structure grounding based on delta systems</li> <li>• Design aerial structure grounding based on wye systems</li> <li>• Design aerial structure grounding—special situations</li> <li>• Determine space allocation on pole</li> <li>• Select cable attachment method and associated hardware</li> <li>• Design aerial to underground transition structures</li> <li>• Design optical ground wire structures</li> <li>• Design all dielectric self supporting (ADSS) support structures</li> </ul>	14-15%

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AREA OF EXPERTISE	% OF EXAM
<p><b>Prepare Design</b></p> <ul style="list-style-type: none"> <li>• Prepare preliminary design</li> <li>• Prepare critical design review scope/design development</li> <li>• Prepare final design (construction) package</li> <li>• Prepare rough order magnitude (ROM)</li> </ul>	<p><b>8-9%</b></p>
<p><b>Quality Control Process</b></p> <ul style="list-style-type: none"> <li>• Develop quality control process</li> <li>• Implement design change process</li> <li>• Identify common mistakes</li> <li>• Design betterments/optimization</li> </ul>	<p><b>7-8%</b></p>
<p><b>Professional Responsibilities</b></p> <ul style="list-style-type: none"> <li>• Perform pre-award responsibilities</li> <li>• Perform post-award responsibilities</li> </ul>	<p><b>1-2%</b></p>

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