

Occupational Analysis Chart

BROADBAND NETWORK TECHNICIAN

Occupation Description: A Broadband Network Technician installs, maintains and repairs cable and satellite telecommunication systems, including cable television, broadband internet and telephone services. Broadband Network Technicians work in the telecommunications industry, performing services on-site at client premises, in the distribution network, or at the headend. On-site tasks include installations, troubleshooting, and repair of cable, internet or telephone systems. They also perform customer service and education tasks. Headend tasks include directing and routing broadband information to its destination and troubleshooting central problems.

TRADE SAFETY A	Use personal protective equipment (PPE)	Practice safe working procedures				
	A1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	A2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				
BROADBAND RF SYSTEMS AND COMPONENTS B	Describe RF signal distribution systems	Describe television systems	Apply decibel theory and mathematics	Describe broadband communications architecture	Describe broadband system amplifiers	Interpret broadband RF system designs
	B1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	B2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	B3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	B4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	B5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	B6 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	Describe components of subscriber installations	Describe structured cabling systems	Describe transmission systems and components			
	B7 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	B8 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	B9 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
	BROADBAND SYSTEM CONSTRUCTION, INSTALLATION AND UPGRADE C	Construct broadband systems (outside plant)	Perform broadband systems installations			
		C1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	C2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

**MAINTAIN AND REPAIR
BROADBAND SYSTEMS**

D

Use testing tools and equipment

D1

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Perform routine and preventive maintenance on broadband systems

D2

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Describe signal leakage

D3

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Describe digital signal maintenance and repair

D4

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Troubleshoot modem operation

D5

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Repair broadband systems

D6

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Maintain and repair broadband amplifiers

D7

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HEADEND

E

Describe headend and components

E1

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Maintain and repair headend

E2

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**FIBER OPTIC SYSTEMS
AND COMPONENTS**

F

Describe fiber optic technologies and components

F1

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Describe fiber-to-the-premise (FTTP) architecture and components

F2

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Maintain and repair fiber optic systems

F3

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**MAINTAIN AND REPAIR
BROADBAND
POWERING SYSTEMS**

G

Maintain and repair the power distribution system of a broadband network

G1

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Maintain and repair power supply systems for broadband networks

G2

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