



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	Use personal protective equipment (PPE)	Practice safe working procedures				
A	A1	A2				
BROADBAND RF SYSTEMS AND COMPONENTS	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
B	B1	B2	B3	B4	B5	B6
	Describe components of subscriber installations	Describe structured cabling systems	Describe transmission systems and components			
	B7	B8	B9			
BROADBAND SYSTEM CONSTRUCTION, INSTALLATION AND UPGRADE	Construct broadband systems (outside plant)	Perform broadband systems installations				
C	C1	C2				



MAINTAIN AND REPAIR BROADBAND SYSTEMS
D

Use testing tools and equipment
D1

--	--	--	--	--	--

Perform routine and preventive maintenance on broadband systems
D2

--	--	--	--	--	--

Describe signal leakage
D3

--	--	--	--	--	--

Describe digital signal maintenance and repair
D4

--	--	--	--	--	--

Troubleshoot modem operation
D5

--	--	--	--	--	--

Repair broadband systems
D6

--	--	--	--	--	--

Maintain and repair broadband amplifiers
D7

--	--	--	--	--	--

HEADEND
E

Describe headend and components
E1

--	--	--	--	--	--

Maintain and repair headend
E2

--	--	--	--	--	--

FIBER OPTIC SYSTEMS AND COMPONENTS
F

Describe fiber optic technologies and components
F1

--	--	--	--	--	--

Describe fiber-to-the-premise (FTTP) architecture and components
F2

--	--	--	--	--	--

Maintain and repair fiber optic systems
F3

--	--	--	--	--	--

MAINTAIN AND REPAIR BROADBAND POWERING SYSTEMS
G

Maintain and repair the power distribution system of a broadband network
G1

--	--	--	--	--	--

Maintain and repair power supply systems for broadband networks
G2

--	--	--	--	--	--