Network Engineers are responsible for designing, implementing, monitoring and managing the local and wide area networks of an organisation to ensure maximum uptime for users.

The role can include designing system configurations, documenting and managing the installation of a new network, and maintaining and upgrading existing systems as necessary.

## Network Engineer duties and responsibilities of the job

Network Engineers will work in-house or be assigned to project management teams working with outside clients. As part of an organisation’s IT team, Network Engineers work with Infrastructure Architects and IT Managers. A Network Engineer job description can therefore comprise of:

* Designing and implementing new network solutions and/or improving the efficiency of current networks
* Installing, configuring and supporting network equipment including routers, proxy servers, switches, WAN accelerators, DNS and DHCP
* Procuring network equipment and managing subcontractors involved with network installation
* Configuring firewalls, routing and switching to maximise network efficiency and security
* Maximising network performance through ongoing monitoring and troubleshooting
* Arranging scheduled upgrades
* Investigating faults in the network
* Updating network equipment to the latest firmware releases
* Reporting network status to key stakeholders

## Network Engineer job qualifications and requirements

Holding a degree and having a technical background will be required to gain a Network Engineer role. Degrees in the following subjects can be included:

* Computer science
* Computer software/computer systems engineering
* Computer systems and networks
* Electrical/electronic engineering
* Mathematics
* Network security management
* Physics

Organisations may also have specific requirements depending on their current network configuration. As a guide, a CCNP (Cisco Certified Network Professional) certification is desirable.

As well as formal qualifications, a Network Engineer job description should include the following qualities:

* An analytical mind
* An ability to learn new technologies quickly
* Good time management skills
* An ability to follow processes
* Strong documentation skills
* Good communication skills – both written and verbal
* Commercial and business awareness