

CS 2705 Challenge Exam Study Guide

- Know all 7 layers of the OSI model.
- Know what the responsibilities and functions of OSI layer
- Know what the types of addresses are used in the OSI layers
- Know how to convert binary digits to decimal and vice versa
- Know classful addressing of IP addresses
- Know how to determine the network address, first and last host addresses, and the broadcast address when given an IP address in the range and the subnet mask length
- Know networking devices and their functions (hub, router, switch and bridge)
- Know the components of a data communications system
- Know the transmission modes associated with networking
- Know the various network topologies
- Know the key elements of a protocol
- Know what multiplexing is
- Know what addresses are used in Network Address Translation
- Know tools used to troubleshoot networking issues
- Know the types of entity authentication
- Know what IPSec is and the types of headers used
- Know the types of cryptographic algorithms
- Know the types of firewalls