Internet Communications Technology (Advanced Diploma)

Meet our students

Our students learn from an in-depth curriculum on the technologies of the Internet, as part of the longest-standing Internet engineering undergraduate program in Canada. The students acquire comprehensive knowledge of Internet infrastructure and security, and gain hands-on experience in IP engineering, cloud computing architecture, network security, wireless and voice communications. Graduates from this program specialize in the technologies that run the Internet and they go on to work for a variety of Canadian and global institutions.

Learn more about the classes these students take by visiting the program webpage.

Core competencies and skills

- Designing complex network topologies from enterprise to carrier level.
- Architecting and deploying cloud infrastructure.
- Designing and implementing programming scripts with Python to solve network operation problems.
- Configuring and managing security firewalls.
- Using Infrastructure as Code to deploy cloud resources and security firewalls.
- Documenting network information using technical writing style and diagraming tools.
- Implementing network services using Operating systems Linux and Windows server.

Sheridan Works

Work term availability

- Winter (January – April)
- Summer (May – August)
- Fall (September – December)

Work term capabilities

- Analyzing and troubleshooting network traffic issues using a sniffer application.
- Configuring and troubleshooting layer 2 LAN switches with VLANs, trunking and STP protocol.
- Building and debugging GRE IPsec Virtual Private Networks.
- Implementing and securing Wireless networks IEEE 802.11.
- Designing, building, and analyzing a SIP-based VoIP PBX.
- Writing Python scripts to manage and configure network resources such as routers, switches, and servers.
- Automatizing network configuration with Ansible.
- Configuring and managing Palo Alto firewalls.
- Installing, configuring, and maintaining Linux application services DNS, DHCP, HTTP/HTTPS webservers, SNMP monitoring, CA PKI and Radius AAA access control.
- Creating and managing Docker Containers and Kubernetes clusters in a cloud provider.
- Designing and implementing carrier core using MPLS L3VPN, L2 VPNs, EVPN with VXLAN, L3 VPN6 and Traffic Engineering. Protocols BGP, OSPF, ISIS, LDP, RSVP.
- Deploying virtual private clouds using user interfaces and infrastructure as code (IaaC) AWS CloudFormation and Hashicorp Terraform.

Employer resources

- Employer webpage
- Program information
- Program course schedule

Post a job

To post a job, log in to our online platform **Sheridan Works**.

Don't have an account? Create one today using our **Employer Registration Guide**.

Sheridan Works