## Challenge what's possible

Computer networks are everywhere, they are the backbone of virtually every company – big or small, in everything from the high-tech sector to government, meaning networking professionals are in high demand and will find challenging work in a variety of industries.

The Network Technology (NET) program provides a multidisciplinary education that seamlessly integrates theoretical study with practical experience, in areas such as the physics of communications, network protocols, switching, routing, architecture, cyber security issues and networked applications.

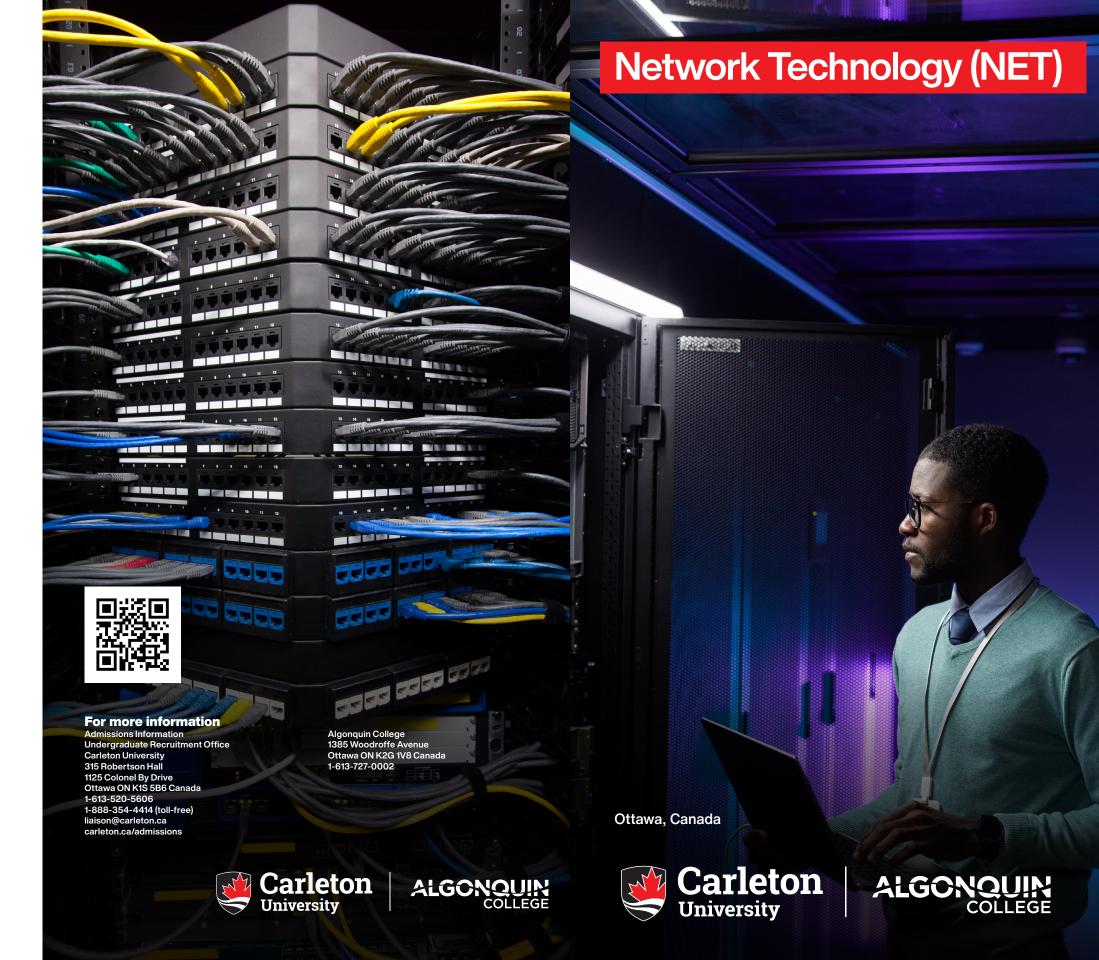
### Why NET?



ONE OF THE FEW PROGRAMS IN CANADA that combines a Bachelor's Degree in Information Technology and an Advanced Technology Diploma



WORK TOWARD certifications such as CCNA, CCNP and CCIE





# **Network Technology (NET)**



Co-op available

Expansion of information networks and the evolution of the technology that supports them requires sophisticated knowledge, skills and hands-on training.

Offered jointly between Carleton University and Algonquin College, the NET curriculum offers a unique blend of computer and network technology courses and covers the essentials in physics, mathematics, communications and business.

The program focuses primarily on the design, installation, operation and management of future complex IT networks.

#### Gain knowledge and practical experience

You will move from the design, installation and operation of advanced IT networks to reconfiguring networks to meet users' needs and analyzing the role of IT networks in an organization.

The NET program also prepares you for the CCNA (Cisco Certified Network Associate) and CCNP (Cisco Certified Network Professional) certifications, as well as CCIE (Cisco Certified Internetwork Expert) certification following two years of industrial experience. These certifications bring valuable expertise and are considered a huge asset by employers.

#### Enrich your studies through Co-op

Gain at least 12 months of valuable work experience while studying for your degree. Co-op opportunities help you develop personal and professional skills in a range of settings, such as the private sector, government agencies, technology companies, and many more.

#### Agile programs

Both institutions regularly consult with representatives from related industries to track changing trends in the IT field.

#### Courses

To graduate from this program, you will need 20.0 credits, generally completed over four years. The required courses include:

1st Year	2nd Year	3rd Year	4th Year
Fall: Mathematics I for NET, Intro to Programming & Problem Solving, Arts & Humanities Elective, Computer Technology Basics, Networking Fundamentals	Fall: Introduction to Business, Communication Skills for NET, Intermediate Networking, DevOps, Desktop & Server Environments	Fall: Database Concepts and SQL, Data Structures, Network Security, Advanced Network Routing, Wireless Networks	Fall: Network Simulation, Networked Applications, Multimedia Networking, Troubleshooting IP Networks, NET Capstone Project
Winter: Mathematics Il for NET, Achieving Success in Changing Environments, Physics for NET, Intermediate Programming, Routing and Switching	Winter: Probability for Technology, Basics of Transmission Systems, Desktop & Server Environments II, Networking Technologies and Automation, Computer Systems Foundations	Winter: Real-Time Systems, Network Management and Measurements, Web Programming, Advanced Network Switching, IP Architectures & Solutions	Winter: Emerging Network Technologies, Computer Systems Architecture, Secure Mobile Networking, Advanced Topics in Network Security, NET Capstone Project

### Exceptional laboratory facilities and resources

State-of-the-art laboratory facilities and equipment are available at both institutions. This includes voice-over-IP equipment, Cisco and Nokia equipment, remotely configurable switches and router systems, and computer laboratories equipped with the latest networking software.

#### Benefit from the capital advantage

There are few better places in which to study and live than Ottawa, the nation's capital. With more than 1,800 high technology companies and a wide range of governmental departments, non-profit organizations and research institutions, NET graduates are well situated to find employment in network planning, design and administration.

#### Future opportunities

Successful completion of this degree/ diploma combination opens the door to a broad range of career opportunities with network design and installation companies, governments, telecom operators, system integrators, educational institutions, private training companies and many other business enterprises requiring network design, installation, operation and management.

Graduates from the program also have excellent opportunities to pursue Master's and PhD programs at Carleton or elsewhere

#### Your career

Careers for NET graduates could include:

- network security specialist
- wireless network specialist
- cloud services specialist
- solution architect
- service delivery manager
- customer application analyst
- network analyst
- network architect
- software architect

Alumni from the program are currently employed in companies such as Facebook, Google, Nokia Networks, Cisco, Bell, Linux Foundation, and many more.

#### Admission requirements

To be eligible for admission to the first year of the NET program, Ontario students must have an Ontario Secondary School Diploma (OSSD) with a minimum of six 4U/M courses. Your six courses must include one 4U Math credit.

For all applicants outside of Ontario, please visit admissions.carleton.ca/requirements.

Have questions? Email infoNET@ bitdegree.ca or visit bitdegree.ca/NFT

