



Position: Academy Digital Infrastructure Student

Term: Fall 2022 (Sept 6, 2022 – Dec 16, 2022)

About Us:

CENG N is Canada's Centre of Excellence in Next Generation Networks. Our mission is to drive technology innovation and industry growth through our test bed, technical expertise, talent development, and partner ecosystem to enable economic strength and prosperity as well as innovation and competitiveness for Canada in the high-growth global multi-trillion-dollar Information and Communications Technology industry.

For more information, check out <https://www.cengn.ca/>

What We offer:

- **Career Development:** An agile company in a modern setting where your ideas and opportunities for growth are nurtured and encouraged
- **Cutting edge and relevant network technology:** Our physical and virtual multi-vendor, test, certification, and validation platform provides a unique environment to commercialize advanced products, applications, and services
- **Canadian Innovation Support:** Be part of an organization that drives digital by providing Canadian start-ups and scaleups as well as tech students and professionals the ability to succeed
- **Great People:** The advantage of working with other students, full-time staff, and our executives who are all passionate about their individual contributions to CENG N
- **Be Part of the Digital Revolution:** CENG N leads collaboration projects in wired and wireless networking that are utilized by applications across industries and leverage the more relevant digital tech like cloud, wireless 5G, autonomous vehicles, broadband Internet, artificial intelligence, virtual reality, and cybersecurity
- **Join Canada's Tech Ecosystem:** Work in the hub of Canada's network technology ecosystem, collaborating with the country's top Telecom multinationals, innovative start-ups and scaleups, government funders, post-secondary institutions, and fellow tech and business accelerators

The Opportunity:

We are seeking a highly skilled and motivated individual for CENG N's Training department for a 4-month co-op term. Reporting to CENG N's Senior Manager of Training Programs, this individual will continue development of CENG N Academy's digital infrastructure with a focus on custom software and API development. The student will start the term with the CENG N Cloud System Specialist boot camp to learn the latest in cloud technologies like containerization, private cloud administration and virtual networking. Upon completion of this boot camp, the student will attempt the CCSS certification exam.

CENG N Academy delivers practical, use-case driven training in commercial cutting-edge technologies, with a focus on open-source technologies and hands-on activities supported on CENG N's unique cloud-based lab infrastructure. CENG N Academy uses multiple internal and external platforms to deliver training, manage learners, collect data and report to various stakeholders. The Academy Digital Infrastructure Student will design, develop and update applications that enhance the functionality of individual platforms and tie multiple platforms together for greater efficiency. Potential projects may include: learner support chatbot; APIs to automatically generate surveys; lab snapshot tool for learners. The Academy Digital Infrastructure Student will also work with and evolve existing custom apps, as well as provide backend support for training deliveries as required.

This position may involve participation in events outside normal working hours on a few occasions during the placement. Applicants should expect to be required to work irregular hours 3-5 times during the contract. For more information about CENG N Academy, visit <https://www.cengn.ca/services/cengn-academy/>

Key Responsibilities:

The main responsibilities of the Academy Digital Infrastructure Student are:

- Collaborate in a professional manner among a team of experienced trainers and engineers
- Work with internal clients to enhance CENG N's training delivery ecosystem
- Design and develop custom software applications using industry best practices
- Link internal and external systems using relevant APIs
- Automate manual processes wherever possible
- Deploy applications on CENG N's private cloud infrastructure using industry best practices
- Ensure data is transported between systems and stored in a secure manner
- Set up cloud-based lab infrastructure for learners, using established automation routines
- Create and maintain high-level (design) and low-level (coding) documentation
- Consume and provide feedback on CENG N Academy self-paced training courses
- Support CENG N Academy training events as required
- Support presentations at public events like meetups and other technical forums
- Liaise with training participants
- Other duties as required

Key Competencies/Qualifications:What you need:

- Desire to learn and develop while exercising and demonstrating solid problem-solving skills
- Ability to work autonomously within a team leveraging online collaboration tools
- Excellent interpersonal, organizational, and communication skills
- Excellent customer service approach

- Ability to design software applications to meet client requirements
- Ability to update and improve existing applications
- Strong programming skills, especially with Python and JavaScript
- Good documentation skills
- Demonstrated ability to manage multiple tasks and demands

You will stand out if you have:

- Practical experience in/with any of the following:
 - Open APIs
 - Datacenter environment
 - Public and/or private cloud services
 - TCP/IP networking
 - Linux and Open Source technologies
 - Virtualization and containerization technologies
 - Agile methodology
 - Atlassian toolset (Confluence, JIRA, etc.)
- Code available for review on public repositories (e.g. Github)

Education:

Post-secondary term in Software Engineering, Computer Science, Engineering, IT or related discipline

Experience:

1 – 2 university/college work term experience is desirable

Eligibility

Students who are enrolled or have graduated from post-secondary institution programs which provide the relevant background and aptitude to work and enhance their skills as per the requirements of CENGN's listed student postings will qualify for internships under this program.

- Students can be at the undergraduate level (current students) or graduate level (current masters and PhD students), or they may be recent undergraduate and master graduates within three years of graduation from an Ontario-based post-secondary institution
- The student must be eligible to work in Ontario and have employee status at the company for the duration of the internship (Canadian citizen, permanent resident, or on a work/student visa)
- The student may not apply with a company where there is any conflict of interest, including, but not limited to, a company where the student or relatives have any control as a major creditor or shareholder or governing board
- As a condition of employment and in accordance to CENGN's Code of Conduct Policy, all students must maintain a clean criminal record. CENGN engages a third-party provider to verify student backgrounds prior to the start of the internship

Languages:

- English oral, reading and writing
- Competency in any other language could be considered an asset

Interested and qualified candidates are invited to upload their resume in confidence to CENGN through the following link, [Resume submission - CENGN Application Portal - Service Desk](#). Please select "**Academy Digital Infrastructure Student**" as the position title.

CENGN reserves the right to remove this posting prior to the application deadline. CENGN thanks all applicants for their interest, however, only those selected for an interview will be acknowledged. CENGN is an equal opportunity employer.