

Communications Security Establishment (CSE) is currently looking for Cryptanalysts and Crypto-Scientists to work in a dynamic and innovative operational environment. As a Cryptanalysts/Crypto-Scientist at CSE, you will be part of a team applying your analytical and problem-solving skills to a variety of problems in support of the SIGINT and Cyber missions. This means you could be working to defeat encryption or working to design and evaluate cryptographic algorithms and protocols. You will learn and apply advanced cryptanalytic techniques and contribute to the development of innovative tools, new techniques, and recommendations for a wide variety of clients both within CSE and from other organizations.

Cryptanalysts and Crypto-Scientists at CSE perform one or more of the following functions:

- Operations, developing and maintaining decryption capabilities and using them to support Government of Canada Intelligence and Cyber Defense requirements.
- Cryptologic research, design, develop, assess, and attack cryptographic algorithms and protocols.

We are looking for passionate people from a variety of backgrounds who:

- have a blend of math and software development skills;
- have knowledge of and an interest in learning more about cryptography and cryptographic protocols;
- enjoy reading deep technical documents, like mathematics papers, cryptographic standards and protocol specifications;
- are creative and critical thinker who love solving problems;
- are self-motivated, tenacious and do not give up on a problem at the first sign of adversity;
- are team players and want to be a part of a great team that delivers results for the Government of Canada and Canadians.

All jobs are located in Ottawa. Salary range is \$91,585 - \$115,504 per year, depending on level.

Required Qualifications include:

- A University degree in a field related to the position, such as (but not limited to): *Mathematics with programming courses, Computer Science, Engineering (e.g. Computer, Software, Electrical) with a strong math background* OR an acceptable combination of education (i.e. college diploma, professional certification) in a field related to the position (as above) and relevant experience.
- Recent experience developing software using a language such as C, C++, Java, Perl, or Python.
- Recent experience applying analytical skills on difficult problems.
- Recent experience communicating the results of your work to various stakeholders (e.g. peers, supervisors).
- Knowledge in one or more of the following: algebra, discrete math, computational number theory, probability and statistics, combinatorics, or cryptography.

A graduate degree in mathematics or computer science will be considered an asset.

You must be a Canadian citizen and be eligible for a Top-Secret security clearance. The selection process includes a [security clearance process](#)

For the full list of positions and their requirements, please visit <https://jobs-emplois.cse-cst.gc.ca/en/careers-carrieres/professionals-professionnels/opportunities>

The current deadline to apply is November 20th, but the post is recurring.

About CSE

Communications Security Establishment (CSE) is Canada's national cryptologic agency. Unique within Canada's security and intelligence community, we employ code-makers, codebreakers, and secure system creators to provide the Government of Canada with cyber security and foreign signals intelligence (SIGINT) services. CSE is the national hub for cyber operations to defend Canada and advance national interests. We provide technical and operational assistance to federal law enforcement and security agencies.

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