Information Systems Analysts

A guide for newcomers to British Columbia

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Contents

1. Working as an Information Systems Analyst [NOC 2021: 21222 / NOC 2016: 2171]

Job Description

Information systems analysts and consultants work with software, hardware and wiring infrastructure. They plan, manage and review information systems, and help to improve a company's computer networks, performance and security.

As an Information Systems Analyst you will perform some or all of the following duties:

- Plan, set up and manage information technology systems including software, hardware and operations

- Create and carry out the plans, policies and procedures for their company's information systems

- Check for and fix any problems that could come up in these systems

People in this job may work on different parts of information systems, depending on their area of focus. They might take on a specialty, which includes:

Business analysts: someone in this role would start with the business requirements of a company and then design, implement or maintain those information systems

Security analysts: you would take existing or proposed systems, review them, find the security problems, and develop or put in place what is needed to stop or reduce the risk

Quality assurance analysts: make sure that the systems work and that they meet regulatory condition

Source:

- **WorkBC Career Profile for Information Systems Analysts**
  https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx

Industry Overview

Currently, there is a small shortage of workers in this career, and those with experience are in higher demand. Also, people with training or experience in business administration will also be in higher demand

It is expected that information systems analysts and consultants will have many job opportunities in business, accounting, financial, scientific and engineering organizations in the future.

The Information & Communications Technology Council ICTC forecast, *Onwards and Upwards: Digital Talent Outlook 2025*, reports that:

- **Data Analyst** and **Security Analyst** are included in the *Ten Most In-Demand Digital Roles* in the Digital Economy
- **Business Analyst** is one of the *Top Three Most In Demand Business Roles* in the digital economy

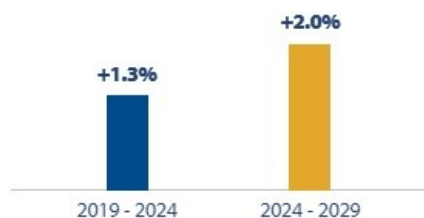Source: https://www.ictc-ctic.ca/wp-content/uploads/2021/08/digital-talent-outlook-for-2025.pdf

Job Outlook in BC

Information systems analysts and consultants

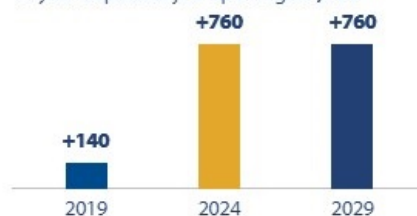### B.C. Labour Market Outlook (2019-2029)

Provincial outlook

Forecasted average employment growth rate

+1.3% (2019 - 2024)
+2.0% (2024 - 2029)

Source: B.C. Labour Market Outlook

Job openings

10 year expected job openings: 7,600

+140 (2019)
+760 (2024)
+760 (2029)

Source: B.C. Labour Market Outlook

Composition of job openings

Replacement of retiring workers:
58.0%
4,410 openings

New jobs due to economic growth:
42.0%
3,190 openings

Source: B.C. Labour Market Outlook

Source: https://www.workbc.ca/careers/2171https://www.workbc.ca/careers/2171

The **Employment Outlook for BC** provides job openings projections for Information Systems Analysts and Consultants within BC regions:

Cariboo

Employment in 2019:	170
Average annual employment growth(%) 2019-2029:	1.6%
Expected number of job openings 2019-2029:	60

Kootenay

Employment in 2019:	220
Average annual employment growth(%) 2019-2029:	1.4%
Expected number of job openings 2019-2029:	100

Mainland / Southwest

Employment in 2019:	13,670
Average annual employment growth(%) 2019-2029:	1.5%
Expected number of job openings 2019-2029:	5,370

North Coast & Nechako

Employment in 2019:	100
Average annual employment growth(%) 2019-2029:	0.0%
Expected number of job openings 2019-2029:	20

Northeast

Employment in 2019:	70
Average annual employment growth(%) 2019-2029:	2.3%
Expected number of job openings 2019-2029:	30

Thompson-Okanagan

Employment in 2019:	980
Average annual employment growth(%) 2019-2029:	0.9%
Expected number of job openings 2019-2029:	370

Vancouver Island / Coast

Employment in 2019:	3,000
Average annual employment growth(%) 2019-2029:	2.2%
Expected number of job openings 2019-2029:	1,650

Source: https://www.workbc.ca/careers/2171

You can learn more about working as an **Information Systems Analysts** in BC:

- **WorkBC Career Profile for Information Systems Analysts**
  https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx

Types of Employers

As an Information Systems Analyst you will work in information technology (IT) consulting firms and telecommunications businesses, financial institutions such as banks and credit unions, and IT departments in both the private and public sectors. You may work in hardware and software developers, manufacturers, retailers, IT companies, government agencies, and insurance companies. You may also be self-employed and consult with several companies.

Sources:

- **WorkBC Career Profile for Information Systems Analysts**
  https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx
- **Career Cruising** – Profile for 'Business Analysts'
  http://www.vpl.ca/digital-library/career-cruising

Available from the VPL Digital Library | Explore our Digital Library page

Salary

In BC, the annual provincial median salary is $79,253; the provincial hourly median rate is $38.00.

Analysts' earnings depend on many factors. The more experience and education they have, the more money they can make. People with more responsibility also earn higher salaries.

Analysts who work full time usually get benefits as well as a salary. These often include extended health care, paid vacation time, and sick days. They may also receive help with a retirement plan. Some analysts get performance bonuses, too.

Job Bank Canada provides recent hourly wages for information systems analysts in BC regions:

Community/Area	Wages ($/hour)		
	Low	Median	High
British Columbia	22.50	37.00	60.10
Cariboo Region	N/A	N/A	N/A
Kootenay Region	N/A	N/A	N/A
Lower Mainland–Southwest Region	21.00	36.06	61.54
Nechako Region	N/A	N/A	N/A
North Coast Region	N/A	N/A	N/A
Northeast Region	N/A	N/A	N/A
Thompson–Okanagan Region	22.50	37.00	60.10
Vancouver Island and Coast Region	30.00	39.00	52.88
Canada	25.00	41.03	60.10

Source: https://www.jobbank.gc.ca/marketreport/wages-occupation/22490/BC

Sources:

- **WorkBC Career Profile for Information Systems Analysts**
  https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx
- **Career Cruising** – Profile for 'Business Analysts'
  http://www.vpl.ca/digital-library/career-cruising
- Available from the VPL Digital Library | Explore our Digital Library page
- **JobBank Canada** – Computer Systems Analysts
  https://www.jobbank.gc.ca/marketreport/wages-occupation/22490/BC

Working Hours

Information systems analysts usually work a regular 40-hour week. However, during the implementation of a new computer system or software, trouble-shooting critical applications or times of problems you may be require to work long hours.

Evening and weekend work is necessary when computer/network maintenance and upgrades can only be performed after business hours. Depending on your position, you could be on call 24 hours a day to helping solve the problems of systems users.

2. Skills, Education and Experience

Skills

- exceptional communication, research and planning skills
- problem solving and decision making
- good with people
- critical thinking
- project management

Education and Experience

A bachelor's degree in computer science, computer systems engineering, software engineering, business administration or a related discipline is usually required.

Some information systems analysts and consultants may combine a college program in computer science with work experience. Those performing systems analysis under specific technical platforms may be required to have vendor certification.

Qualifications

This occupation does not require certification in British Columbia.

Experienced systems analysts and consultants can apply for the Information Systems Professional (ISP) designation through the Canadian Information Processing Society.

- For more information on the ISP designation see: https://cips.ca/isp/

Sources:

- **WorkBC Career Profile for Information Systems Analysts**
  https://www.workbc.ca/Jobs-Careers/Explore-Careers.aspx
- **Career Cruising** – Profile for 'Business Analysts'
  http://www.vpl.ca/digital-library/career-cruising

Available from the VPL Digital Library | Explore our Digital Library page

3. Finding Jobs

You'll find job advertisements in local newspapers, trade journals, and electronic sources, as well as through professional associations' publications.

Local Newspapers

You can look at the *Vancouver Sun* & *The Province* at Vancouver Public Library for free. Check the job postings daily, the careers section in the *Vancouver Sun* on Wednesdays and Saturdays and in *The Province* on Sundays.

Online Job Postings

- **Indeed.com**
  http://www.indeed.ca/
  Find jobs posted on a multitude of company career sites and job boards.
- **IT World Canada**
  https://www.itworldcanada.com/new-job-board-coming-soon
- **T-Net British Columbia**
  https://www.bctechnology.com/tech-careers.cfm

Professional Associations' Career Resources

- **BC Technology Industry Association**
  https://wearebctech.com/jobs/
- **ICTC CTIC Talent Programs – Job Seekers**
  Information and Communications Technology Council (ICTC)
  https://www.ictc-ctic.ca/talent/#jobseekers
- **eTalent Canada (ICTC)**
  https://www.etalentcanada.ca/
  employment programs, job market information, employment data

Identifying the Right Position

When you browse job advertisements, you'll find a range of different job titles that are relevant.

For information systems analysts, look for these related job titles (from NOC):

- Applications Analyst – Computer Systems or Information Systems
- Business Systems Analyst
- IT (Information Technology) Consultant
- Computer Consultant
- Computer Systems Analyst
- Systems Security Analyst
- Information Systems Business Analyst
- Information Systems Quality Assurance Analyst
- Management Information Systems (MIS) Analyst
- Systems Auditor

Creating a List of Potential Employers

You can use directories to produce lists of employers who work in the computer programming and software industry in Vancouver or the Lower Mainland. Contact them directly to find out if they're hiring. You can photocopy from the print directories at Central Library, or use the online directories from a computer connected to the internet.

- **BC Tech, 2020**
  includes company lists for: biggest BC tech companies, BC telecommunication companies, BC software developers, digital arts companies, industry associations and the top 100 tech companies in BC.
  https://biv.com/magazine/bc-tech-2020
  Also Available at the Central Library, 380 EL3CBh
- **BC Tech Association**
  https://wearebctech.com/members/member-directory/

- **T-Net – Member Directory**
  https://www.bctechnology.com/scripts/members_only.cfm?t=directory&dstr=
  Membership required to access – membership is available at no charge for personal, non-corporate use
- **Reference Canada**
  http://www.vpl.ca/digital-library/reference-canada
  Click on "Start Search" beside Canadian Businesses, then select the "Advanced Search" button. Select both "Keyword/SIC/NAICS" under Business Type and "City" under Geography. In the top search box enter "computer systems" and click SEARCH. Select the appropriate headings. Lower down, select the Province, choose the cities, and click the "View Results" button.
  Available from the VPL Digital Library | Explore our Digital Library page

NOTE: *You can access this database from a Library computer. If you are using a computer from outside the Library, you will need a Vancouver Public Library card to login to this database. After clicking on the database name, you will be asked to enter your library card number and PIN (usually last four digits of your telephone number).*

4. Applying for a Job

In Canada, employers usually expect to receive a resume (curriculum vitae) and a cover letter that identifies the position you are applying for and summarizes your relevant experience.

Use the library catalogue, http://vpl.bibliocommons.com/ to find books on writing resumes and cover letters specific to your industry.

To learn about applying for jobs in Canada, use the following pathfinders which are available in print at the Central Library or online at http://skilledimmigrants.vpl.ca/.

- **Writing Resumes and Cover Letters**
  Go to http://skilledimmigrants.vpl.ca
  [Search Writing Resumes and Cover Letters]

- **Getting Canadian Work Experience**

  Go to http://skilledimmigrants.vpl.ca

  [Search Getting Canadian Work Experience]

- **Networking for Employment**

  Go to http://skilledimmigrants.vpl.ca

  [Search Networking for Employment]

- **Learn More About Working in BC and Canada**

  Go to http://skilledimmigrants.vpl.ca

  [Search Learn More About Working in BC and Canada]

5. Getting Help from Industry Sources

Industry Associations

Associations and organizations for information technology in BC and Canada provide assistance to individuals.   Some require paying a fee for membership.

- **BC Tech Association**

  https://wearebctech.com/

- **Information and Communications Technology Council ICTC**

  http://www.ictc-ctic.ca

  See section on GO Talent Program connecting employers with internationally educated professionals https://www.ictc-ctic.ca/talent/

- **Association of Professional Canadian Consultants (APCC)**

  http://www.apcconline.com/

  The APCC is a Canadian not-for-profit professional association designed for the independent IT consultant.

- **Canadian Information Processing Society (CIPS)**

  http://www.cips.ca/

- **IEEE Computer Society Vancouver Chapter**

  - Vancouver https://site.ieee.org/vancouver-cs/about

  - International https://www.computer.org/

Industry Journals

Search the Vancouver Public Library catalogue for journals related to your profession.

- **BC Tech Association - Newsletters**
  https://wearebctech.com/news/bc-tech-newsletters/
- **BC Tech** (A division of Business In Vancouver)
  Available at VPL Central Library, 380 EL3CBh
  https://biv.com/magazine/bc-tech-2020

Questions? Please ask the Information Staff in the Central Library, Vancouver Public Library or telephone 604-331-3603.

Please note that the information in this guide is also available online through the Skilled Immigrant InfoCentre website at http://skilledimmigrants.vpl.ca/ *.*