Job Roles and Responsibilities in Canada

Information Systems Analysts & Consultants
Acknowledgments

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Disclaimer

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Please contact the Winnipeg Technical College at 989-6500 or www.wtc.mb.ca if you have questions about the contents of this document
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Introduction

This package focuses on the job roles and responsibilities of information systems analysts and consultants. Because the information technology sector is constantly changing, it is important to keep up to date with current job roles and technology.

The most common areas of work in Information Technology (IT) are the following: Software (72.3%); Web Internet/Intranet (57.7%), and Database (51.3%). The next group involves the areas of hardware, network, security systems, E-commerce and interactive media. Most IT occupations engage in multi-tasking across various areas of work.¹

Description

Information systems analysts and consultants conduct research, develop and implement information systems development plans, policies and procedures, and provide advice on a wide range of information systems issues. They are employed in information technology consulting firms and in information technology units throughout the private and public sectors or they may be self-employed. Information systems analysts and consultants are classified under the National Occupation Classification (NOC) # 2171.

Example Titles

- Computer consultant
- Computer systems analyst
- Informatics consultant
- Informatics security analyst

• Information systems business analyst
• Information systems quality assurance analyst
• IT (information technology) consultant
• Management information systems (MIS) analyst
• Systems auditor
• Systems consultant
• Systems security analyst

Where They Find Work

In Manitoba, employment is concentrated in Winnipeg where approximately 83% of the jobs are located. Information systems analysts and consultants are employed in Professional scientific and technical service (34%), Public administration (14%), Finance and insurance (12%), Information and cultural industries (11%), Wholesale trade (6%), Manufacturing (4%) and Utilities (3%).

Language Requirements

Computer/network operators and web technicians, information systems analysts/consultants and web designers/developers should be able to communicate clearly in English to do their job well. It is very important to employers that you have good oral communication skills so you can communicate with them and with your co-workers.

It is important to note that language entrance requirements and test requirements vary in different colleges. Contact the colleges to see what is required.

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2 www.mb.jobfutures.org
Recommended Canadian Language Benchmark Levels for Information Systems Analysts and Consultants

<table>
<thead>
<tr>
<th>Speaking</th>
<th>Listening</th>
<th>Reading</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

Recommended TOEFL scores

<table>
<thead>
<tr>
<th>Paper Based</th>
<th>Computer Based</th>
<th>Internet Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>550</td>
<td>213</td>
<td>80</td>
</tr>
</tbody>
</table>

For those individuals where English is an Additional Language (EAL), it is recommended that you take a Canadian Language Benchmark Placement Test to determine your level of English, and to see which English classes are available to you. Contact the Winnipeg English Language Assessment and Referral Centre for an appointment:

**Winnipeg English Language Assessment and Referral Centre**

400 - 275 Portage Avenue
Winnipeg, Manitoba R3B 2B3
Phone: 204-943-5387

**Skills**

Systems analysts and consultants need the following characteristics:

- An interest in business systems and finding creative solutions to business problems
- Ability to think logically and creatively to analyze problems
- Ability to take a step-by-step approach and pay close attention to detail while performing routine tasks
- Ability to handle the stress of deadlines and working on several projects at the same time

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3 Note: This occupation has not been formally benchmarked.
4 These are the current TOEFL entrance requirements at some colleges.
• Ability to express technical concepts clearly to people with no technical background
• Good personal interaction skills
• Ability to work alone or as a member of a team
• Project management skills (optional), which include planning, supervising or coordinating the work of others, budgeting and communicating well with clients
• An interest in keeping up-to-date with new developments in the field

Do you have many of these skills?

Main Duties

The following is a summary of the main duties for the following occupations:

• Information systems business analysts and consultants meet with clients to identify and document requirements, conduct business and technical studies, design, develop and implement information systems business solutions, and provide advice on information systems strategy, policy, management and service delivery.

• Systems security analysts assess physical and technical security risks to data, software and hardware, and develop policies, procedures and contingency plans to minimize the effects of security breaches.

• Information systems quality assurance analysts develop and implement policies and procedures to maximize the efficiency, effectiveness and overall quality of software products and information systems.

• Systems auditors conduct independent third-party reviews to assess quality assurance practices, software products and information systems.

Do you think you would enjoy doing the work described above?
The Importance of Safety in Canada

Safety in the workplace is very important in Canada. If your employer sees you are not listening to the safety rules, you may be fired immediately.

The company is responsible for:

- Training employees how to work safely
- Telling employees about things that are dangerous in the workplace
- Giving employees safety equipment and make sure they wear it

The employee is responsible for:

- Following the company’s safety rules (sometimes called “policies”)
- Wearing safety equipment
- Telling the supervisor if they see something that is dangerous
- Not doing anything that they think is unsafe

It is your responsibility to ask questions when you don’t understand.

For more information: www.safemanitoba.com

Work Environment

Information systems analysts and consultants work in an office setting during regular business hours (Monday to Friday, 9 a.m. to 5 p.m.), but they may work in the evenings and on the weekends to do new installations or to solve unexpected problems. They spend long periods of time in front of a computer monitor that can lead to eye strain or wrist problems. Some of these professionals move from site-to-site to service client needs, while some others are assigned to one specific client for the duration of a contract. Shift work, overtime and travel may be
required in this occupation. Approximately 10% of this occupation is self-employed.

**Earnings**

**In Manitoba**

- $32,000.00 per annum - starting
- $59,000.00 per annum - average
- $98,000.00 per annum – high

**Average in Canada**

Hourly wage: $29.45

**Education / Training**

- There are a wide variety of degree, diploma and certificate programs related to computer programming and systems analysis offered by universities, colleges, technical institutes and private vocational institutions in Manitoba.
- Some high schools in Manitoba offer a program in information technology.

**Employment Requirements**

- A bachelor’s degree in computer science, computer systems engineering, software engineering, business administration or a related discipline, or completion of a college program in systems analysis is required.
- Experience as a computer programmer is usually required.

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5 www.mb.jobfutures.org
6 www.jobfutures.ca
Career Paths

Many information systems analysts start off as computer programmers and, with experience, take on more responsibility. They may move into security analysis, systems testing or information systems management.

Experience in a particular type of business may result in movement to operational jobs. Further advancement opportunities to management positions depend on the size and nature of the organization.

Those who have business experience or training may move into information systems consulting positions or establish their own consulting firms.

Employment Opportunities

Employment prospects for experienced information systems analysts and consultants are expected to be good in the period 2006 to 2010. Employment in Manitoba in 2006 was estimated at 1,985.

Currently there are fewer opportunities for recent graduates, but the long-term outlook is more promising as the importance of information technology in the workplace continues to grow.

Manitoba has a very small software development sector, so most jobs are found in the information technology branches of large organizations or in consulting companies. The popularity of information technology related courses in universities and colleges ensures a good supply of new recruits to the profession and creates a competitive market for job seekers.
Professional Associations


- **Association of Information Systems Professionals**, 101-605 Des Meurons, Winnipeg, MB, R2H 2R1, (204) 237-6378

- **Canadian Information Processing Society**, P.O. Box 2610, Winnipeg, MB, R3C 4B3, (204) 947-2067, Fax: (204) 222-9262

References


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