**出處:** **http://www.academicinvest.com/science-careers/mathematics-careers/how-to-become-a-data-analyst**

**How to Become a Data Analyst: Career Path Guide**

If you want to become a data analyst, you first need to determine if this career path is a good fit for you. If the following description sounds like you, then you’re probably well suited for a career as a data analyst:

Those who become data analysts are typically individuals with a natural aptitude in mathematics, statistics and data. They also tend to have excellent analytical skills, which allow them to solve complex problems, and excellent communications skills, which allow them to present the solutions to those problems.

Those who become data analysts tend to enjoy not only exploring data on the surface; they enjoy uncovering the story and explanations behind the data.

Becoming a data analyst is an excellent career choice for those who want a challenging and rewarding career in data analytics and business intelligence. It is a great career choice for those who want the ability to work with the executive or departmental management of a company, and want to have a direct impact on the operations of that company.

*Below we've outlined what you'll need to begin a career as a data analyst. We've also included helpful information for this career, such as job description, job duties, salary expectations, a list of possible employers and much more!*

**Education Needed to Become a Data Analyst**

To become a data analyst, you typically need at least an undergraduate degree in a field such as accounting, statistics, mathematics, computer science or business. Some employers may require data analysts to have a master’s or doctoral degree in one of these areas, or a closely related field.

Typically, career advancement opportunities for data analysts require advanced training in the usage of specific software products.

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**What is a Data Analyst?**

A data analyst is someone who scrutinizes data-based information using data analysis tools. The meaningful results they pull from the raw data helps their employers or clients make important operational decisions by identifying various informational facts.

**Data Analyst Job Description**

The job description of a data analyst can vary from one industry sector to the next, and from one employer to the next. In general however, data analysts are responsible for looking at and summarizing data in order to extract useful information and develop conclusions. Employees in a different department, such as executive management or marketing, to help advance the objectives of the company as a whole, then use these conclusions.

Data analysts must be able to ask the right business questions, analyze the resulting data effectively, and understand the appropriate statistical techniques in order to harness the multitudes of unstructured data.

Data analysts must apply a wide range of skills when extracting and analyzing data, and presenting the results to executive management or departmental managers, such as business acumen, presentation skills, database skills, analysis skills, and often coding abilities.

**Data Analyst Job Duties**

• Cull data through advanced computerized models

• Remove erroneous data

• Perform initial analysis to assess the quality of the data

• Perform further analysis to determine the meaning of the data

• Perform final analysis to provide additional data screening

• Extrapolate data patterns from computer model

• Prepare reports based on analysis and present to management

**Who Hires Data Analysts?**

Data analysts work part-time, full-time and in a contractual basis all industries, ranging from non-profit organizations, government and education, to high-tech, finance, and consumer products.

**Companies that hire Data Analysts include:**

• Construction companies

• Utility companies

• Oil, gas and mining companies

• Hospitals and health care organizations

• Colleges and universities

• Federal, provincial/state and municipal government departments

• Transportation companies

• Telecommunications companies

• Insurance, finance and banking organizations

• Management consulting companies

• Manufacturing companies

**Find Data Analyst Job Opportunities**

Data Analyst Jobs - [**Canada**](http://academicinvest.jobthread.com/search?search_string=&search=1&go=Find+Jobs&job_function_ids%5B%5D=13&job_function_ids%5B%5D=2&job_function_ids%5B%5D=1&location_string=&country_code=ca&distance=50&posted_time=&sort_by=date)

Data Analyst Jobs - [**United States**](http://academicinvest.jobthread.com/search?search_string=&search=1&go=Find+Jobs&job_function_ids%5B%5D=13&job_function_ids%5B%5D=2&job_function_ids%5B%5D=1&location_string=&country_code=us&distance=50&posted_time=&sort_by=date)

**Skills and Traits Needed to Become a Data Analyst**

In order to become an effective and successful data analyst, you need to posses a certain set of skills and personality traits. These skills and traits will allow you to perform your job duties with competence, as well as help you to overcome the challenges of a career as a data analyst.

• Enjoy working with numbers, data and statistics

• Excellent communication and presentation skills

• Skilled in data visualization and reporting software

• Proficiency with SQL (structured query language) programming

• Proficiency with Microsoft Excel

• Coding and programming abilities

• Enjoy exploring stories and explanations that data may reveal

• Enjoy providing recommendations to decision makers

• Do not require a lot of social interaction during the day

• Have an analytical mind and enjoy problem solving

**Success Tip:**Some of these skills may not be a requirement of the job you are applying for, but having them can be advantageous in your career. For example, you can have a successful career as a data analysis without knowing how to write a line of SQL, but knowing SQL will simplify things when you try to solve problems that are more complex.

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**Data Analyst Salary Level: How Much Do They Earn?**

The salary level of data analysts can vary based on their personal qualifications, the size and type of their employer, the specific responsibilities of their job, and many others.

**Data Analyst Salary Alberta:**According to the 2011 Alberta Wage and Salary Survey, Albertans working as part of the *Information Systems Analysts and Consultants* occupational group earn an average of between $27.37 and $46.44 per hour.

**Data Analyst Salary Canada:**According to Service Canada, the average salary level of workers in the*Information Systems Analysts and Consultants* occupational group is $63,981 per year.

**Data Analyst Salary United States:**According to the United States Bureau of Labor Statistics, the median salary level of *Operations Research Analysts* is $72,100 per year.

**Careers Similar to Data Analyst**

Listed below are careers in our database that are similar in nature to Data Analyst, as they may involve many of the same skills, competencies and responsibilities.

• [Business Analyst](http://www.academicinvest.com/science-careers/computer-science-careers/how-to-become-a-business-analyst)

• [Financial Analyst](http://www.academicinvest.com/business-careers/finance-careers/how-to-become-a-financial-analyst)

• [Management Analyst](http://www.academicinvest.com/business-careers/management-careers/how-to-become-a-management-analyst)

• [Quantitative Analyst](http://www.academicinvest.com/science-careers/mathematics-careers/how-to-become-a-quantitative-analyst)

• [Statistician](http://www.academicinvest.com/science-careers/mathematics-careers/how-to-become-a-statistician)

**References: How to Become a Data Analyst**

Please consult the references below to find more information on the various aspects of a career as a Data Analyst.

Alberta Learning and Information Service website: [alis.alberta.ca](http://occinfo.alis.alberta.ca/occinfopreview/info/browse-occupations/occupation-profile.html?id=71003256)

CNBC website: [www.cnbc.com](http://www.cnbc.com/id/100792215)

Service Canada website: [www.servicecanada.gc.ca](http://www.servicecanada.gc.ca/eng/qc/job_futures/statistics/2171.shtml)

United States Bureau of Labor Statistics website: [www.bls.gov](http://www.bls.gov/ooh/Math/Operations-research-analysts.htm)

**Scholarships for Becoming a Data Analyst**

The Applicable Majors section below shows fields of study relevant to a career as a Data Analyst. You can search for scholarships matched to those fields of study on our [Business Scholarships](http://scholarships.academicinvest.com/business-scholarships) and [Science Scholarships](http://scholarships.academicinvest.com/science-scholarships) pages.

**Success Tip:** Be sure to apply for any scholarships that you even barely qualify for, as there are millions of dollars of scholarships that go unused every year due to a lack of applicants!

**Becoming a Data Analyst: Applicable Majors**

Studying one of the university majors listed below is an excellent starting point to becoming a data analyst. Click on the links to find out what else you can do with these majors!

[Accounting](http://www.academicinvest.com/category/major/accounting)

[Computer Science](http://www.academicinvest.com/category/major/computer-science)

[Mathematics](http://www.academicinvest.com/category/major/mathematics)