

Data Analysis

POST-DEGREE CERTIFICATE

Why earn a certificate in data analysis?

The world is awash in data; recent estimates state that there are some 500 quadrillion gigabytes stored, an amount that doubles every 18 months. But data is only useful if it is turned into information. That's where the skill of a fully trained data analyst comes into demand.

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Data analysis is the science of collecting data, assessing it for trustworthiness, extracting information from it, and presenting it in a comprehensible informative way. These skills are vital to any institution such as government, business, or health care, where sound decisions must be made based on data and the way it is interpreted.

UFV's data analysis certificate can be an excellent "capstone" credential on top of a degree earned by students successful in a Business Administration, Science, or an Information Technology program.

Students who have not yet completed their first degree can still take courses in the certificate program, and earn the certificate after they have completed their degree.



"UFV's new certificate in Data Analysis is a timely initiative with a strong potential to provide valuable employment related skills in considerable local demand."

— UFV MATHEMATICS AND STATISTICS EXTERNAL REVIEW COMMITTEE.

Data Analysis certificate



“We’re very impressed with the strength of UFV’s data analysis program. With the rapid growth and demand for an analytically savvy workforce, programs like this will fuel graduates that are equipped with the analytics skills needed to lead organizations forward.”

— **WALLY THIESSEN,**
Manager Customer Engagement,
SAS Canada (the leader in business analytics)

WHY EARN A DATA ANALYSIS CERTIFICATE AT UFV?

As members of UFV’s Mathematics and Statistics and Computer Information Systems departments, we are committed to working closely with our students in order to allow them to reach their potential, and further, to inspire and excite them, just as we are inspired and excited by our subject.

Our classes are small, our focus is on teaching excellence, and there are opportunities for student research alongside faculty.

We use our expertise to energize the classroom.

WHAT SORT OF CAREER CAN I EXPECT?

The opportunities are endless. A data analyst can work in private industry, government, the public sector, or anywhere where data needs collection, maintenance, interpretation, and presentation. The job market is very active and growing quickly.

I’M INTERESTED. WHERE CAN I GET MORE INFORMATION?

The best place to start is our math department’s web page at www.ufv.ca/data where you’ll find details about specific courses, programs, and career options. You can also check out our online calendar at www.ufv.ca/calendar and read information about this new certificate carefully.

If you have specific questions, feel free to contact the Math and Stats department at 604-851-6304.

WHAT EXACTLY WILL I BE LEARNING?

As a data analysis student at UFV you will acquire the skills needed to extract reliable information from large data sets with skills that straddle the subjects of statistics and computing.

With carefully designed courses taken in both areas, you will gain the computer data base skills you need to house, extract, manipulate, and maintain data in the real world way in which it arises.

You will also learn the basic statistical techniques to design data collection into useful formats, assess its quality, analyze it, and present the information effectively to decision makers.

WHAT DO I NEED TO GET IN?

ENTRANCE REQUIREMENTS FOR THE POST-DEGREE CERTIFICATE:

- UFV Math 104 — Introductory Statistics (with a B+)
- **or** UFV Math 106 — Statistics I (with a B)
- **or** UFV Math 270 — Introduction to Probability and Statistics
- **or** UFV Math 271 — Introduction to Data Analysis and Statistical Modeling

Note: If you have the taken an equivalent course elsewhere, you may apply to have transfer credit for that course granted. **International** applicants should submit all official transcripts two months before the application date to allow enough time for evaluation.

and

- UFV Comp 150 — Introduction to Programming
- **or** UFV Comp 152 — Introduction to Structured Programming
- **or** UFV Comp 155 — Object-oriented Programming*

* recommended

Note: If you have the taken an equivalent course elsewhere, you may apply to have transfer credit for that course granted. **International** applicants should submit all official transcripts two months before the application date to allow enough time for evaluation.

and

- A bachelor's degree (in any subject). If you're currently still earning your first university degree, you may enrol in the courses of the data analysis certificate (provided you meet the prerequisites). You will be awarded the certificate when you have met its requirements, and met the requirements of your degree.

HOW LONG SHOULD IT TAKE FOR ME TO EARN MY CERTIFICATE?

If you have a bachelor's degree, you can begin the program and earn your certificate in about 10 months.

If you are still working on your first university degree, you can take the certificate courses along with the courses you are currently taking for your degree, and enter the program later. In that case, you will likely take longer than one year to complete the certificate.

A full description of the program can be found in the UFV calendar at www.ufv.ca/calendar.

CAN I GET ACADEMIC CREDIT FOR THE SKILLS AND KNOWLEDGE THAT I HAVE GAINED IN MY LIFE SO FAR?

Yes. UFV offers Prior Learning Assessment and Recognition (PLAR), a flexible assessment process that evaluates your experiential learning (what you already know and can do) for post-secondary credit. Experiential learning includes independent study, volunteer activities, non-credit courses, workplace learning, and military service.

To find out more, visit www.ufv.ca/plar or contact Susan Brown, Assessment Services Coordinator, PLAR at 604-851-6342 or susan.brown@ufv.ca.

WHAT COURSES WILL I TAKE?

Here is an outline of a typical schedule a UFV data Analysis student might take

FALL SEMESTER (SEPT-DEC)

COURSE	TITLE
MATH 271	Introduction to Data Analysis and Statistical Modeling
MATH/COMP 272	Statistical Graphics and Languages
CIS 230	Databases and Data Management Systems
MATH 350	Survey Sampling

WINTER SEMESTER (JAN-APR)

COURSE	TITLE
MATH/COMP 331	Data Quality
CIS 385	Project Management
Math 315	Applied Regression Analysis
Math 430	Time Series and Forecasting

SPRING SEMESTER (MAY-JUNE)

COURSE	TITLE
MATH/COMP 431	Data Mining

WHEN SHOULD I APPLY?

This program is only offered with a fall semester start date. Applications must be received by January 31 of the year in which you wish to begin your studies.

HOW MUCH DOES IT COST?

Domestic students can check the UFV calendar for the latest tuition fees. International students can visit www.ufv.ca/international to learn more about international tuition costs.

You should also visit the UFV Financial Aid and Awards office, which facilitates the disbursement each year of about \$12 million in federal and provincial student loans, grants, bursaries, scholarships, and awards to UFV students. A helpful budget planning worksheet is available online at www.ufv.ca/fineaid/budget.

SOUNDS GOOD. WHAT SHOULD I DO NOW?

The next step would be to check out our online calendar at www.ufv.ca/calendar and read the section about our new certificate program carefully.

Domestic students can visit www.ufv.ca/ar to download an application form or they can apply online at www.ufv.ca/ar/admissions/apply. There is a \$45 application fee.

International students can visit www.ufv.ca/international to find out how to apply. International students pay a \$150 application fee.

CAN I SPEAK WITH SOMEONE ABOUT MY OPTIONS?

Absolutely! We want to hear from you. If you're unsure of your direction, contact Student Services at 1-888-504-7441 to connect with an educational advisor, or arrange for career counselling.

You can also contact the Math and Stats department at 604-851-6304 or visit www.ufv.ca/data, or you can contact a program advisor at the Science Advice Centre at 604-557-4079.

International students can email international@ufv.ca or phone toll free 1-888-504-7741, local 4544 for more information on how to apply or how to transfer credits from another university.

WHAT SORT OF SUPPORT WILL I GET?

Our small class sizes and strong focus on teaching excellence means that our instructors are committed to working closely with you to ensure your success.



The information contained in this document is subject to change. Please refer to www.ufv.ca/data for up-to-date information. UFV reserves the right to cancel courses and programs.



About UFV

Nestled in the beautiful Fraser Valley just east of Vancouver, in B.C., UFV is a fully accredited, public university that enrolls almost 16,000 students each year. UFV has campuses in Abbotsford, Chilliwack, and Mission along with regional centres in Hope and Agassiz, and a growing presence in Chandigarh, India.

UFV is committed to exceptional post-secondary instruction and a nurturing learning environment. We are large enough to offer variety, yet small enough to offer the personal attention that our students need to thrive. Our small class sizes and focus on teaching allow our students to get to know their instructors and learn in a hands-on setting.

We offer a wide range of educational options, including two master's degrees, 15 bachelor's degrees (with majors, minors, and extended minors in more than 30 subject areas), almost 100 diploma and certificate programs, and more than a dozen trades and technology credentials. We believe that anyone who wants to go to university should be given the chance, so our admission policies are flexible, and we provide university prep courses and high school completion options. There are many options for learning: full-time, in class, online, as part of a structured program or one tailored specifically to your interests.

Many of our programs "ladder" into one another, allowing students to keep their options open. Our international programming makes for a culturally diverse student body and great opportunities to study abroad, while our continuing studies offerings make learning a lifelong experience.

UFV is recognized nationally for student success, an excellent learning environment, creative integration of programming, and our work with our local communities.

Get to know us better at www.ufv.ca.

