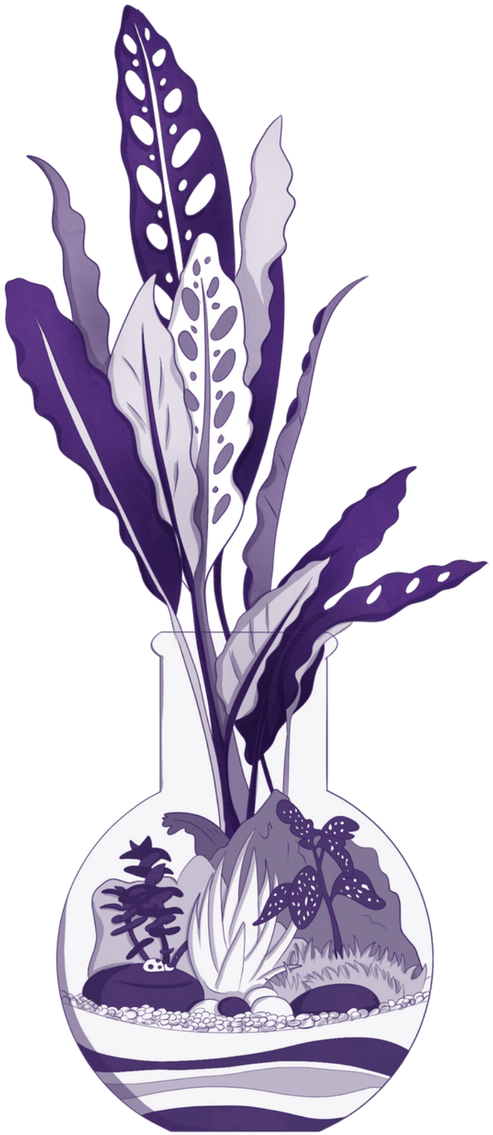
Parité
SCIENCES

Career Guidebook



Mathematics

M

Physics

P

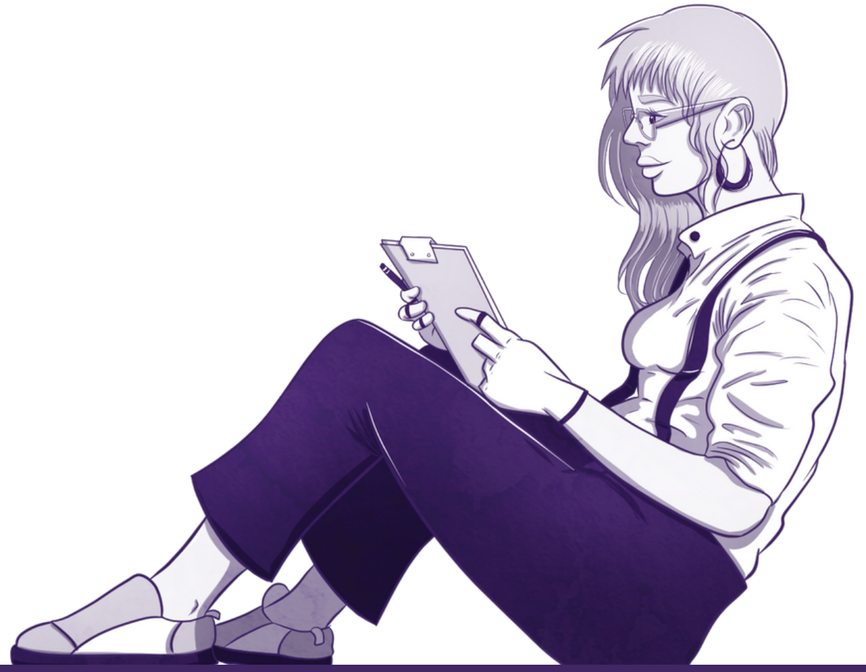
Computer Science

CS

Education and Careers in Mathematics

The perfect equation for stimulating projects and challenges

Guide Content



01 Profile of a mathematician

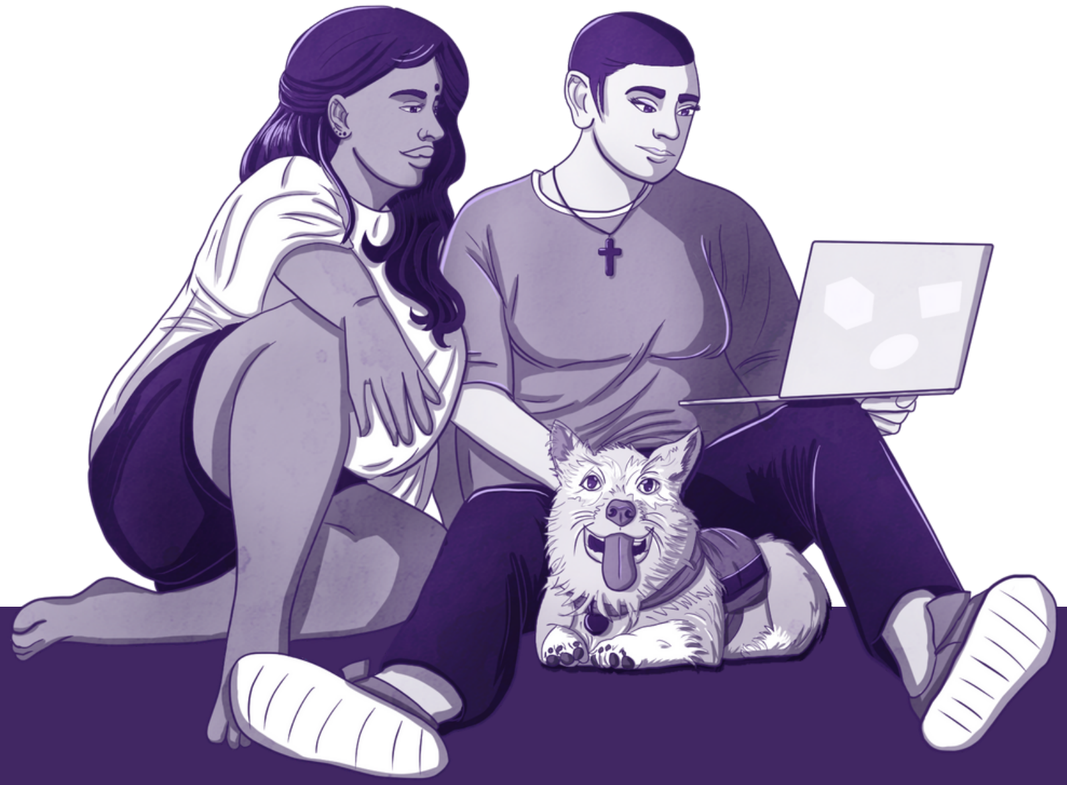
02 Training in Quebec

03 Career Fields

04 Testimonials

05 Remuneration

01 Profile of a Mathematician



A Mathematician

Is

- Curious
- Versatile
- Rigorous
- Ressourceful
- Creative

Like

- Problem-solving
- Collaborative teamwork
- To communicate

Has

- Organizational skills
- Critical thinking

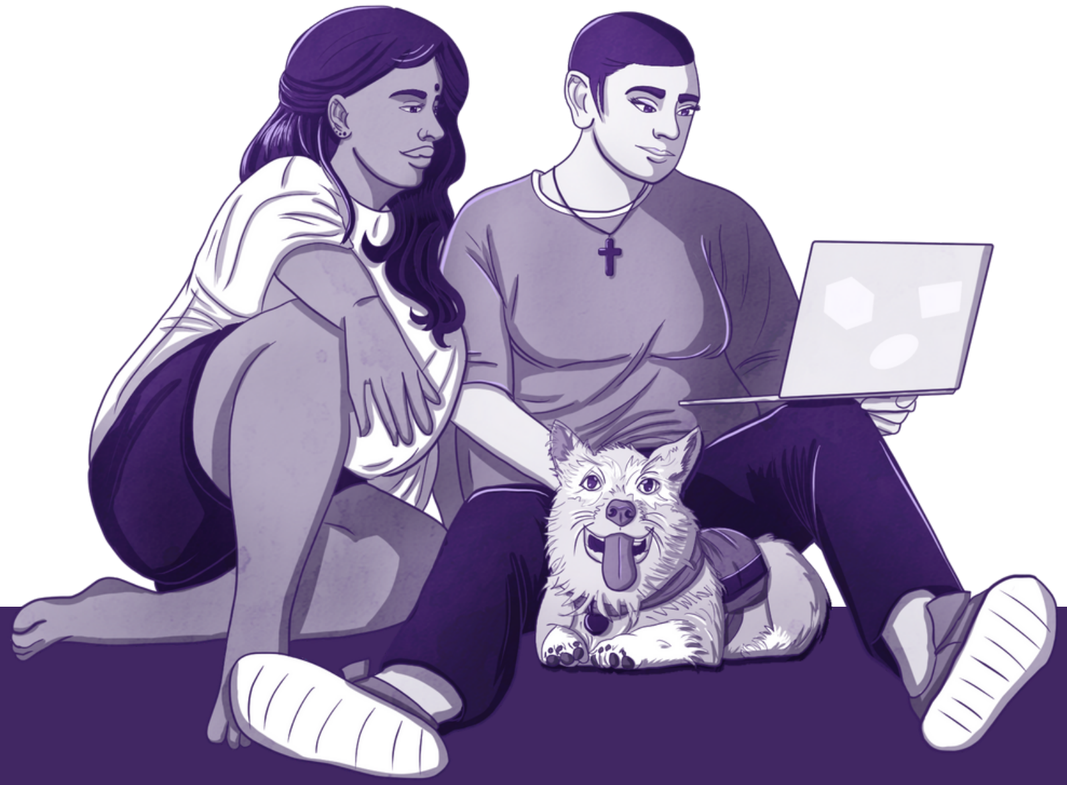
Can

- Work efficiently
- Be independent

* Source : Gouvernement du Canada (2020); Université Laval (service de placement)

02 Training

Career Trajectories



Pre-University Programs

Lead to a Diploma of College Studies (DEC)

Natural Sciences

Duration: 2 years
Specific training: biology, chemistry, mathematics (differential and integral calculus, linear algebra and vector geometry), physics

Computer Science and Mathematics

Duration: 2 years
Specific training:
chemistry, computer science, mathematics (differential and integral calculus, linear algebra and vector geometry, discrete mathematics), physics

Bachelor of Mathematics

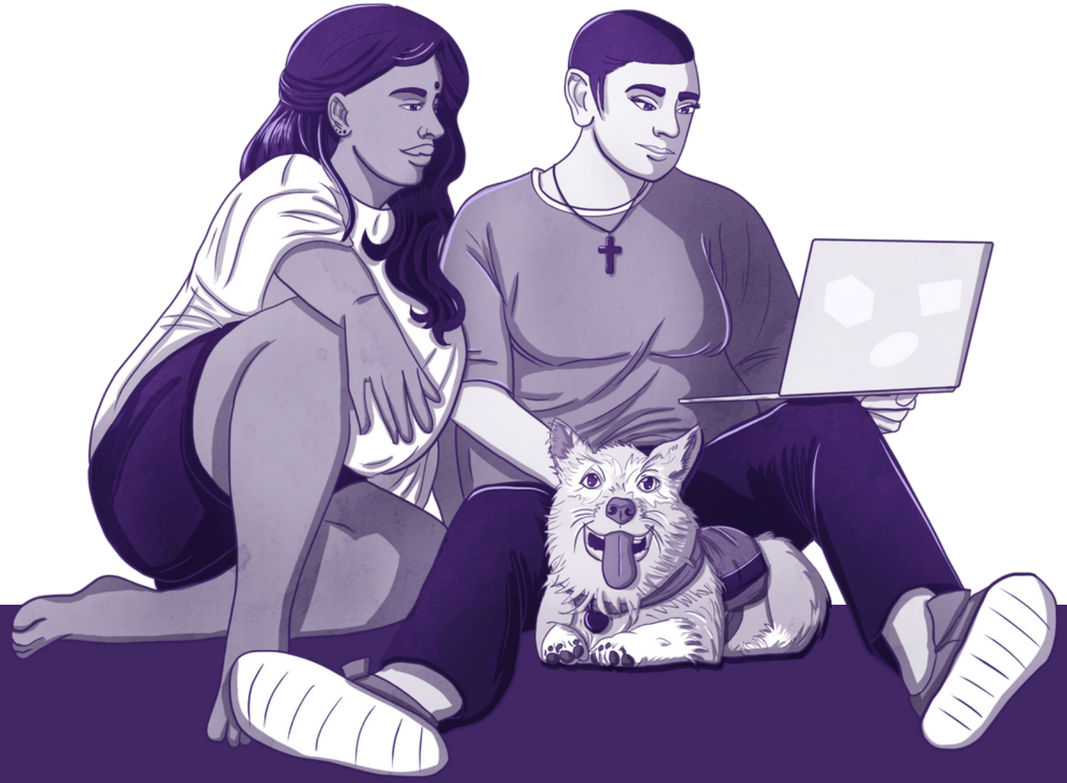
First Cycle

Duration: 3 years
Credits : 90

Minimum R-score varies by university
Mandatory courses: linear algebra, analysis, calculus, mathematics discrete, probabilities, stochastic processes, statistics

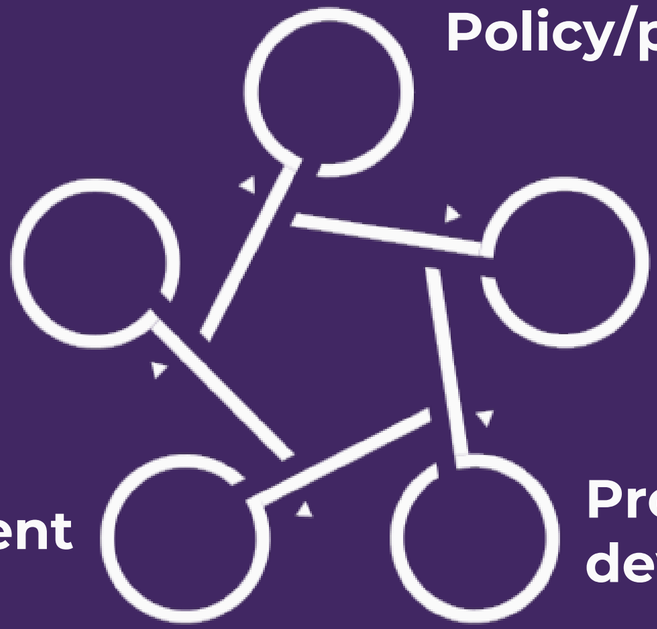
03 Career Fields

Different Sectors Hire Mathematicians



* Source : Fiches carrières en sciences de la nature du Cégep Limoilou

Public Service



Policy/program analysis

Statistics

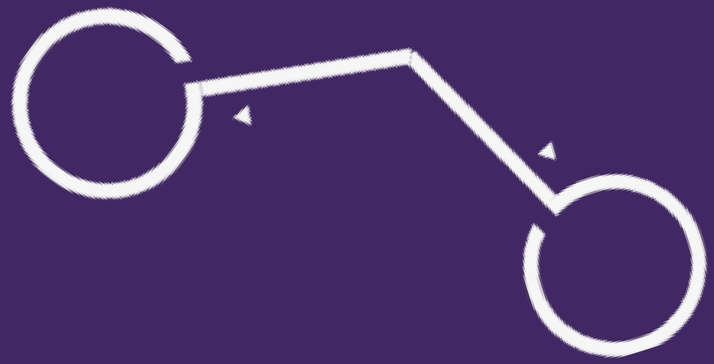
Demographics

Project management

Program and policy development

Teaching and Research

College level



University level

Health and Social Services

Epidemiology

Bioinformatics

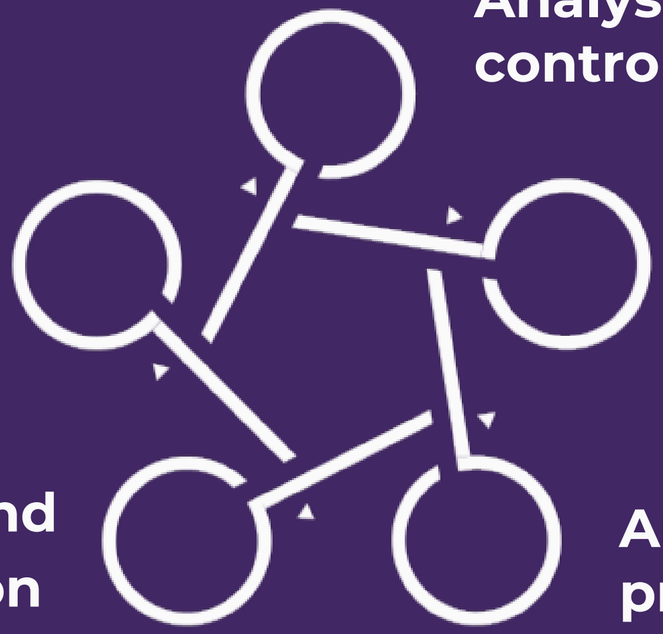
Bio-statistics

Genomics

Industry and Trade

Analysis and quality control

Modeling of industrial systems



Computer systems analysis

Operation simulation and optimization

Analysis in data processing

Services

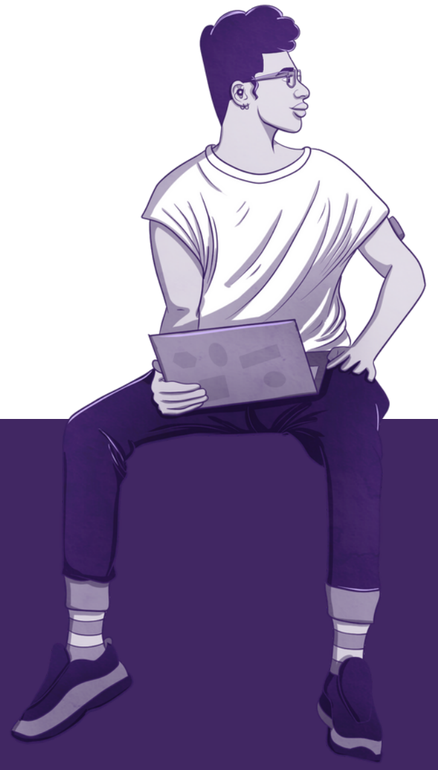
Market analysis / business analysis

Analysis of management systems

Communication and survey analysis

Finance and insurance

Transportation

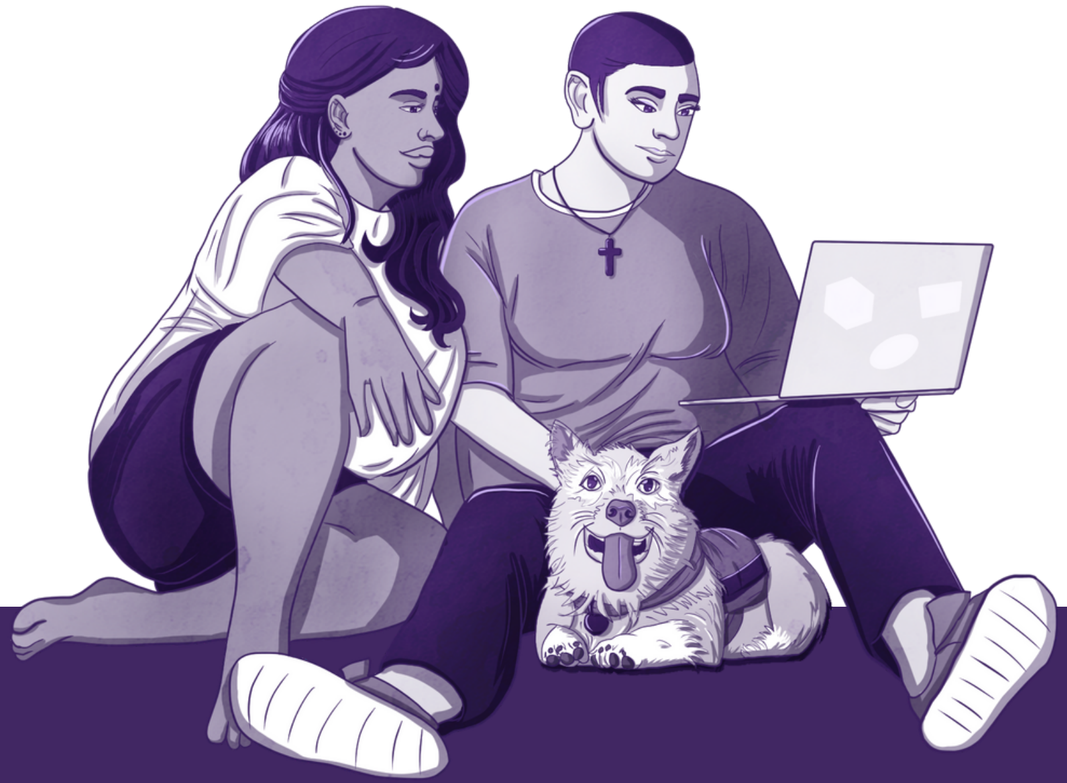


Examples of Employers

- Polling firms
- Finance/economic sectors
- Consulting firms
- Electronic industries and telecommunications
- Parastatal industries
- IT industries and High-Tech companies
- Pharmaceutical and clinical research companies
- Insurance companies
- Medical centres
- Research centres
- College and universities
- Federal and provincial governments

04 Testimonials

Profile of Professionals



Marie-Claude Guértin

Manager of the Biostatistics Department

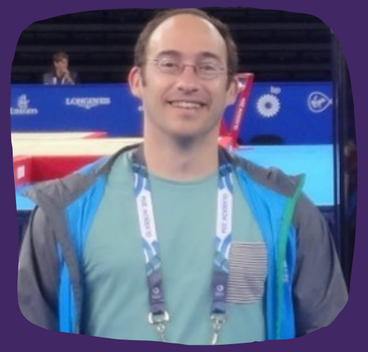
at Montreal Health Innovations Coordinating Center

Doctoral degree in Statistics, Université de Montréal;

"In collaboration with researchers and clinicians, I contribute to the design of clinical studies. I analyze the data collected to answer research questions about diagnosing, preventing and treating illnesses."

"I find it rewarding to participate in state-of-the-art research and see that the statistical analysis results enable us to advance our understanding. To ultimately improve people's care."

A challenge is to "work with non-statisticians. Their research questions are very concrete. The challenge is to convert them into theoretical statistical models, then simplify the results to get real, understandable answers."



Bruno Martin

Technical Leader in Software Development

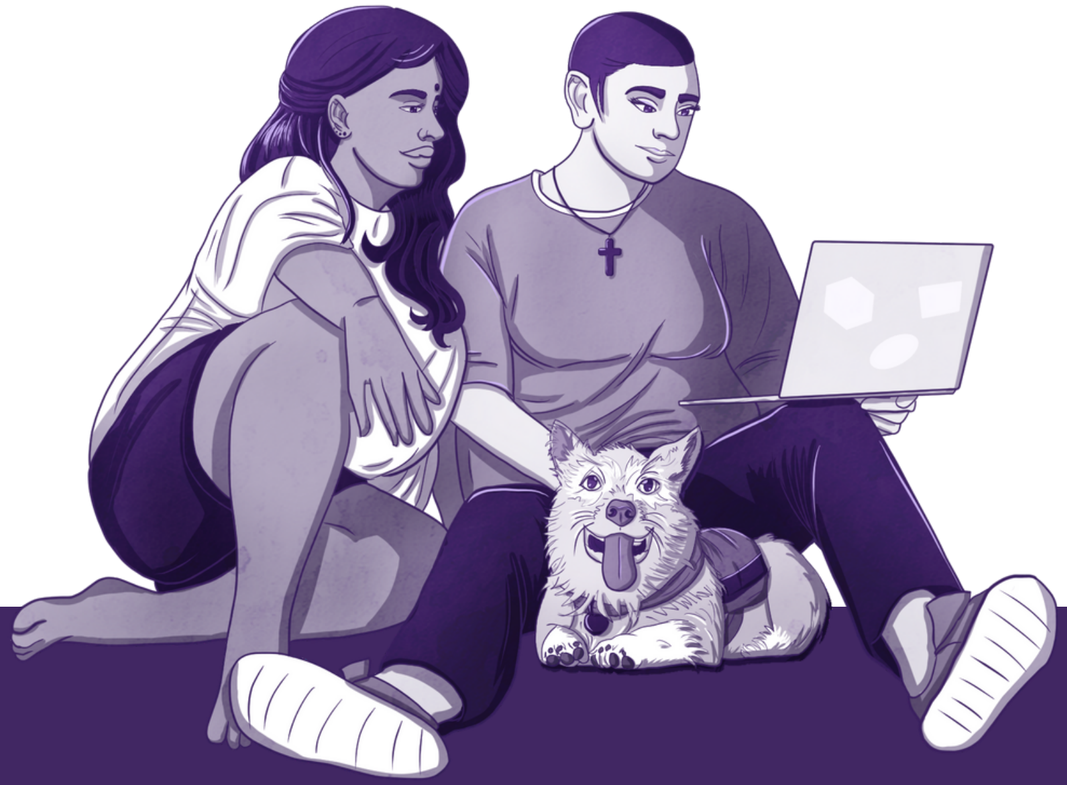
Master's degree in Mathematics, Université Laval
Pure and Applied Science, Cégep de Lévis

"I propose innovative technological solutions to businesses working in the areas of imagery and augmented and virtual reality."

"I love the possibility of continuously learning in several cutting-edge fields."

A challenge is to "always being on the lookout for new technologies and exploring and understanding new areas."

05 Remuneration



Annual Salary

$ 83,000

average per year

Hourly

$ 42 / hr
average

$ 26 / hr
minimum

$ 69 / hr
maximum

* Source : Emploi-Québec (2015); Gouvernement du Canada (2020); Université Laval (service de placement)

Our Partners

CENTRE DE RECHERCHES MATHÉMATIQUES

CRAQ
Comprendre l'Univers

CRSNG
NSERC

IVADO

FEC
CSQ
Fédération des enseignantes et enseignants de cégep (CSQ)

fneeq CSN
Fédération nationale des enseignantes et des enseignants du Québec

Fonds de recherche Nature et technologies Québec

Secrétariat à la condition féminine Québec

UBISOFT ÉDUCATION

Université de Montréal

Contact us

info@paritesciences.com

www.paritesciences.com

Parité
SCIENCES