



Futures in Innovation and Technology

An initiative by the First Nations Technology Council

Bringing the fastest growing demographic

and sector together

The **Futures in Innovation and Technology** initiative is creating a network of *Indigenous innovators* across the province who have the skills, certifications and supports to become leaders in the technology sector while building local economies in their home territories.

Through the **Futures** initiative, *Indigenous peoples* living in British Columbia can access funding for advanced training to become web developers, digital marketers, UX/ UI designers and more. The **Technology Council** has teamed with several government, industry and academic partners to make **Futures** possible.

Did you know...

...that as of 2016, less than 1% of the entire BC tech sector identified as Indigenous? Indigenous people represent the youngest and fastest growing demographic in Canada, with a population that has grown by more than 40% in just 10 years. That is more than four times the growth of any other demographic in Canada.

As transformational technologies rapidly re-shape our economy, the need for local digital talent has become a priority for BC and Canada. The 2016 TechTalentBC report warns of a talent crunch that threatens to leave 30, 500 unfilled jobs on the table. At least 30% of those jobs will need to be filled by underrepresented groups, such as Indigenous peoples.

We hear a lot of talk about reconciliation, diversity and inclusion. Through **Futures**, *Indigenous peoples* are empowered by our partners to ignite real change for both their communities and the broader tech ecosystem!

Where we started

Futures started in 2016 with a partnership between the **Technology Council** and Lighthouse Labs, opening space for Indigenous peoples to take the popular Web Development Bootcamp. The idea was to provide advanced, career oriented training in in-demand fields so students with foundational skills could advance their careers. We recognized that the higher up you go in specialized tech fields, the less Indigenous people you see.

The program soon expanded to six different skill areas, aligned with labour market demand:



Administrative
Professional



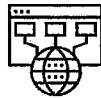
Digital Marketing



Web Development



Software Testing



Network Technology



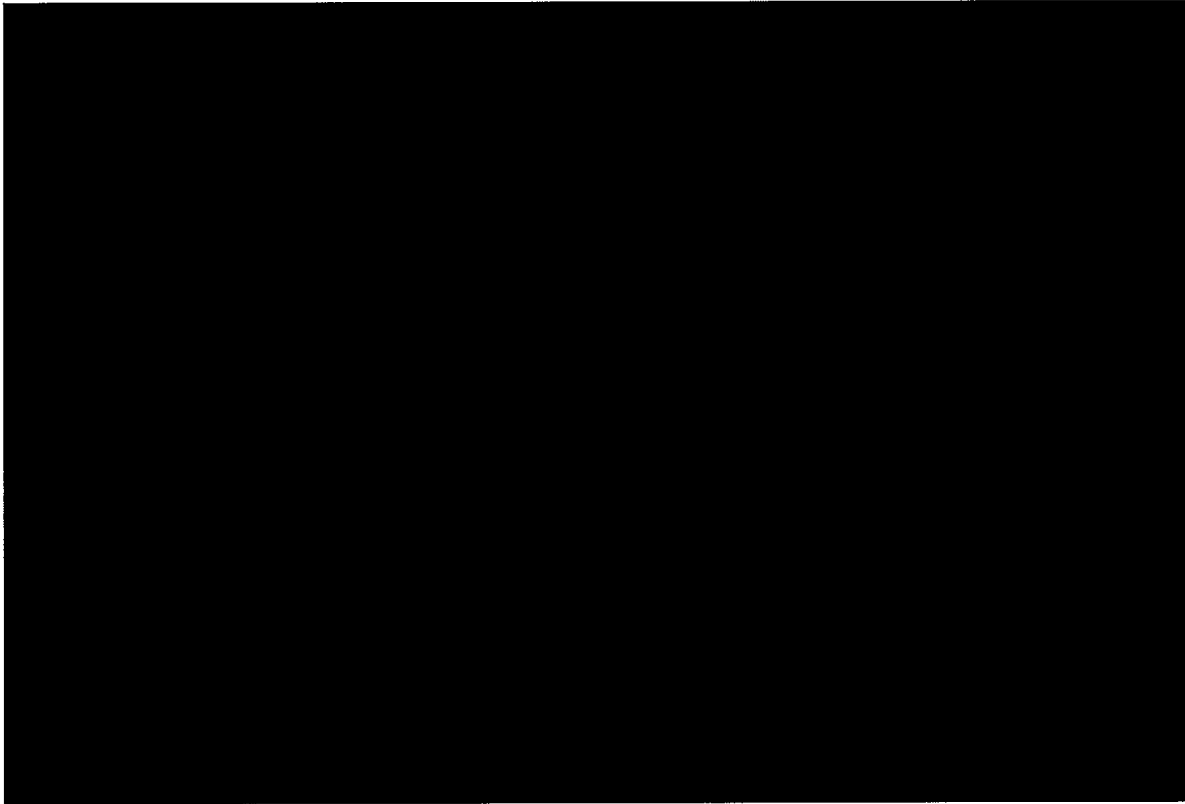
GIS/ GPS Mapping

I want to help create things that help our communities have more agency in tech development. There are so many cool and amazing opportunities out there for our people in tech and there are so many amazing things we can create that could truly make a difference.

- Samantha Nock, Cree/ Metis, Web Development Bootcamp graduate

Where we are now

More than 100 Indigenous peoples took Futures training from 2016 - 2019, representing 60+ Indigenous communities throughout BC.



The Technology Council has also responded to student feedback and community demand, expanding the program to include UX/ UI design and Drone technologies.



There's no reason why the next big tech start-up can't come from an Indigenous community. There's no reason why the next Elon Musk couldn't be an Indigenous entrepreneur.

- Jeff Ward, founder of Animikii Indigenous Technology

Beyond inclusion

The Technology Council doesn't just see Indigenous people being included in tech, we envision Indigenous voices actively transforming the tech sector as it responds meaningfully to reconciliation.

We're working to decentralize tech opportunities and bring Futures programs to remote regions of the province. Indigenous communities bring with them a rich culture, strong community values, and mindsets that are crucial to innovation. That's why we are exploring new partnerships, innovative delivery models and entrepreneurship programs next.

We envision Indigenous technologists not having to leave their home communities to pursue training or employment, instead using those skills to help empower their communities.

The tech industry is highly innovative and ever-changing, as such, I believe it is important to have people from all backgrounds share their ideas, but especially the holistic way of thinking that comes from Indigenous teachings and backgrounds. I can only imagine the types of ideas that will come from these varied backgrounds that can help not only First Nations communities grow in a positive way but also Canada and the world.

– Marina Galay-Bott, Dene/ Cree, Digital Marketing grad

If your company or organization is interested in participating in the **Futures program**, contact us at:

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Facebook: [FirstNationsTechnologyCouncil](#)

Phone: (604) 921 - 9939

Instagram: [fn_techcouncil](#)

Website: www.technologycouncil.ca

Twitter: [fn_techcouncil](#)

Address: 70 Orwell St, unit 102
North Vancouver, BC,
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FOUNDATIONS NVIT VIRTUAL CLASSROOM

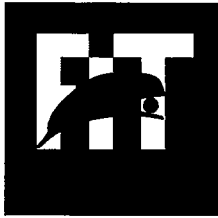
Hosted Online:
October 13 - January 15, 2021

Program Length:
12 Weeks

Application Deadline:
September 25, 2020

Call Tirzah to start your application
at 604-921-9939





Foundations in Innovation and Technology

About Foundations

Foundations in Innovation and Technology is supporting hundreds of Indigenous peoples throughout British Columbia to prepare for the digital economy and the changing nature of work. Did you know that more than 50% of jobs in Canada are at-risk of being impacted by automation and technological advancement over the next 10 years? Digital literacy – the ability to understand digital technologies and the Internet – will be necessary for all new jobs in the future.

The **First Nations Technology Council** is dedicated to advancing digital and connected technologies with Indigenous peoples in BC. This means bringing training for in-demand digital skills to where you live – whether that's in cities or in your home community. That's why we partner with community organizations and Indigenous Skills and Employment Training (ISET) holders to deliver the **Foundations program** in Indigenous communities in all regions of BC.

The Technology Council is excited to invite your community to take part in the **Foundations** program and help de-centralize the digital economy and create access for Indigenous peoples to the exciting opportunities presented by technology. For more information or to get in touch with our team visit technologycouncil.ca/foundations

Program overview

Foundations in Innovation and Technology is a 12-week exploratory program that introduces students to the basics of six different digital skills. The program courses include the following:



Computer Basics &
Professional Practice



Communications &
Digital Marketing



Web Development &
Coding



Software Testing



Network Setup &
Support



GIS/ GPS Mapping

Who is Foundations for?

Foundations is for Indigenous peoples who already have basic computer skills and are interested in exploring technology as a possible career path. Students must have either completed grade 10 or be willing to complete an in-community assessment. Students need to be available to study full-time for all 12 weeks. Admissions to this applied program is administered in partnership with the Nicola Valley Institute of Technology. Upon completion, students receive 24 NVIT credits.



Technology is such an important sector as far as employment. That's definitely why we took on this program. There's a lot of kids coming out of high school who wanted to learn these skills.

– *Terry Sparrow, Job Coach, Musqueam Employment*

Student Supports

We know that starting a new career or changing careers can be intimidating. That is why our team works to support students from the first time they contact us until graduation. Our program coordinators are available to answer student questions, assist with application, support students during their program and to choose more advanced training after the Foundations program.



Tuition



It's fully funded



Living allowance



Rent, relocation, travel, food, and daycare are eligible expenditures



Laptop



with all necessary software (students can keep upon completion of the program)

Indigenized Curriculum and Cultural Safety

The **Foundations program** has been designed by our own Indigenous education specialists in partnership with industry subject matter experts. The course curriculum is created with story in mind, and ensuring that students see Indigenous peoples represented in the teaching material. Each program module is taught by a different instructor with expertise in that specific field, and each instructor receives cultural safety orientation and training by the Technology Council.

Digital Elder-in-Residence

As part of our efforts to create a culturally-relevant and safe space for our students, the **Foundations program** includes one-on-one time spent with our Digital Elder-in-Residence. Elder **Glida Morgan** from the *Tla'amin Nation* greets students through virtual check ins and video chats to ensure each student receives the personal and cultural supports needed for success in the program.



Laddering into Advanced Training

The subject areas in the **Foundations program** have a link or “ladder” into our **Futures in Innovation and Technology program**. Futures provides funding for Indigenous students to take advanced, career-oriented training with our industry partners. So if there is a subject that a student falls in love with during **Foundations**, we are able to assist them with more advanced training in that area upon graduation. Admissions into a Futures program is not guaranteed. Each subject area has unique requirements.



You will learn a lot. You might find something new that you never thought you would want to do. I have a bright future in technology. Try the foundations program, you never know what you may like.

– **David Nelson**, *Tsimshian Nation, Prince Rupert cohort*

Program Outline

Each program course is taught in a two-week module, with 60 hours of in-depth classroom learning. The following is a description for each course delivered in Foundations.

1 Computer Basics and Professional Practice

This course introduces students to Microsoft Office Suite software programs and guides students through the development of professional conduct and communication practices in the workplace. Upon course completion students should be able to:

- create well-written and formatted documents utilizing MS Word;
- create and customize spreadsheets utilizing MS Excel;
- create and customize presentations using MS Power Point;
- demonstrate competency in both analog and digital file management;
- demonstrate competency in discovering and modifying data in MS Access;
- demonstrate professional conduct and verbal communication skills appropriate to an office environment.

2 Communications and Digital Marketing

This course introduces students to the foundational skills necessary for pursuing a career in communications and marketing, utilizing a combination of soft skills development, writing and technical training. Upon course completion students should be able to:

- identify the role of communications planning and its objectives;
- recommend tools and techniques for promoting community engagement;
- illustrate the role of the communications plan and its objectives;
- list effective and ineffective web design practices and their impacts;
- describe the role of evaluation and analytics in improving communications objectives;
- assess the role and impact of social media on various audiences;
- create and post original web content in line with industry standards; and
- identify and describe the role of Content Management Systems on the web.

3 Network Setup and Support

This course introduces students to the foundational knowledge necessary for pursuing a career in computer network maintenance, including basic skills development in the set-up, operation and maintenance of networked environments. Upon course completion students should be able to:

- set up, maintain and troubleshoot common hardware types;
- navigate, maintain and troubleshoot common software types;
- list common network types and data connections;
- identify common tools for data sharing, storage and security;
- apply principles and best practices around network, internet and office security.

4

Web Development and Coding

This course introduces students to the foundational concepts necessary for pursuing a career in web development, including basic skills development in front end design and customization, and back end development and problem solving. Upon completion students should be able to:

- describe the fundamental concepts and principles involved in online technology and web development;
- apply software development best practices, including documentation standards, naming conventions and security;
- utilize basic HTML and CSS to build a simple web page;
- select and apply more advanced web developing tools and concepts to customise a web page;
- explain fundamental programming language concepts and describe their purpose within a script;
- explain the fundamental concepts of JavaScript and its role in forming the backend functionality of a website;
- identify issues in a script and successfully apply problem solving techniques to resolve issues.

5

Software Testing

From video games to word processors, software needs to be tested for bugs. This course shows you how to recognize these bugs to ensure that the software created by developers is doing what it's supposed to do. Upon completion students should be able to:

- Understand why software is tested and describe the role of the tester
- Understand the Software Development Life cycle
- Describe various testing levels and methods
- Evaluate simple applications and apply informed decision-making on how to test
- Document test ideas in a test case
- Report simple bugs and document in a defect report

6

GIS/ GPS Mapping

This course introduces students to the foundational knowledge necessary for pursuing a career in GIS/GPS mapping, including skills development in data gathering and map customization, GIS analysis and modelling, and project plan development. Upon completion students should be able to:

- define the purpose of GIS, its fundamental components and commonly used tools for data collection;
- describe the spatial data and how it is modelled in GIS software;
- identify tools and methods for storing, labeling, selecting and managing GIS data;
- create, edit and process direct-to-digital data in GIS utilizing GPS;
- conduct basic GIS analysis and process modelling techniques;
- assess communications needs and stakeholders to design effective traditional and web-based maps;
- evaluate a mock GIS project to create a sample project plan.

