SFU APPLIED SCIENCES OUTREACH & SCIENCE AL!VE FREE YOUTH PROGRAMS

STEM SPEAKER SERIES

Paige Tuttösí – Robotics

Nima Boscarino – AI Ethics

Dr. Brian Fraser – Software Engineering

Neha Sharma – Computer Vision

Dr. Molly McVey – Sustainable Energy Engineering

STEM SPEAKER SERIES

The STEM Speaker Series provides high school students with the opportunity to meet and interact with university students, faculty members, and/or working professionals in STEM fields. See topics for January to March 2024 below. You can also check out past and future events here.

Innovation for a Sustainable Future

Jan 20, 2024 | 1:00 pm - 2:00 pm | Grade 8-12

Our guest speaker for January is [Dr. Rahul Singh](#), who is the Director of Innovation & Technology at the [BC Centre for Agritech Innovation](#). In this talk, Rahul will draw upon his 15 years of experience in building better and meaningful connections between technology providers and users within the agriculture, agrifood, and natural resources sectors. His passion and expertise lie in supporting technology translation and commercialization to address the pressing challenges posed by climate change, impacting both our communities and the planet. Join this talk to learn more!

[**REGISTER HERE**](#)

Critical Care Nursing

Feb 24, 2024 | 1:00 pm - 2:00 pm | Grade 8-12

Our guest speaker for February is Evelynn Yap. Evelynn is a registered nurse, specializing in critical care. With over seven years of experience, her diverse expertise spans across working in different hospital units and at health centers in northern Indigenous communities. Ever wonder how STEM concepts and skills intersect with healthcare? Join this talk for an opportunity to learn about Evelynn's valuable perspectives!

[**REGISTER HERE**](#)

Navigating the Skies with Software Tools

Mar 2, 2024 | 1:00 pm - 2:00 pm | Grade 8-12

Our guest speaker for March is Florian Krauthan. Florian is an engineering manager at FISPAN, a local financial technology company in Vancouver. He enjoys learning new programming languages and building open-source, practical tools in his spare time. Florian also holds a private pilot license and has recently started working on tools to assist pilots in flight planning. Join this talk to learn how Florian combines both his passion for coding and aviation!

[**REGISTER HERE**](#)

HACK THE FUTURE

Hack the Future is an online hackathon for Grade 8-12 girls, young women, and non-binary youth. Our aim is to foster a safe and inclusive learning environment centered on creativity, collaboration, and knowledge sharing. We welcome participants of all levels of expertise, whether you are new to coding or have some coding experience! For those who are new to coding, we will offer several pre-hackathon workshops to help you develop your skills in various digital tools and programming languages. The registration for the hackathon and pre-hackathon workshops is free. Join us to learn new skills, unleash your creativity, and win exciting prizes while making lasting connections with mentors and your peers! Check out our website to learn more.

Info Session

Jan 20, 2024 | 10:00 am - 11:00 am | Grade 8-12

Have questions about the Hack the Future hackathon? Join this info session to meet the organizers and get more details about!

REGISTER HERE

Pre-hackathon Workshop: Ideation

Jan 20, 2024 | 11:00 am - 12:00 pm | Grade 8-12

Coming out with project ideas could be challenging for some, especially if this is your first hackathon experience. Join this pre-hackathon workshop to get your creative juices flowing and brainstorm cool project ideas!

REGISTER HERE

Pre-hackathon Workshop: Python Basics

Jan 27, 2024 | 10:00 am - 12:00 pm | Grade 8-12

The Python basics workshop introduces the basics of the Python programming language and best practices in programming. This workshop will cover Python syntax, variables, conditionals, and loops. It is beginner friendly and will use Google Colaboratory. Don't forget to review the workshop overview and requirements before registering! Please note that this workshop is the same as the Hour++ of Code Python Basics workshop; it is cross-promoted as a pre-hackathon workshop to Hack the Future participants.

REGISTER HERE

Pre-hackathon Workshop: Turtle Graphics in Python

Feb 3, 2024 | 10:00 am - 12:00 pm | Grade 8-12

The Turtle Graphics in Python workshop will introduce students to coding concepts through creating pictures and shapes on a virtual canvas using the Python turtle library. It is a fun and interactive way to learn programming for beginners. This workshop will use Google Colaboratory. Don't forget to review the workshop overview and requirements before registering! Please note that this workshop is the same as the Hour++ of Code Turtle Graphics in Python workshop; it is cross-promoted as a pre-hackathon workshop to Hack the Future participants.

REGISTER HERE

Pre-hackathon Workshop: Mobile App Dev

Feb 10, 2024 | 10:00 am - 12:00 pm | Grade 8-12

The Mobile App Dev workshop is open to students who are interested in how to plan, prototype, and code a mobile app. This workshop is beginner-friendly and will use Thunkable, which is a drag-and-drop app builder. Don't forget to review the workshop overview and requirements before registering! Please note that this workshop is the same as the Hour++ of Code Mobile App Dev workshop; it is cross-promoted as a pre-hackathon workshop to Hack the Future participants.

REGISTER HERE

Pre-hackathon Workshop: Intro to HTML/CSS

Feb 24, 2024 | 10:00 am - 12:00 pm | Grade 8-12

The Intro to HTML & CSS workshop is open to students who are interested in learning the basics of HTML and CSS and how to use them for making web pages. This workshop is beginner-friendly and will use CodePen. Don't forget to review the workshop overview and requirements before registering! Please note that this workshop is the same as the Hour++ of Code HTML/CSS workshop; it is cross-promoted as a pre-hackathon workshop to Hack the Future participants.

REGISTER HERE

Pre-hackathon Workshop: Machine Learning for Kids

Mar 2, 2024 | 10:00 am - 11:00 am | Grade 8-12

Machine Learning for Kids is a free, web-based tool that offers hands-on experiences for training machine learning models and creating projects. For hackathon participants who are interested in exploring AI concepts and skills, this pre-hackathon workshop could be for you!

REGISTER HERE

Pre-hackathon Workshop: How to Present Your Project

Mar 2, 2024 | 11:00 am - 12:00 pm | Grade 8-12

At the end of the hackathon, participants will present their project to a panel of judges and their peers. Join this pre-hackathon workshop and learn how to craft an engaging presentation to effectively communicate your project with a general audience!

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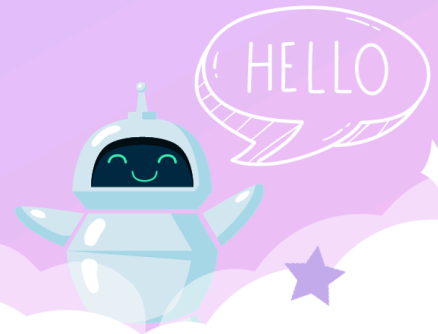
Hack the Future Hackathon

Mar 9, 2024 | 9:00 am - 4:30 pm | Grade 8-12

The deadline to sign up for this online hackathon is March 4 (Mon) at 11:59 pm. You can join the hackathon as an individual or a team of five. If you plan to join as a team, please choose a team captain. The team captain will be responsible for signing up the team and acting as the team's main contact. Please make sure you select the number of tickets to reflect the number of team members. For example, if you are a team of five (including yourself), please select five tickets during sign-up. Check out our website for more details and updates!

REGISTER HERE

HOUR++ OF CODE

The Hour Plus Plus of Code event features various one-off workshops for school-age students to learn how to code and implement popular digital tools. Between Jan to Feb 2024, we will be offering multiple online workshops on various topics ranging from user interface and experience design, programming logic foundations (in Python and Java), mobile app development, and game development. Please review the overview and requirements document for each workshop before registering. Not sure if coding is for you? Join us for these workshops and let us change your mind!

Python Basics

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[**REGISTER HERE**]()

INTRO TO COMPUTING IN JAVA

Jan 27-Mar 16, 2024 | 10:00 am - 11:30 am | Grade 9-12

Introduction to Computing in Java is a series of seven online workshops that run from 10-11:30 am every Saturday between Jan 27-Mar 16, 2024 (except for the Feb 17 long weekend). In this workshop series, Grade 9-12 students will learn what computer science and computer programming is about. They will also use fundamental programming concepts such as variables, data types, comparison and logical operators, control structures, and functions to create useful programs. This workshop series will be taught using the Java programming language. There will be a show-and-tell session during the final workshop, in which students will present their work to their peers and celebrate their accomplishments. All workshops will be offered virtually via Zoom.

We recommend having some programming experience before joining this program, which you can acquire by attending our Hour++ of Code workshops. Don't forget to review the program overview and requirements before registering! **Please do not sign up if you know you will miss more than one workshop in this 7-week program.** We offer various one-off workshops that you can sign up for instead. You can check our one-off workshop offerings here.

REGISTER HERE

GRADE 4-9 SUMMER PROGRAMS PRE-LAUNCH

We will be offering various full-day workshops and week-long summer programs for Grade 4-9 students between May-Aug 2024. These workshops and programs will cover a wide range of topics, including design thinking, basic coding concepts, mobile app development, societal impacts of technology, and artificial intelligence. Feel free to sign-up to be the first to hear about these offerings! Alternatively, you can stay up-to-date by checking our website!

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SUBSCRIBE TO OUR OUTREACH COMMUNITY PROGRAMS NEWSLETTER

Interested in hearing more about Science AL!VE programs throughout the year? Sign-up for our monthly newsletter which lists our current free and paid youth programs in a community near you as well as teacher professional development opportunities and resources.

APPLY TO WORK AT SCIENCE AL!VE

APPLY TO VOLUNTEER AT SCIENCE AL!VE

Interested in working or volunteering with Science AL!VE? Check out our application pages for more information.