

# **SAIT Session Descriptions 2019**

**IMPORTANT SAFETY NOTE**: For the safety of participants in <u>ALL sessions</u>, *Explore STEM* and **SAIT** will be strictly enforcing the following:

- participants must wear long pants;
- wear closed-footed shoes (no flip flops or sandals);
- tie back long hair;
- wear a lab coat and safety glasses (if provided) and;
- NO eating or drinking in the labs.

Failure to comply will result in students not being permitted to participate.

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### Believe It or Not, There is a Trade for You!

Do you like working with your hands? How about feeling proud of your accomplishments on a daily basis? In this session, meet experienced women in the plumbing trade and explore aspects and skills required to succeed in this diverse field of work.

## **CSI Calgary: Computer Forensics Bootcamp**

In a world of advanced technology, there are many things that can threaten your cyber security. Learn how to detect and protect your computer from them in this session. Understand what viruses, Malware and Trojan Horses are and what you can do to stop them.

## **Develop Inspiration in the Palm of Your Hand!**

Instagram and Snapchat are both mobile apps that someone had to create. Why not learn the basics in how they did it? In this session, students will have an introduction to the world of programming and complete a customizable mobile app for the Android platform.

## **Digital Audio Production**

Have you ever wondered what goes on behind the scenes during a live broadcast? How to create sound effects, or edit audio? We'll show you how! In this session, you'll learn the secrets of a live broadcast, and record and edit your very own commercial and radio play in SAIT's very own radio station!









## Girls Rule! - Computer Coding Like You've Never Experienced

Are you curious about coding but didn't know where to start? This session is perfect for you. Computer programming can be both fun and profitable, and a career in computers is where it's at. In this session learn how popular software and applications like Minecraft can be created without complex command languages and join the thousands of girls worldwide in the coding community!

## Hands on Chemistry with a "Light" Twist

Chemistry is everywhere! In this session, you will explore the chemistry involved in various industrial technologies in this hands-on session. We will also reveal how the government uses light technologies to communicate information. You'll just have to wait to find out how!

#### **Learn How to MacGyver Stuff**

Electronic devices are everywhere; our bags, pockets, hands, and homes. In this session, you will use basic electronic fabrication skills including: component identification and soldering to create an electronic device that you can take home and show off!

#### Metal Rules!!

Get creative and discover the joys of the welding trade. In this introductory session, you will learn the basics of the welding processes and practice your skills on some projects. Think of all the fun you will have in this hands-on session while you're learning a new skill!

### **Position Yourself for the Future**

Do you have the kind of mind that can visualize distance and size, and you are ready for a fun outdoor scavenger hunt activity? Come and play a game of discovery and skill with us, where participants have to find and collect hidden items/objects to collect a prize using GPS technology. Participants will build an appreciation for the outdoors, work in a team, and get the 411 on geomatics technologies and the latest in data collection techniques. You will learn about aerial photography, thermal imaging, land surveying, and geocaching in this fun filled session. Please note that participants will be spending time outdoors, so come with the appropriate clothing and footwear for the weather.









#### Quiet on the Set!

Wondering what it takes to produce a great TV show? Want to sit behind a news desk? This session takes you behind the scenes in SAIT's state of the art television studio where you can explore all the positions available to you such as computer graphics operator, video switcher, lighting director, and news, sports and weather anchors. Get hands on and produce your very own "Action Central News!"

#### This is How Fast & Furious Started!

Do you like working with your hands and using technology? Want to feel proud of your accomplishments on a daily basis? In this session, you'll get to explore the automotive trades and discover how a car operates and the skills required to keep it running.

#### **Visual Artists Unite!**

Learn how to create eye-catching designs that are sure to impress. Using the latest Desktop Publishing software you'll learn how to add photos and fonts and create eye-catching designs like a pro.

### Yes, You Too Can Design a Dream Home!

Are you an HGTV fanatic? In this session, you will learn about the field of residential architectural technology, and draw and animate your very own house using 3D Architectural Design and Animation with Sketchup. PLUS, you'll get to take home your animation too.

#### You Too Can Control the World with a Raspberry Pi

Controlling traffic lights and rolling news feeds seems like a job for a large computer system. The Raspberry Pi, although it is little – packs a punch. In this hands on lab session, students will learn how to connect Raspberry pi I/O, configure a Linux operating system and use GPIO libraries and python programming language to manage LEDs.





