ATLAS ACADEMY

UNIVERSITY-LEVEL CONCEPTS, FOR YOUTH

Introduction to Software Engineering

Foundations of Coding

This 15-week program offers an interactive, project-based curriculum inspired by renowned courses from **Harvard, MIT, and Stanford,** focusing on **Python** and **real-world applications** using **Raspberry Pi**. By the end of the course, students will gain a solid foundation in **programming, problem-solving skills**, and the **ability to learn any coding language**, preparing them for **future opportunities** in technology.

Built on World-Class Content

Our program is modeled on world-renowned materials from Harvard, MIT, and Stanford, ensuring that your child receives the highest quality instruction available. We've drawn inspiration from:

- **Harvard University's CS50: Introduction to Computer Science**, one of the most popular online computer science courses.
- **MIT's Introduction to Computer Science and Programming Using Python**, which equips students with the fundamentals of coding and problem-solving.
- **Stanford's Computer Science 101 course**, focusing on key programming concepts and hands-on learning.

By adopting the teaching methods from these prestigious programs, we're providing your child with a solid foundation in coding that mirrors the structure and depth of top-tier university courses—in an age-appropriate format for younger learners.

Contact Us

778.839.0873

admin@atlas-academy.ca

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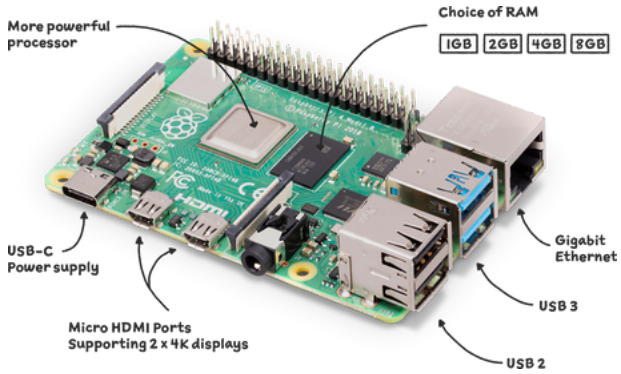
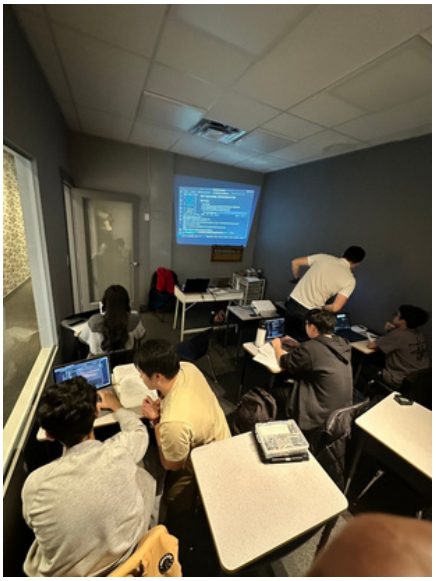
Level 1 - Foundations of Coding

What Makes Our Course Special?

Our 15-week program takes a highly interactive, project-based approach, with Python as the primary language. Python is widely used in the industry, particularly in fields like AI, and is known for being easy to learn, making it the perfect language to kickstart your child's coding journey. We also aim to not teach our students language-specific concepts; instead we enable them to be able to learn ANY coding language by teaching them the skills to pick them up.





Key Benefits of the Course

Practical, Hands-On Learning

Students will work with **Raspberry Pi,** a real-world mini-computer that allows them to create exciting projects, like controlling LEDs and sensors.

In-Depth Programming Skills

From learning the fundamentals like **loops, functions**, and **data structures** to more advanced topics like **file I/O** and **sensor integration**, this course offers a comprehensive understanding of coding.

Real-World Problem Solving

By the end of the course, your child will be able to break down and **solve complex problems**, creating their own programs from scratch.

Project-Based Learning

In line with the best practices from **Harvard, MIT,** and **Stanford**, our course emphasizes project-based learning, culminating in a **final project presentation** where students showcase what they've built.

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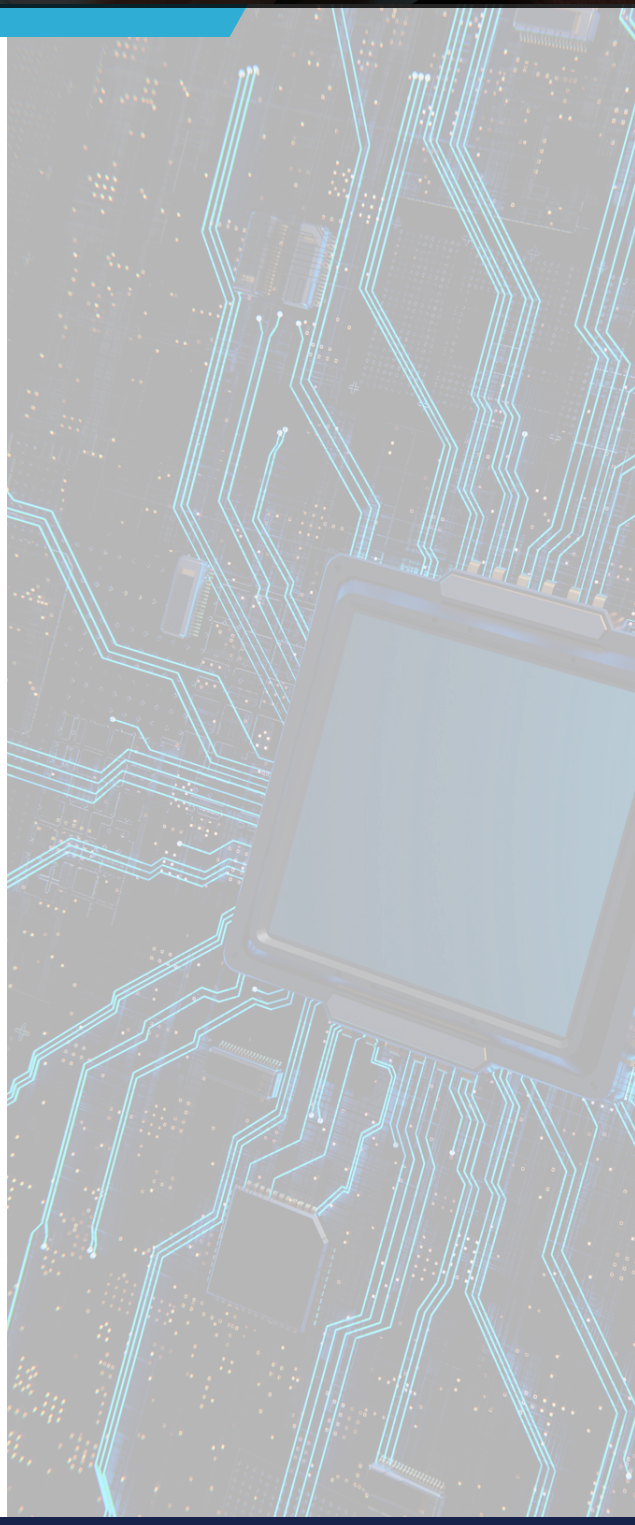

What Will Your Child Learn?

Weeks 1-2

Introduction to **coding fundamentals** with Raspberry Pi, learning Python syntax, loops, and conditionals.

Weeks 3-6

Explore **functions, modular programming**, and working with sensors to build **real-world** projects.

Weeks 7-9

Advanced topics like **dictionaries, file handling**, and planning for a **personalized final project**.

Weeks 10-15

Learn how to **leverage Python libraries** to expand programming skills, work on the final project, and prepare for the final project presentation.

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A Real Investment in Your Child's *Future*.

As technology continues to shape the world, learning to code is more than just a valuable skill—it's a **gateway to countless opportunities**. Our program, built on the knowledge and techniques of the best universities, will set your child on the path to becoming a confident and creative coder. However, instead of aiming to teach language-specific content, our goal is to enable children on how to learn ANY coding language without bounds.

With over **250+ students** already part of our community, this is a fantastic opportunity for your child to dive into the world of coding. We'd love for them to join our **Level 1 – Foundations of Coding** program and start their journey toward mastering computer science.

Spots are Limited

Enroll Today!

Respond today to secure your child's spot in this exciting program. We can't wait to see your child thrive in this innovative learning environment!

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