WHY HACKHIGHSCHOOL?

MOTIVATION

The program design at 42 uses project-based learning and gamification, meaning goals as well as peers provide motivation for students rather than rules and fear of exams.

STUDENTS WANT TO LEARN

Our gamified program motivates students by presenting problems, issuing challenges, and awarding points. The 42 community becomes a network of students motivated to learn and willing to help one another.

REAL WORK, NOT JUST THEORY

In lieu of theory, students write code, learn programming, and design software. Students love the hands-on, real-world approach to learning, and digest and absorb far more material than a lecture.

SKILLS FOR THE 21ST CENTURY

Students spend hours on projects and working in groups. They learn soft-skills, self-motivation, initiative, and determination, skills that transfer well to the real-world.

LEARNING ISN'T BOUND BY TIME

Students can progress at their own pace. There is no restrictive quantity of time within which you need to learn, such as a semester. The point is that they learn skills, not pass within a given timeframe.

DEVELOP SOFT SKILLS

The HackHighSchool program is designed to develop collaboration, communication, teamwork and other soft skills such as giving and receiving correction.

SCALABLE, SUSTAINABLE MODEL

Low-cost, easy to scale: just add computers, or if you can't add computers, add time-slots. No teacher-student ratio, no specific CS knowledge required.

MASTERY-BASED LEARNING

Students have to master a skill before they can move to the next project: they have to display competency. Students have an open environment to try, fail, be corrected by peers, try again, and learn until they get it right.

LEARN HOW TO LEARN

Students how to learn, how to be resourceful and problem solve. If they don't know how to do something, they find out how to do it.

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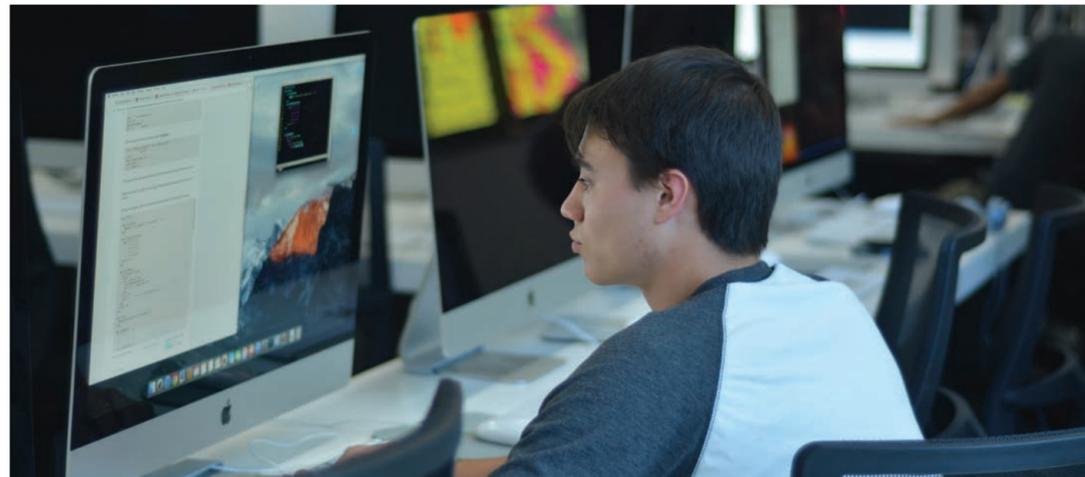
IMPLEMENT HACKHIGHSCHOOL ANYWHERE FOR FREE!

While HackHighSchool is the particular program that's hosted at 42 Silicon Valley's campus in Fremont, the curriculum is designed to be replicated in other locations. We work with other educational institutions and organizations to implement the program across the nation. Our model is scalable and requires minimal resources, and our goal is to work with schools and districts to make it easy to implement so that coding education is effective, affordable, and accessible.

TOGETHER, WE PROVIDE

A low-cost, scalable, peer-to-peer education process

A learning community with in-person support & learning, not just classes

Tools to help any teacher offer computer science education

WHO PROVIDES WHAT?

42 Silicon Valley:

Gamified education platform (free)
Project-based coding curriculum
IT support for automated aspects
of the class
Education & training on our peer-to-peer
pedagogy

Either 42 or Partner:

Mentors
Meeting space
Computers

Partner Organization:

Enrollment
Communication and marketing
Logistics for student and parent needs

INTERESTED IN IMPLEMENTING A CODING COURSE OR CURRICULUM? CONTACT US!

Location
42 Silicon Valley
6600 Dumbarton Circle
Fremont, CA 94555

HackHighSchool contact
Kai Drumm
HackHighSchool@42.us.org
HackHighSchool Academic Coordinator

Follow us:

42 Silicon Valley
@42SiliconValley
@42SiliconValley
42.us.org

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@codeforfunusa
@codeforfun2
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HackHighSchool

Free coding education for high school students & preparation for the AP Computer Science Principles exam

WHAT PARENTS ARE SAYING...

We asked parents about their student's experience at our summer camp. Here's what they said:

"She LOVED every minute of it."

"His interest in programming is rejuvenated. He is waiting for the weekend program announcement from you folks!"

"He liked being able to go back and to complete things missed."

PROGRAM OVERVIEW

HackHighSchool is a free computer programming and coding program with open enrollment for high school students. Students can also opt to prepare for the AP Computer Science Principles exam. It's run by 42 Silicon Valley and Code for fun who together developed a specially designed curriculum that's easily replicated beyond our campus.

No experience necessary

Project-based and fun

Free & accessible

Digital literacy is so important for today's world, and the sooner students learn even the smallest amount of coding, the better! Our mission is to make coding and programming accessible to high school students, which is why our program is free.

HackHighSchool focuses on:

- Programming concepts
- Collaborative work
- Self-learning habits
- Ethical coding practice
- Preparation for the AP CSP exam
- Algorithms
- Data structures

PREPARING FOR THE REAL WORLD

HackHighSchool is not just about learning to code: it's about learning real-world skills and how to live and work in the real-world. Our goal is to help transform teenagers into young adults.

We appreciate that our approach to learning is different, but it's effective at helping students gain invaluable skills for their lifetime.

One of the parents from our summer camp gives a great example:

"It was harder [than high school] because he had to learn so much in a little time. Also if he didn't understand a concept he had to search online and some answers were either too complicated or too simple. So then he had to ask peer and found out that he was over thinking answer which simpler than he thought. He learned that it was important to ask the right question."

PROGRAM DETAILS

- Saturdays 11:00 – 5:30pm
- Ongoing projects throughout the week
- Come any Saturday September - May
- Check 42.us.org for information about Saturdays that fall on holiday weekends.
- 6 month - 4 year program

Hacking the Curriculum

The HackHighSchool program is currently split into four levels where progress is tracked and graded. Each level contains multiple projects.
Level 1: Intro to Ruby or Python projects
Level 2: Text-based games, cryptographic puzzles, visualizing math
Level 3: Graphical games, interactive websites, music synthesis
Level 4: Build an Instagram clone in the web browser, make a chatbot or teach a robot how to walk, make an iOS or Android app.

After each project, students are randomly matched with two peers who will each review their code, provide feedback, and assign a grade according to the official grading scale. There is always the option to retry a project.

WEEKLY STUDENT LIFE

On Saturday afternoons, students come to 42 Silicon Valley to work on projects, do corrections, and have fun as a community. During the week, students can spend time working on their projects; all they need is internet access. HackHighSchool is supervised by a team of mentors recruited from the full-time 42 student population. Students and mentors both work on coding projects side-by-side and enjoy an hour of social time with organized games and snacks.

TRAINING - IT'S LIKE SPORTS

Coding is an art and a science, and like a sport, it takes practice. Just as student athletes practice basketball, ballet, or hockey, spending time coding is practicing to be a software engineer. Actively participating regularly builds coding skills, but it's also about learning soft skills such as:

- Determination
- Motivation
- Commitment

OUR APPROACH TO INSTRUCTION

HackHighSchool uses a hands-on approach to learning and curriculum. We're big fans of active learning rather than passive learning. Students learn by doing in a fail-safe environment, but also learn real-world skills through collaboration, peer-learning, and peer-correcting. HackHighSchool is based on:

Rigorous learning through projects and challenges

Peer-to-peer correction

Gamification

LEARNING ISN'T TIME-BOUND

HackHighSchool is a program that is not bound by time: each student advances at his or her own pace and actively take ownership of their learning. The program is designed to be completed in as little as one year or as long as three years.

Since HackHighSchool is not based on courses or classes, students have the freedom to complete projects as quickly as they wish and in a manner that reflects their personal learning needs. Students can spend the time they need on a topic in order to truly master it without disrupting the progress or learning of other students.

90% of the 20 parents surveyed were very likely or highly likely to recommend our summer camp.

Register at
https://www.42.us.org/program/hackhighschool-coding-classes-kids/
or https://www.codeforfun.com/h2s/ **today!**