



COMPUTER SCIENCE FIRST

PROGRAM











SUPPORTING ORGANIZATIONS





























COMPUTER SCIENCE (CS) FIRST PROGRAM

The Michigan Film & Digital Media Office is proud to partner with Google in an effort to promote computer science (CS) education in Michigan schools through the CS First program. CS First is a free program that increases student access and exposure to computer science education through after-school, in-school, and summer programs. All clubs are run by teachers and/or community volunteers.

The goals of the partnership between the Michigan Film & Digital Media Office and Google are to:

- Increase confidence when using computers
- Instill courage to try new things
- Grow perseverance when tackling difficult problems
- Provide a sense of belonging in technology for under-represented students
- Demonstrate the impact that CS has in careers and communities. See the impact the CS First program is having across Michigan at www.cs-first.com/michigan

Importance of computer science education in Michigan

Computer science is a 21st century skill. Currently, only one in 10 K–12 schools in the United States offers computer science classes. In addition, 75 percent of the population is underrepresented in computer science, even though exposure to computer science leads to some of the highest paying jobs in the world.

Opportunities for graduates with computer science degrees are plentiful. Jobs in computing are growing at twice the national rate of other types of jobs.

By 2020, the U.S. Bureau of Labor Statistics predicts there will be one million more computer science jobs than graduating students qualified for them. In Michigan alone, the demand for computing jobs is growing at over three times the state average.

What is CS First?

CS First empowers all students to create with technology through free computer science clubs. It provides easy-to-use computer science enrichment materials that target and engage a diverse student population.

CS First overview

- Materials are targeted at students in grades 4–8 (ages 9–14)
- Clubs are run by teachers and/or community volunteers. No computer science experience necessary!
- CS First materials are video-based
- Program can be tailored to fit your schedule and needs
- Student projects involve block-based coding and are themed to attract students with varied interests
- Themed clubs attract students with varied interests



Each theme has eight activities. Each activity takes about 60-75 minutes. Scheduling is flexible and up to you!







STARTING A CS FIRST CLUB IN YOUR SCHOOL

What CS First provides



PASSPORT AND BADGES for each student



G+ COMMUNITY BOARD for students to post handouts



CLUB PLANS AND SOLUTION SHEETS to help you run your club



MARKETING FLYER for advertising your club to your students



CONTINGENCY PLANS in case technology fails



CERTIFICATES for students who complete your club

What Michigan Film & Digital Media Office provides

- Employment collaboration with local community partners
- Promotional support (media, legislatively, etc.)
- Digital badging program for students to promote their CS First success
- Headphones (up to 20 headphones per participating school)
- Inclusion in statewide launch events























LAUNCH CS FIRST IN YOUR SCHOOL

Creating a club

Creating a club takes 5–10 minutes. To start a club, visit www.cs-first.com/start-club.

Minimum requirements

- Access to a computer lab or laptops (one per student)
- Reliable Internet/Wi-Fi connection
- Access to students

What you need



COMPUTER LAB with Internet



TEACHER HOST to supervise the club



GURUS to facilitate the club

You will be guided through the following steps:



Choose a theme and request materials



Create a schedule



Check computers to make sure all required website work properly

Participants

Teacher host: The teacher in the computer lab (~1 per club); can be a teacher, parent, college student, volunteer, etc. No computer science expertise required.

Gurus: Volunteers or teachers who facilitate the club (~2 per club); can be parents, high school or college students, volunteers, etc. No computer science expertise required.

Club members: Students (~20 per club); targeted for 4th-8th graders

Additionally, we ask that you:

• Complete our partnership form found here or visit www.michiganfilmoffice.org.









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Frequently asked questions

How much does it cost to implement CS First in my school?

Nothing. CS First is a free online-based computer science first program.

When can I launch the CS First program?

You can launch the CS First program at any time. Schools that opt to begin the CS First program are encouraged to participate in a statewide launch in January of 2016. Additional details will be provided by the Michigan Film & Digital Media Office in December 2015.

How many computers are needed for a CS club?

One laptop per student is required for successful implementation

Will CS First work on iPads?

No, the CS First program is not accessible on iPads. Please plan on using Chromebooks, laptops, or desktops.

Is any additional software needed to implement CS First?

No, no additional software is needed, only Internet and access to Wi-Fi

Do teachers and gurus need background in computer science in order to teach CS First?

No, the easy-to-understand curriculum makes it possible for anyone to teach CS First, regardless of education or background

Where can we find teachers and volunteers to help implement CS First?

When you create your CS First club, you will have the option to find volunteers. It is the responsibility of the school or location hosting the club to perform any background checks or vetting that may be required. Other participating schools have recruited teachers and volunteers from local colleges and university students, parents, and community organizations (i.e., Boys and Girls Clubs of America, YMCA, Teachers of America, etc.)

Can CS First be used during the school day?

Yes, many clubs are already doing this. CS First is flexible and can be tailored to fit your particular needs and schedule.

Will posters and marketing material be provided to my school for promotional efforts?

Yes, poster and marketing material can be provided to your school to promote the CS First program in your school. Please contact the Michigan Film & Digital Media Office for more information.

Additional FAQs and information can be found at www.cs-first.com/faq.