



San Diego, Ca



Summer camp immerses students in STEM

Qualcomm Thinkabit Lab offers a free-of-charge, immersive summer camp program to introduce and solidify middle school students' interest in STEM. Following the success of the first all-girls cohort at the original Thinkabit Lab, the program expanded through collaborations with other organizations to serve girls and boys nationally and in China.

As part of this expansion, the camp has been integrated into summer programs of the American Association of University Women and the YMCA. In addition to serving special groups during summer camps, we also test new content and augment our knowledge about best practices that can be shared with our national network of Qualcomm Thinkabit Lab sites.

Visit www.ThinkabitLab.com/videos to view highlight reels of our summer STEM camps from the past 5 years.

Cultivating tomorrow's workforce

Qualcomm® is focused on building the wireless world of the future and aims to show students from all cultural and socioeconomic backgrounds that they can be a part of inventing that future.

Through the Qualcomm® Thinkabit Lab™ initiative, we're increasing interest in science, technology, engineering and mathematics (STEM) opportunities; inspiring students to become the next generation of inventors and engineers; growing an inclusive, diverse workforce that supports innovation, technological advancement and competitiveness; and, ultimately, helping people around the globe address future challenges.

Engaging students in STEM

The Qualcomm Thinkabit Lab program provides an exciting opportunity for students to explore engineering and non-engineering careers and invent robotic creations. It provides educators an opportunity to observe best practices for engaging students in STEM.

The experience begins with the Qualcomm World of Work activities. Students discover their unique talents and explore STEM-related careers that they might not know exist, including a wide range of careers that are available at a tech company such as Qualcomm. They are also exposed to technology concepts, such as the Internet of Things (IoT), which are increasingly important in careers and everyday life.

Then, working in groups, students apply what they learned during the Qualcomm World of Work activities to invent and build a robotic creation that solves a problem in their community. This hands-on engineering experience fosters problem-solving, creativity, collaboration and the development of critical skills that are needed for future careers.

Together, the career exploration and engineering activities help students understand where they might fit in the future workforce and how they could contribute to solving real-world problems.



Reaching students and educators in any location

The original Thinkabit Lab operated at Qualcomm's San Diego headquarters from 2014 to 2018. Approximately 14,000 San Diego area students and more than 2,500 teachers, parents and administrators visited the colorful, creative, high-energy space to experience our innovative STEM program.

Demand for the experience was so high that Qualcomm made available a free set of resources to help schools and other organizations, irrespective of location, create their own Thinkabit Lab to serve students and educators in their communities. These resources are based on lessons learned at the original Thinkabit Lab and provide step-by-step guidance on how to design the environment and implement the program's signature Qualcomm World of Work and hands-on engineering activities.

Currently, there are more than 25 Thinkabit Lab sites at schools, universities, libraries and other organizations to serve students and educators around San Diego and in other regions, such as the Washington, D.C., metro area; the Detroit region; and California's rural Central Valley. Qualcomm continues to expand the program in different regions of the United States and with new signature activities for students and corresponding training for educators.

Collaborating to continually improve the Thinkabit Lab experience

Qualcomm is collaborating with Virginia Tech, University of Michigan, Porterville Unified School District, Chula Vista Public Library, Sharp Hospital and other organizations to continually improve the Thinkabit Lab program. We work together to conduct research, collect impact data and share student and teacher successes, with the goal of improving the program's effectiveness in piquing student interest in STEM.

For example, Thinkabit Lab's collaborations with Virginia Tech, University of Michigan and University of Colorado at Boulder are focused on 1) developing new signature activities that expose students to the latest technology concepts in STEM fields, such as the IoT, smart cities and environmental sensors; 2) engaging students in engineering activities that use different platforms, such as microcontrollers, Arduino and Micro Bit; 3) leveraging other successful robotics programs, such as FIRST™; and 4) training educators in the implementation of new activities.

International efforts

Thinkabit Lab supports Qualcomm employees globally in bringing STEM engagement programs to their communities. In the United Kingdom, Qualcomm employees will use Qualcomm World of Work activities in various STEM events hosted by local schools, such as a Women in Engineering workshop to raise girls' awareness about technology careers.

More than 100 girls and 20 science teachers from rural parts of China attended summer camp sessions hosted by Qualcomm in Beijing in collaboration with the Children and Youth Science Center of China Association for Science and Technology.

Through a collaboration with the Institute of the Americas, hosted at the University of California, San Diego, Qualcomm World of Work activities have been translated into Spanish and will be used to inspire the next generation of inventors in Mexico. The translated activities can also be used with English language learners in the United States.

Visit a Qualcomm Thinkabit Lab

Thinkabit Lab can coordinate a tour for those who may want to experience Qualcomm's STEM program prior to scheduling class visits or who may be interested in joining our growing community of inventors by creating a Qualcomm Thinkabit Lab of their own. Tours are offered at these Thinkabit Lab Hubs:

- Thinkabit Lab at Virginia Tech – Northern Virginia Center (Falls Church, VA)
- Thinkabit Lab at University of Michigan – Michigan Engineering Zone (Detroit, MI)
- Innovation Station – Chula Vista Public Library, Civic Center branch (Chula Vista, CA)
- Future Ready Lab – Porterville Unified School District (Porterville, CA)

Please contact us at ContactThinkabitLab@Qualcomm.com to schedule a visit.

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For more Information please visit www.ThinkabitLab.com or email us at ContactThinkabitLab@qualcomm.com
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"I see a future in which today's youth are inventing products that solve problems in their communities and starting companies to bring their inventions to life. I envision them getting and providing well-paying jobs, helping build industries in their hometowns and collaborating with local schools and public and private organizations to feed the cycle of education, invention and jobs."

– Susie M. Armstrong,
Senior Vice President of Engineering,
Qualcomm