Sept. 24, 2023 — In 2022, Intel announced plans for an initial investment of more than $20 billion to construct two new leading-edge chip factories in Licking County, Ohio. To help develop and attract a pipeline of skilled talent from within the region, Intel is supporting a range of education initiatives. They include K-12 science, technology, education, arts and math (STEAM) programs; collaborative research projects; and semiconductor-specific curricula for associate and undergraduate degree programs. Further, Intel has committed to invest $50 million over the next decade in partnership with Ohio universities, community colleges and other institutions of higher education. Ohio institutions will also be eligible for an additional $100 million in nationwide funding from a partnership between Intel and the U.S. National Science Foundation. In September 2022, Intel awarded the first $17.7 million of that $50 million commitment to eight proposals involving more than 80 institutions of higher education across Ohio.

Elevating STEAM education across Ohio sets the stage for success in school and 21st-century careers. By investing in schools, colleges and universities, we will train the next generation of engineers and technicians who will help propel the semiconductor industry. Creating the world-changing technology of tomorrow starts with empowering a diverse generation of technologists today. We are proud to work with the local government, industry and academia to bring these opportunities to life.

Christy Pambianchi, Intel executive vice president and chief people officer

K-12 Education Initiatives

**Khanmigo**

Intel is funding the launch of Khanmigo, an AI tutor and teaching assistant, developed by Khan Academy. It benefits middle and high school students in selected Ohio school districts by providing tailored math and science tutoring for students and AI assistance for teachers in lesson planning and assessments. This program aligns with Ohio’s curriculum and aims to enhance educational outcomes, particularly in STEM education, to prepare students for success in school and future careers. Intel's investment covers implementation support, teacher training, actionable data and program costs during the pilot period.

**Moonshot Ohio**

Announced in February 2023 by the STEM Next Opportunity Fund and Intel Foundation, Moonshot Ohio aims to increase access to STEAM learning and fuel workforce development. Through after-school and summer programs across Ohio, it brings together programs, networks and partners creating access to STEAM learning for all. In collaboration with the Million Girls Moonshot and the Ohio Afterschool Network, Intel employees volunteer with local students to inspire and encourage youth to reach their STEAM career dreams. The statewide movement focuses on STEAM education initiatives and technology to re-imagine who can engineer, who can build and who can invent, with a goal to help close the digital divide and double the number of Ohio youth engaged in STEAM learning by 2025.

**Intel® Future Skills**

Since August 2022, Intel has engaged more than 10,000 students across Ohio through its signature K-12 STEAM program, Intel® Future Skills, a design-thinking, project-based, experiential learning platform. Intel volunteers have facilitated in-person, hands-on engagements across the state, including: three successful Future Skills Summer STEAM camps in Marietta, New Albany and Columbus, collectively reaching 430 PreK-8th grade students; and events centered around local science and community fairs like National STEAM Day, National Engineers Week, Hartford Fair and COSI Science Fair. In the fall of 2023, Intel will launch a Future Skills pilot at 12 different locations in Ohio. Looking further ahead, the company will continue to scale the program, while creating specific advanced manufacturing content.

**Community Engagement and Sustainability Education**

Intel employees have volunteered several thousand hours at nonprofits, schools and after-school programs across Ohio. Through hands-on activities, tutoring and mentoring efforts, volunteers help students build confidence and capacity for creative problem-solving and work to inspire the next generation of engineers, semiconductor technicians, and construction and environmental professionals. For example, demonstrations and mini-science experiments have taught more than 30,000 students about the construction process and the importance of people in skilled trades. Interactive displays highlight the journey from sand to silicon in the production of Intel wafers and illustrate how math, science and engineering are integral to jobs of the future. Intel has also established a pilot program for at-risk children experiencing food insecurity and living in the nature gap. Students received free meals while learning about Earth science, physics and chemistry and building knowledge and skills about healthy nutrition.
Semiconductor Technician Certification Program

Intel is collaborating with community colleges in Ohio to help build the local talent pipeline by launching the industry’s first stackable, shareable and transferable one-year semiconductor technician certificate program. The program develops the essential skills for an entry-level technician. This work, funded by the Intel Semiconductor Education and Research Program, helps close the talent gap by accelerating and increasing the accessibility of semiconductor technician training to traditional and nontraditional students. The program will launch in the 2023-24 academic year and be offered by 11 Ohio community colleges: Columbus State Community College, Marion Technical College, Rhodes State College, North Central State College, Central Ohio Technical College, Clark State, Northwestern State, Stark State, Zane State, Owens Community College and Lorain Community College. In subsequent years, the technician certificate program will be offered at most community colleges in Ohio.

AI for Workforce Program

Launched by Intel in 2020, the first-of-its-kind community college program provides more than 600 hours of artificial intelligence (AI) content, professional training for faculty and implementation guidance — all at no cost to participating schools. The program enables schools to develop AI certificates, augment existing courses and launch complete AI associate degree programs for their students.

In collaboration with the American Association of Community Colleges and Dell Technologies, Intel is bringing the program to seven community colleges in Ohio. As of August 2023, UC Blue Ash College in Cincinnati and Rhodes State College in Lima offer a full Associate of Applied Science degree in AI with Intel’s guidance. Stark State College purchased computers for a new AI lab in 2022 with a $40,000 Intel AI incubator grant. Columbus State College will use Intel’s curriculum to develop a noncredit IT certificate program in AI focused on upskilling the local workforce.

Podium Education

Intel and Podium Education, which offers in-demand skills to 1 million undergraduate students across 50 universities, including The Ohio State University, are collaborating to bring a sustainability-focused project to Podium’s flagship program, The Global Tech Experience (GTX). This initiative enables GTX students to build skills in areas like data analytics, coding and digital marketing through project-based work that was created from the lens of an employee at Intel. GTX is fully online and accessible to students from diverse backgrounds, bridging the gap between college and employment with the aim of providing invaluable early career experiences to students nationwide.

For more information on Intel’s Ohio plans and its commitment to the community, visit the Intel.com/Ohio.

Curriculum Development of OACC

Ohio’s community colleges are launching programs and career pathways to meet the growing workforce demands of the semiconductor industry and its ecosystem, supported by a grant from Intel, with a focus on attracting underrepresented groups. These initiatives will offer diverse courses, including micro-credentials, certificates and degrees, such as an associate’s or bachelor’s in applied science, to prepare students for roles ranging from entry-level technicians to process or quality engineers. The collaborative effort, led by the Ohio Association of Community College’s (OACC) Semiconductor Collaboration Network, aims to meet the demands of the semiconductor sector, foster economic development and provide accessible education across the state.

Quantum Curriculum Development at Ohio State

In 2022, Intel provided funding to a team from The Ohio State University led by Professor Ronald M. Reano to develop a curriculum focused on quantum computing skills. The curriculum helps science and engineering students become familiar with quantum programming applications and technologies. It also helps proliferate the use of the Intel® Quantum Software Developer Kit (SDK), a full-stack software development kit optimized for executing hybrid algorithms. Since its launch, hands-on instruction of the SDK has been piloted in the classroom. The program has grown to include exposure to practicing scientists and engineers through a summer short course and will continue to expand to create a community of developers exploring programming applications for quantum computing.