The Polytechnic School at ASU hits milestone mark at 10 years

By Joy Gaeraths, ASU News

January 29, 2025

The year was 2014.

Taylor Swift released "1989."

"Frozen" and its soundtrack were stuck in the minds of many.

Facebook was still the most popular social media site, and "Happy" by Pharrell Williams was the No. 1 song on the airwaves.

That same year at Arizona State University, The Polytechnic School was born when the College of Technology and Innovation joined forces with the Ira A. Fulton Schools of Engineering, becoming one of the six (at the time) schools in the Fulton Schools.

Innovative impact

Since 2014, The Polytechnic School has added more than 20 new degree programs, the most recent being a master's degree in clean energy systems and a Doctor of Information Technology.

Other programs previously only offered on campus, like the human systems engineering degree, now offer an online delivery method to increase access to learners around the world.

By adding new programs and streamlining existing ones, The Polytechnic School has opened more pathways for students to engage with and explore its diverse areas of study. Over the past 10 years, enrollment has nearly doubled for undergraduate students and quintupled for master's degree and doctoral students.

The school's young innovators are excelling in the classroom and beyond, demonstrating their specialized skill sets on the global stage.

Students in The Polytechnic School were selected as one of 16 teams nationwide to compete in EcoCAR 3, a sustainable vehicle compeition, in 2017. Another group of students created and were invited to present their conceptual transportation system at the SpaceX Hyperloop Pod Competition Design Weekend in 2016. More recently, the all-women robotics team Desert WAVE continued their record of success by winning an international competition with their underwater robots.

Alumni from The Polytechnic School have made their mark on the world as well.

Eric Goodchild and Jake Slatnick drew from their Fulton Schools experience when they presented their startup, Aira, in 2019 on the television show "Shark Tank" — leaving with a $500,000 investment. In 2020, alumnus Aaron Dolgin helped communities across the country during the COVID-19 pandemic by rallying high school and college students with 3D printers to help make personal protective equipment.

Faculty members in The Polytechnic School have also spent the last decade using their expertise to improve society.

Kiril Hristovski, an associate professor and program chair of the environmental and resource management program in the Fulton Schools, led a U.S. Environmental Protection Agency-funded team's efforts to better protect water quality. Nancy J. Cooke, a professor and graduate program chair of human systems engineering in the Fulton Schools, collaborated with six universities to develop defense strategies against cyberattacks for a project supported by an Office of Naval Research Multidisciplinary University Research Initiative award. Nathan Johnson, an engineering associate professor, was elected to the United States Energy Association board of directors and has worked to develop microgrid technologies to provide stable power resources to remote and underserved communities around the world.

With its instructors focused on solving real-world problems, The Polytechnic School takes a hands-on, industry-focused approach to learning — with students developing professional skills that will benefit them throughout their careers.

At the end of each fall and spring semester, graduating students in The Polytechnic School display what they've learned at the Innovation Showcase event. Students show their capstone projects to students, staff and faculty members, explaining the processes they followed and their outcomes.

Methodologies and prototypes developed during capstone projects have had real-world value, with some being adapted and implemented in industry spaces. Students' work can also lead to job offers and internships. For the spring 2025 semester, Innovation Showcase is planned to grow in size and impact, as efforts are underway to draw in the surrounding community, especially high school students, to see the project demonstrations in person.

People make success possible

Penny Dolin, professor of practice in the graphic information technology program, has seen all this change firsthand as an ASU alum and longtime faculty member.

"I believe The Polytechnic School has the opportunity to become a real catalyst for Arizona," Dolin said. "We have a great opportunity to continue to get out there and cultivate the fantastic relationships with companies that are being established near the campus."

The Polytechnic School's strong leadership over the years has contributed to its successful evolution. Ann McKenna, the inaugural director of The Polytechnic School after serving as a professor and program chair in its engineering program, is familiar with the campus and the culture of the school, as well as what makes its programs unique.

"As The Polytechnic School has evolved, the community aspect has stayed strong, and the school continues to be adaptable, innovative and interdisciplinary," said McKenna, who is now dean of the College of Engineering at the University of Iowa. "The school has grown in positive ways by developing new programs, adding talented faculty and staff, engaging in impactful research, and staying true to being a supportive and collaborative community."

Kelley McManus, assistant director of business services for The Polytechnic School, also appreciates the community feel.

"Processes have evolved, and people have come and gone over the years," McManus said. "But the constant in the past 10 years is the small-town vibe of The Polytechnic School. Helping each other, working together and being connected is what keeps the school thriving today."

As The Polytechnic School has grown, so have the resources and opportunities for its students. In addition to a growing faculty body and new facilities, the school streamlined many of its processes — including in advising, students' first stop for support in their academic journey. The team developed scheduling tools to increase advising efficiency and added express advising, through which students can be seen without an appointment.

"When the College of Technology and Innovation merged with the Fulton Schools, the advising department was able to make changes that benefited the students based on their feedback," said Meghan McLaughlin, academic advising manager at The Polytechnic School. "With the help of Cindy Boglin as the new assistant director of advising, our team was able to provide a more student-centric space and positive experience for the students."

A growing future

The year 2023 brought a new director for The Polytechnic School: [Kurt Paterson](#). He is leading the school in setting the foundation for its next decade of success with a yearlong update of the school's vision and identity.

"A lot happens in 10 years. The Polytechnic School is fortunate to be positioned upon important disciplines and enduring operational practices, but the world has different needs in 2025 compared to 2014," said Paterson, who is also a professor in the school. "We can stay true to our past and achieve remarkable new heights by guiding our innovation with smart principles. I don't know of an engineering school that is better positioned to lead in this much-needed way, and that's a testament to the great visionaries at the school's founding, a community-first ethic over many years, and an organizational purpose focused on helping everyone succeed."

Taking advantage of ASU's newest design aspiration, [Principled Innovation](#), Paterson is leading the school to set a global standard for what a modern polytechnic educational institution should be. His passion has produced opportunities for faculty members to incorporate these frameworks into their classrooms and research.

In 2024, [Kyle Squires](#), dean of the Fulton Schools and the senior vice provost for engineering, computing and technology at ASU, was named as the vice provost of the Polytechnic campus, where The Polytechnic School is based.

"The Polytechnic campus is a unique environment that supports the success of our students, staff and faculty and is important to both the broader ASU and East Valley communities," Squires said. "It is exciting to work alongside its talented faculty, staff and leadership to broaden its impacts and ensure that the campus evolves a model for forward-thinking education and a hub for addressing the challenges of tomorrow."

McKenna reflects on her time at The Polytechnic School with fondness and is eager to see what's next for the school.

"As The Polytechnic School has evolved, so has the Polytechnic campus," McKenna said. "The campus is adding a new state-of-the-art building that will enable even more academic and research opportunities as well as new partnerships. The Polytechnic School is at the core of these new endeavors, and there is no doubt that the school will continue to grow and thrive. I am watching fondly and with anticipation to see what the future holds."
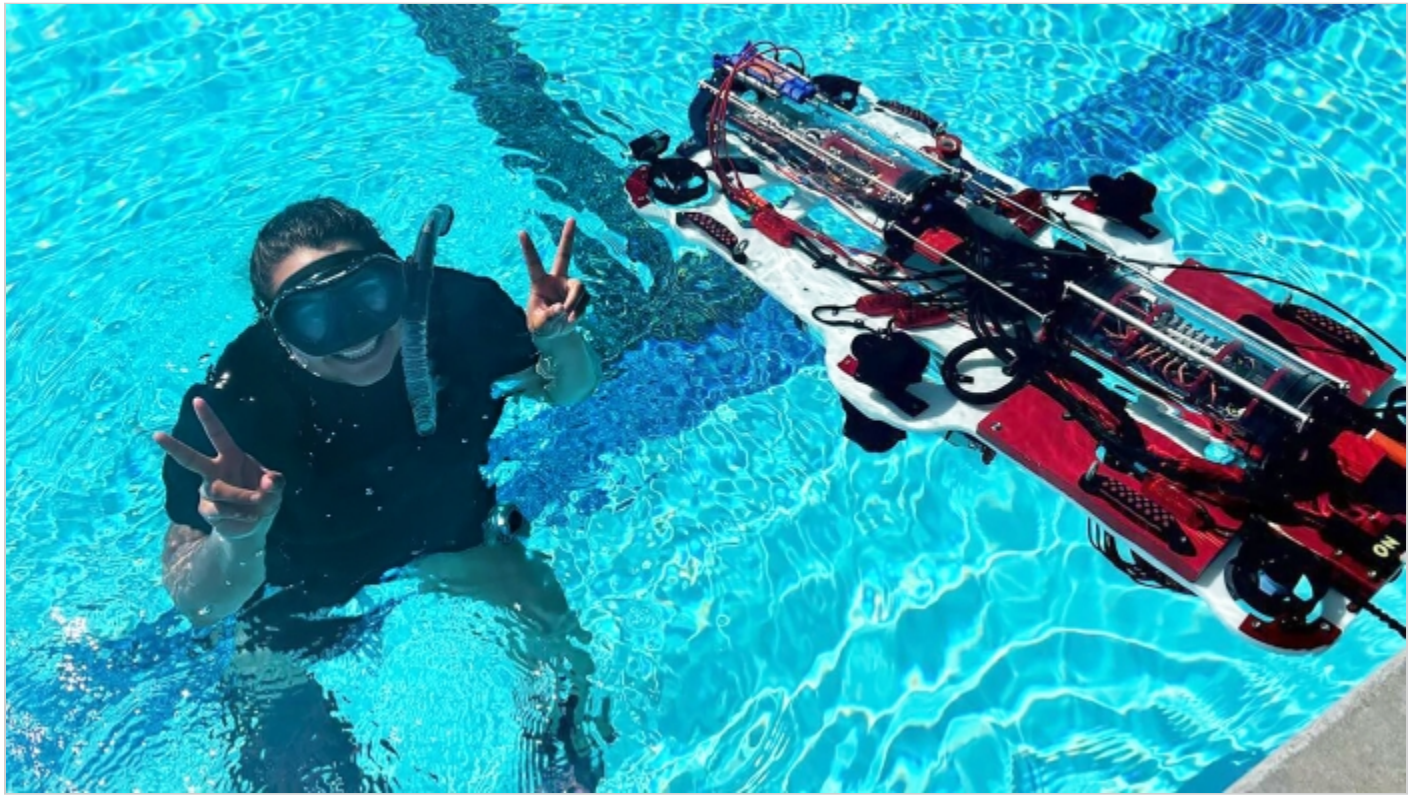

This story originally appeared on [ASU News](#).

Main image

The Polytechnic School celebrates 10 years of being a part of the Ira A. Fulton Schools of Engineering at Arizona State University. Graphic by Rhonda Hitchcock-Mast/ASU

Text image(s)

Litzi Matancillas, a recent graduate of the Fulton Schools, is in the water at the RoboSub competition with Dragon, the robot that helped the Desert WAVE team take the top spot in the international robotics competition. Photo courtesy of Paulina Garibay Jaquez

Students in Fulton Schools programs located on the Polytechnic campus participate in the Innovation Showcase event at the end of each fall and spring semesters. Photo by Sona Srinarayana/ASU

The ASU Charter located on the Polytechnic campus. Photo by Sabira Madady/ASU