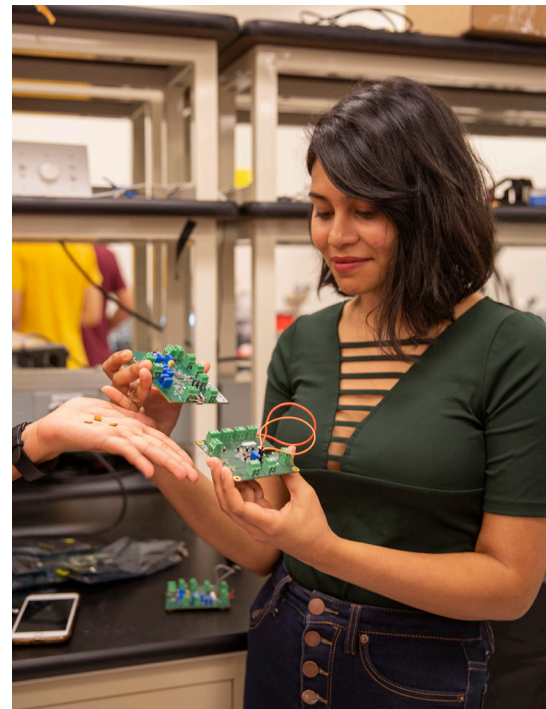
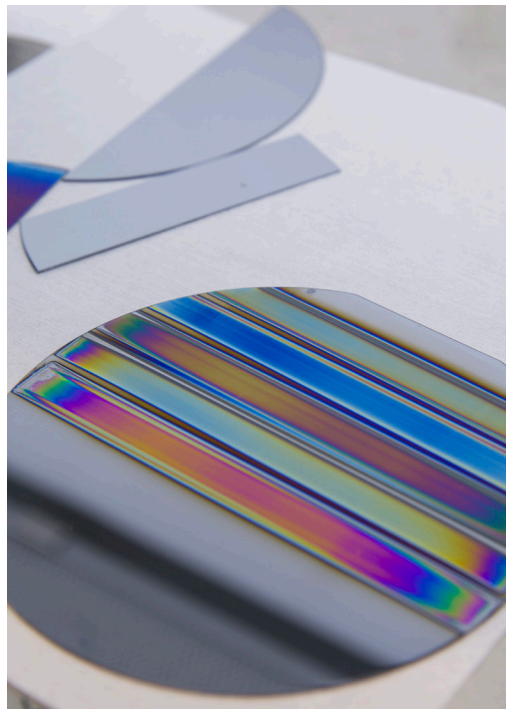


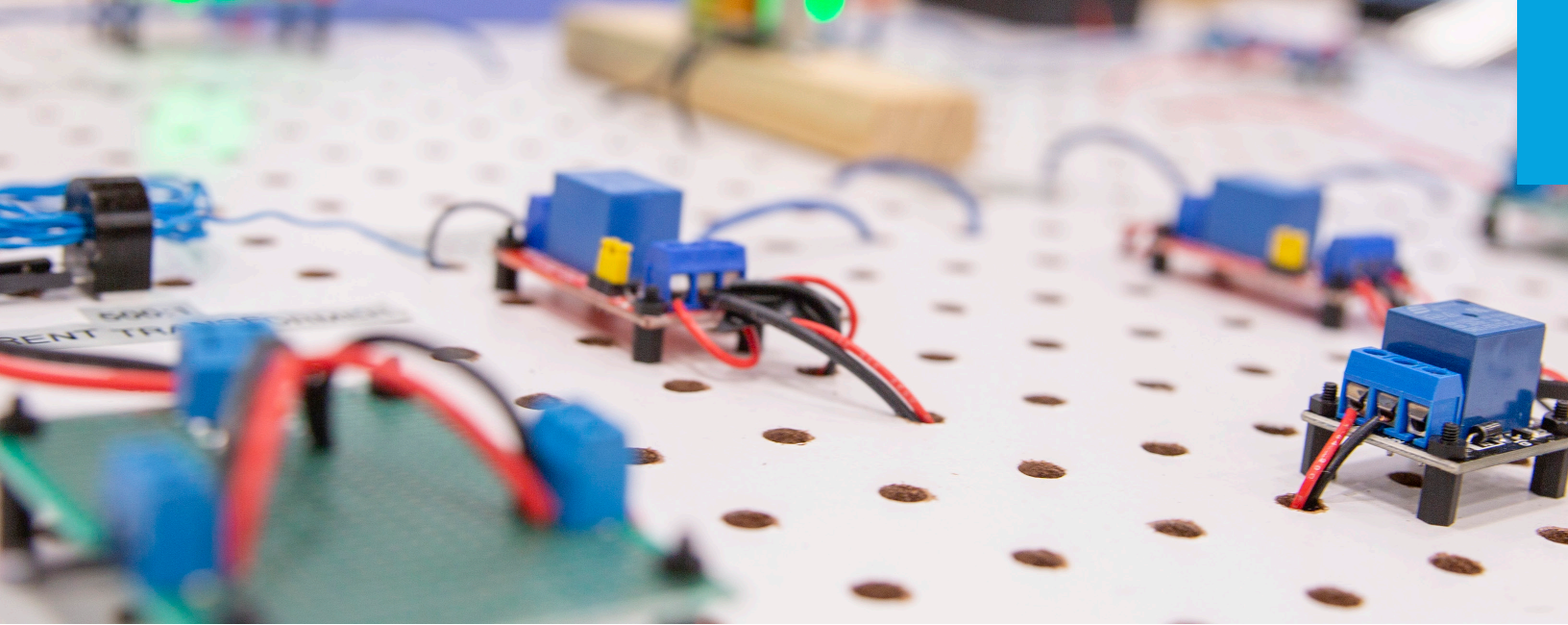


## Director search

# School of Electrical, Computer and Energy Engineering

## Ira A. Fulton Schools of Engineering





## School of Electrical, Computer and Energy Engineering

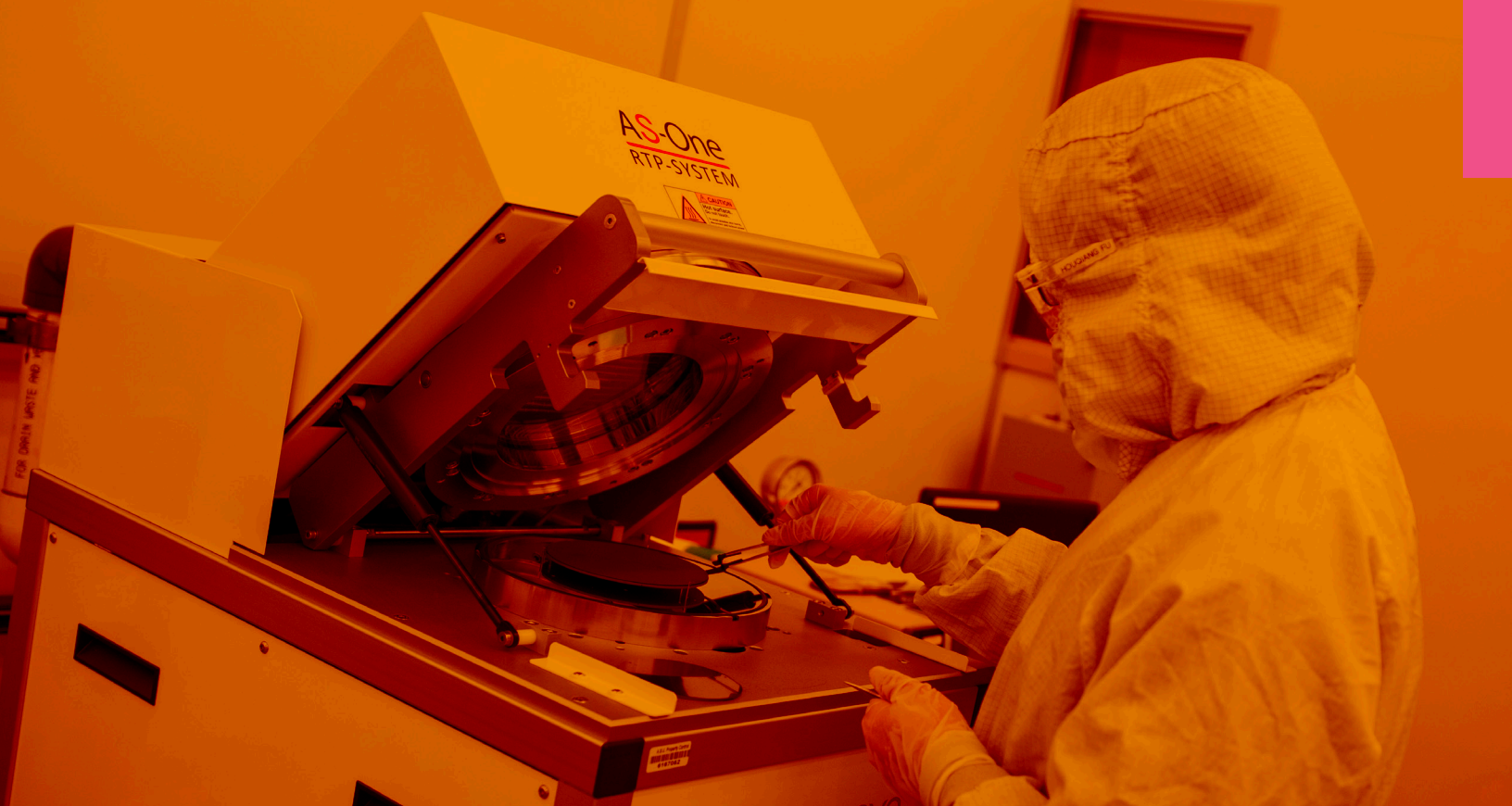
**The Ira A. Fulton Schools of Engineering (Fulton Schools, or FSE) at Arizona State University** seeks a highly accomplished scholar and strategic leader as director of the School of Electrical, Computer and Energy Engineering, or ECEE. Part of the Fulton Schools, ECEE has more than 85 faculty members and over 4,000 students enrolled as of fall 2024 on the Tempe campus and online. With 10 major research centers and highly regarded degree programs in electrical engineering; computer engineering; robotics and autonomous systems; and data science, analytics and engineering, ECEE faculty, students and strategic partners are exploring the ways **we advance electrical, computer and energy engineering from foundational discoveries through translational impacts via its academic programs and research enterprise.** ECEE is a key element of ASU's major evolution of the Fulton Schools to position it as one of the top 25 engineering schools in the U.S., and the director has an unparalleled opportunity to grow and transform the school to increase our impact as we address critical societal challenges together.

The director of the school reports to the dean of the Fulton Schools and will be the academic and administrative leader of ECEE. The director is responsible for visioning, strategic planning, operations, finance, academic affairs, external relations and advancement of school goals. These activities include working with faculty and staff to recruit and retain high-quality students, hiring and developing faculty, recruiting and supervising staff, creating opportunities for externally funded research, fundraising and development, and building strong relationships with industry, local, state and federal agencies and the greater Arizona community. Candidates will be qualified for appointment at the rank of full professor.

One of the nation's top public universities and ranked No. 1 in innovation by U.S. News & World Report, ASU is well underway in its bold reinvention of higher education as the New American University. ASU has developed new programs and units that bridge disciplinary boundaries to enable the exploration and discovery of new knowledge, while developing practical solutions to serve our communities and the world at large. ASU has strong and simultaneous commitments to educational access, research and teaching excellence and assumes significant responsibility for the cultural, social and economic vitality of its surrounding communities in the metropolitan Phoenix region and beyond.

Bolstered by the expertise among ECEE faculty, ASU is also a crucial piece of the rapidly expanding microelectronics industry ecosystem in Arizona, which has experienced a boost in semiconductor industry activity since the CHIPS and Science Act of 2022, elevating the area's longtime history as a microelectronics hub. ASU facilities have been named as the site of the National Semiconductor Technology Center (NSTC) Prototyping and NAPMP Advanced Packaging Piloting Facility, the Southwest Advanced Prototyping Hub (SWAP Hub) and the Materials-to-Fab collaboration with Applied Materials.

One of the fastest growing academic research enterprises in the U.S., ASU has created a vibrant environment of discovery, interdisciplinary research and innovation focused on addressing society's greatest challenges. Its research expenditures have more than doubled over the last decade, totaling \$904 million for the 2023 fiscal year. The Fulton Schools plays a pivotal role in this continued expansion.



## ASU leads the SWAP Hub

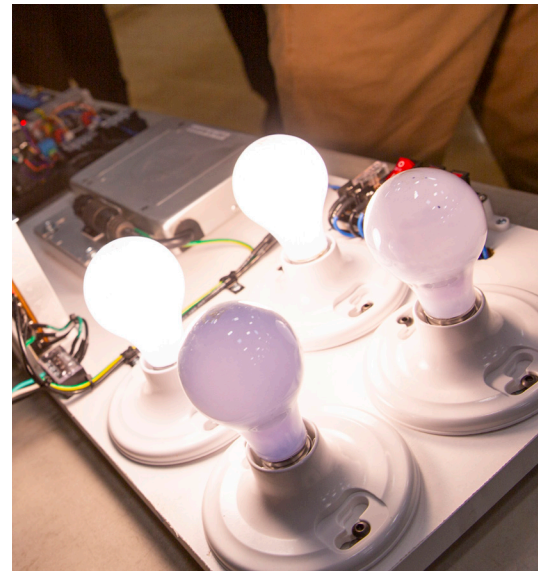
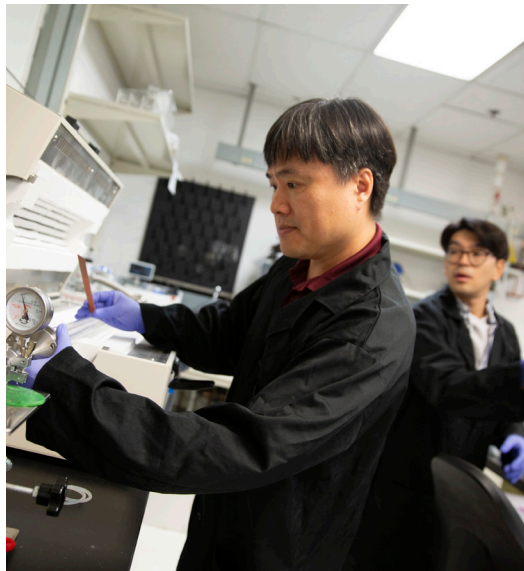
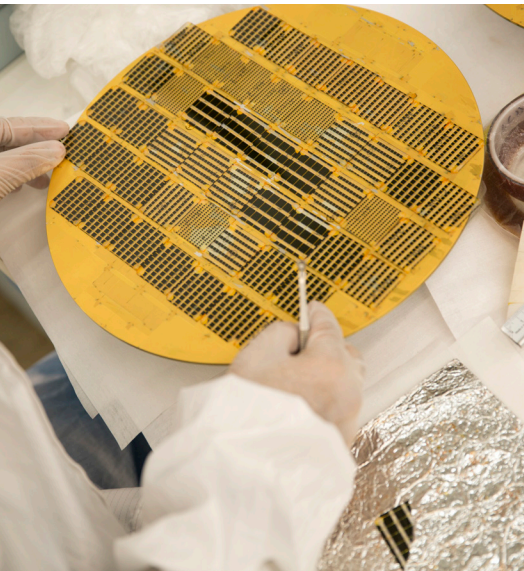
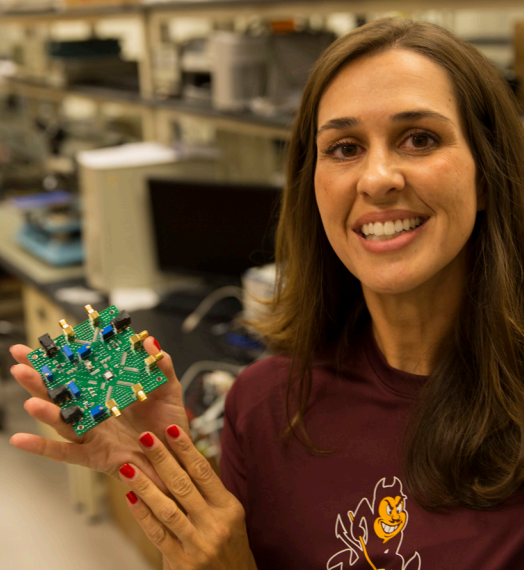
### The Southwest Advanced Prototyping Hub is pushing the limits of microelectronics capabilities for national defense

The U.S. Department of Defense chose **Arizona State University to lead the Southwest Advanced Prototyping, or SWAP Hub** — one of eight Microelectronics Commons regional innovation hubs nationwide.

- The SWAP Hub aims to boost the speed at which innovative microelectronics technologies move from the experimental stage to prototyping to deliver prototyping capabilities tailored to advance DOD needs.
- The SWAP Hub was awarded \$40 million in funding for its first year.
- Partnerships with industry and funding from the Arizona Commerce Authority and CHIPS and Science Act are providing more than \$200 million in equipment upgrades for ASU's MacroTechnology Works facility, where much of the SWAP Hub's work takes place.
- Krishnendu Chakrabarty, the Fulton Professor of Microelectronics in ECEE; Kyle Squires, dean of the Fulton Schools and ASU's senior vice provost of engineering,

computing and technology; and Jason Conrad, a semiconductor industry veteran with more than 20 years of experience, all serve in leadership roles for the program.





## Home and partner for CHIPS and Science Act-funded national semiconductor packaging facility

The U.S. Commerce Department and Natcast — the operator of the NSTC — announced the selection of ASU Research Park as the site of the co-located NSTC Prototyping and NAPMP Advanced Packaging Piloting Facility.

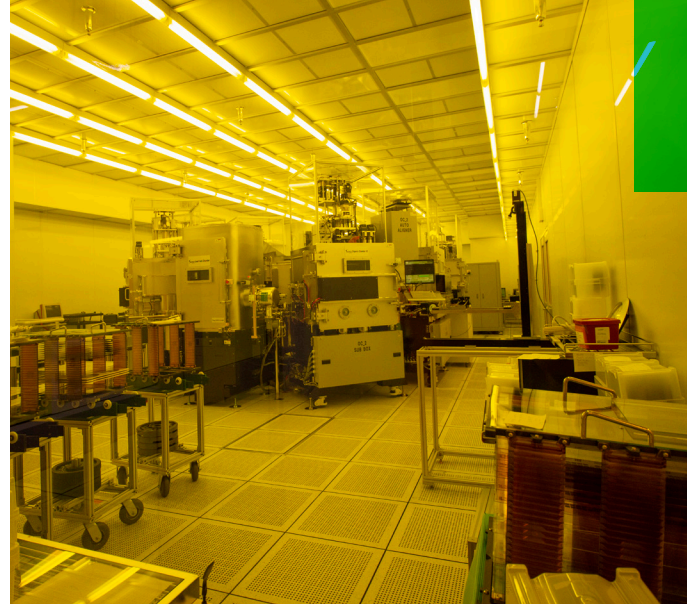
It is one of three **CHIPS for America** research and development flagship facilities and the one with the largest financial investment.

Located adjacent to the university's **MacroTechnology Works building**, the new facility will combine semiconductor research and prototyping for front-end manufacturing and packaging capabilities, meeting a unique need for advanced packaging R&D within the U.S. semiconductor ecosystem. The facility — part of the **CHIPS for America initiative**,

which aims to strengthen the U.S. semiconductor supply chain and accelerate cutting-edge research and development — is expected to be operational as early as the fourth quarter of 2028, representing hundreds of new jobs and billions of dollars of investment in Arizona.

# Research infrastructure: MacroTechnology Works

**ASU MacroTechnology Works** is accelerating semiconductor, advanced materials and energy device research in the United States. This unique national resource combines the equipment, expertise and training necessary to develop new technology from proof of concept to pilot scale. MacroTechnology Works offers capabilities that are an order of magnitude larger than those available at other universities.



## Key capability areas

**250,000 ft<sup>2</sup>**  
of total capacity

**43,500 ft<sup>2</sup>**  
of clean rooms

**22,000 ft<sup>2</sup>**  
of wet/dry labs

- ✓ R&D, pilot and production capable
- ✓ Substantial H6 capability
- ✓ Flexible subdivision can provide secure space for proprietary programs

**\$14.3M invested in equipment in FY22**

Primary focus on semiconductor equipment and research thrusts in ASU's Advanced Materials, Processes and Energy Devices (AMPED) Science and Technology Center

## Facilities for innovation and collaboration

### **Additive Manufacturing Center**

Formed as a partnership between ASU, Honeywell Aerospace, Concept Laser (now GE Additive), PADT, Intel and Stratasys, ASU's Additive Manufacturing Center contains \$2 million in state-of-the-art additive manufacturing equipment, including more than 20 3D printers that fabricate parts in polymers, composites and metal, making it the largest additive manufacturing R&D center at any southwestern U.S. university.

### **Advanced Electronics and Photonics**

The Advanced Electronics and Photonics (AEP) facility provides comprehensive electronics capabilities bridging the high-risk, resource-intensive gap between innovation and product development in an information-secure environment. AEP offers backplane electronics design, fabrication and test and integration capabilities. It operates dedicated pilot line tool sets for technology development.

### **NanoFab**

The NanoFab facility offers state-of-the-art device processing and characterization tools for research and industry partners and specializes in nanofabrication, unique silicon processing, molecular- and bioelectronics, microelectromechanical systems, nano-fluidics, optoelectronics and device characterization.

### **Solar Fab**

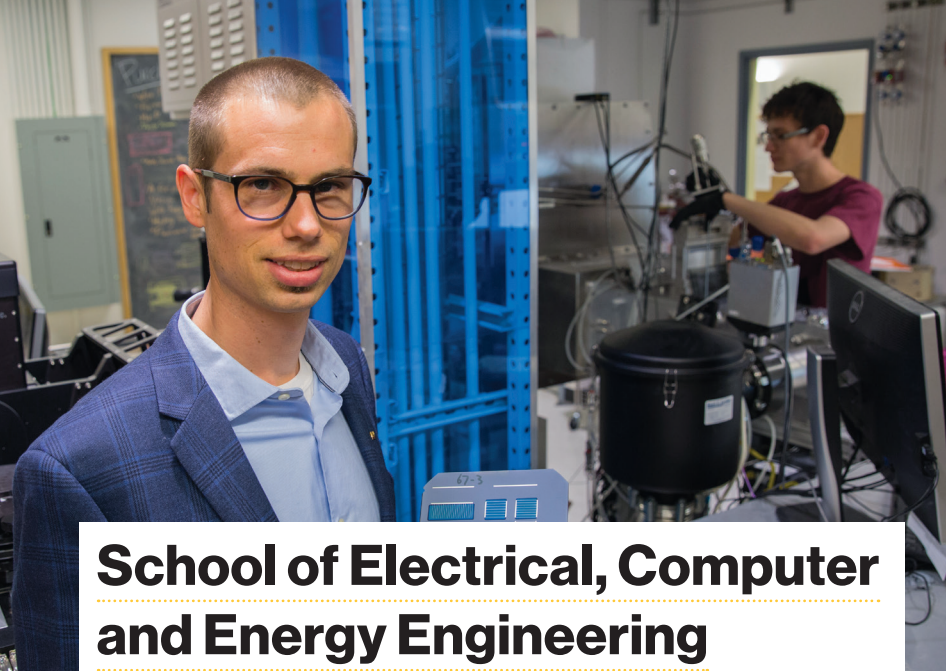
The Solar Fab facility offers start-to-finish solar cell fabrication, characterization and testing capabilities. Additional services include the ability to make modules and perform fundamental reliability testing.

### **Eyring Materials Center**

The Eyring Materials Center provides researchers with expertise and instrumentation for materials characterization; surface, optical and structural analysis; and high-resolution electron microscopy. It supports materials analysis across a broad range of scientific disciplines, including physics, chemistry, biological sciences, earth and space sciences and engineering.

### **Ultrafast Laser Facility**

This multi-user facility specializes in time-resolved laser spectroscopy for chemical, biological and material research. It offers advanced laser technologies and instruments for spectroscopic and imaging measurements to observe photophysical and photochemical processes in real time with temporal resolution down to femtosecond time scales and spatial resolution and sensitivity to the point where single molecule signals are detectable.



## School of Electrical, Computer and Energy Engineering

ECEE has more than 85 tenured and tenure-track faculty, research faculty, lecturers and professors of practice. Approximately 3,100 undergraduate students and 1,000 graduate students are enrolled on the Tempe campus and online. ECEE is one of eight schools in the Ira A. Fulton Schools of Engineering. Its faculty members are responsible for \$47 million in research expenditures and \$421 million in proposals for the 2024 fiscal year. ECEE boasts 10 major research centers led by faculty in the school. Ten ECEE faculty members have earned the prestigious NSF CAREER Award in the last four years.

ECEE's faculty excellence, research impacts, growth in its current programs and the development of innovative new academic programs, both on campus and online, have attracted national and international attention.

### By the numbers

**4,153** students fall 2024

**3,095** undergraduates

**1,058** graduates

**85** tenured/tenure-track faculty

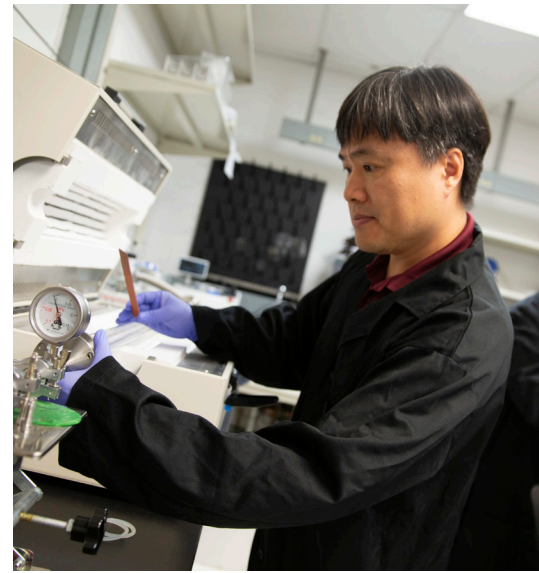
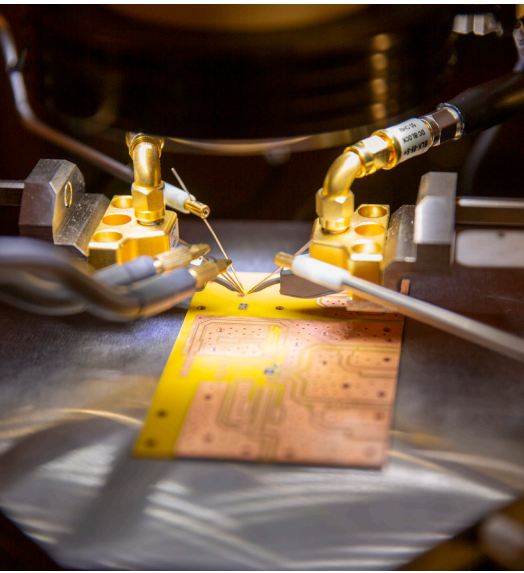
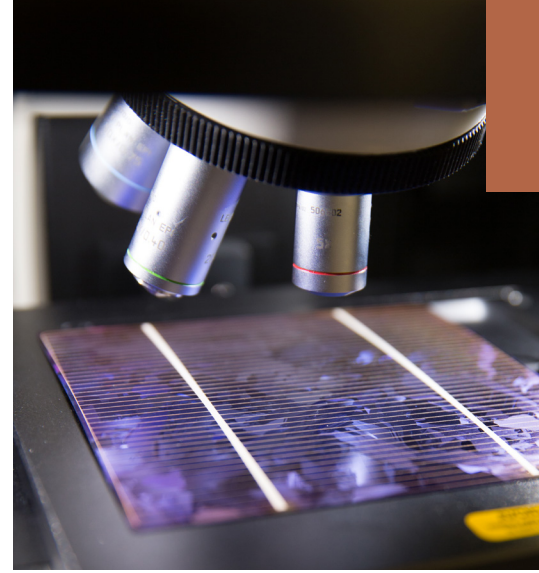
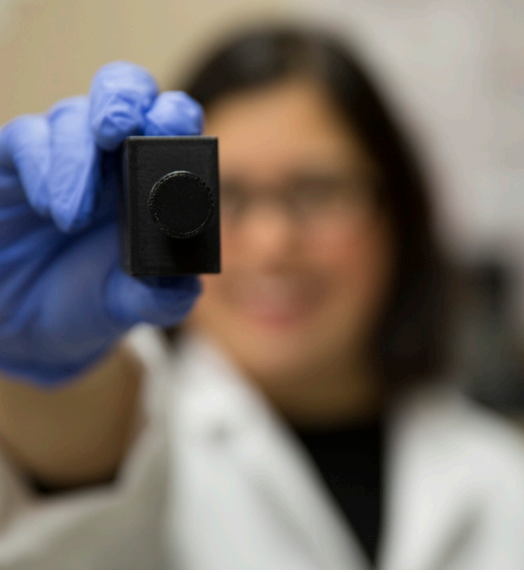
### ECEE research

Our research areas reflect the diversity of the disciplines that underlie the school and include control systems; electric power and energy systems; electromagnetics, antennas and microwaves; electronic and mixed-signal circuit design; physical electronics and photonics; and signal processing and communications. With 10 multidisciplinary centers and nationally recognized undergraduate and graduate degree programs, ECEE faculty scholarship makes impacts across myriad applications.

**\$421M**  
research proposals  
FY2024

**\$93M**  
research awards  
FY2024

**\$47M**  
ECEE research expenditures  
FY2024



## The Ira A. Fulton Schools of Engineering

The Ira A. Fulton Schools of Engineering is the largest and one of the most comprehensive engineering schools in the nation and is excelling in its mission to educate engineers and inspire innovation. In fact, one out of every five students at ASU is a Fulton Schools engineer, computer scientist or technologist. FSE's strategic goals center on advancing research and innovation at scale, revolutionizing engineering education and expanding global outreach and partner engagement.

FSE's differentiating hallmark is the "Fulton Difference" that is grounded in the following principles:

- Focus on student success in the classroom and beyond.
- Excellence in research from discovery to application and in engineering education.
- Acceleration of use-inspired research and entrepreneurial engagement.
- Engagement with stakeholders in industry and the community.
- Drive to make global impacts.

**\$272.9M in funding for major collaborative projects, facilities and initiatives in decarbonization and microelectronics, including the SWAP Hub, EPIXC and SHIELD USA**

**329 patents**  
**40 startups**  
in the last three years

**408**  
tenured and  
tenure-track  
faculty

Lead institution (CBBG) and partner institution (NEWT) on two National Science Foundation Engineering Research Centers



Lead institution on the Department of Homeland Security Center of Excellence



**#2**

**Startups**  
Ahead of Northwestern and Purdue

**#4**

**IP disclosures**  
Ahead of Cornell and Columbia[1]

**#3**

**Issued U.S. patents**  
Ahead of Penn and MIT

**#3**

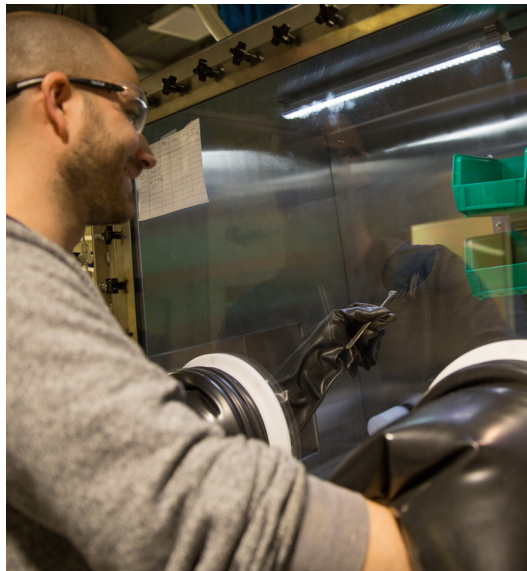
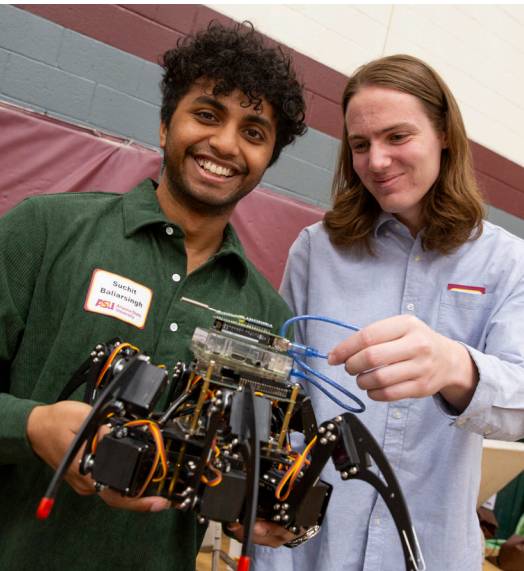
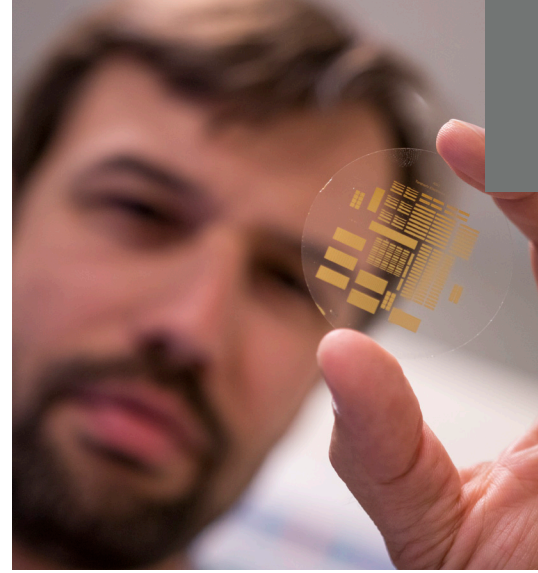
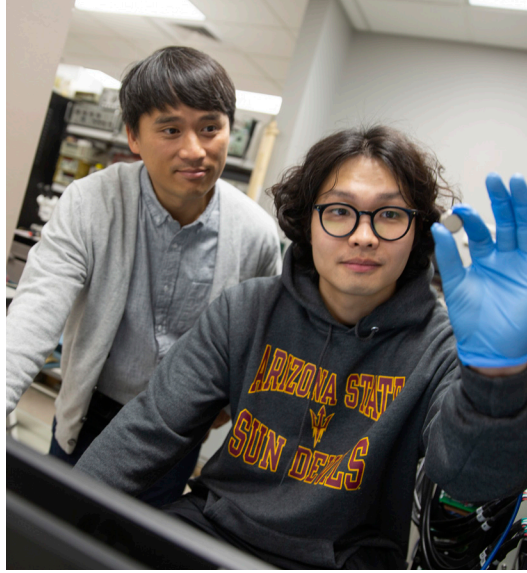
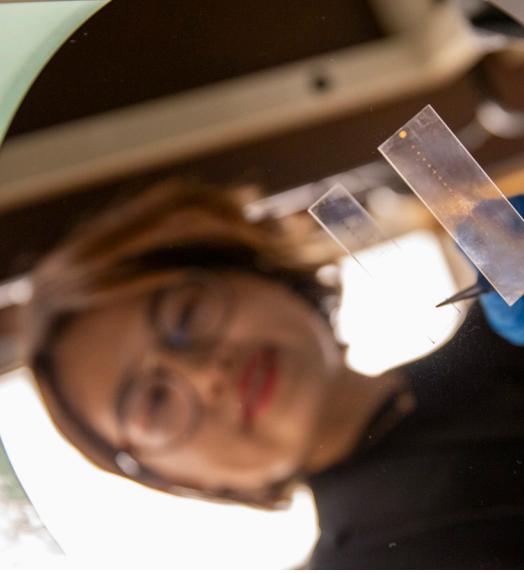
**Licenses and options**  
Ahead of Princeton and MIT

**34**  
NSF CAREER  
awards over  
the past  
four years

**\$265M**  
research  
expenditures  
– 2023 NSF\*

Association of University Technology Managers, FY2022[1] Comparative performance per \$10 million in research expenditures.  
\*2023 National Science Foundation Higher Education Research and Development Survey,





## Access and excellence

ASU is deeply committed to positioning itself as one of the great new universities by seeking to build excellence, enhance access and have a positive impact on its community, state, nation and the world. To accomplish this requires ASU faculty and staff to reflect its access and excellence mission by integrating a variety of perspectives from our nation and the world at large, enabling students to learn from the broadest perspectives. **The Fulton Schools' commitment to access and excellence** ensures we engage in the advancement of knowledge with the most comprehensive understanding possible of the issues we are addressing through our scholarly activities. The access and excellence mission is also integral to ASU's commitment to outstanding achievement in research, engagement and education.

# Arizona State University

Arizona State University has developed a new model for the American research university, creating an institution committed to excellence, access and impact — the New American University. The New American University is a comprehensive public research university measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.

Nine design aspirations guide the ongoing evolution of ASU. These institutional objectives are integrated in innovative ways throughout the university to achieve excellence, access and impact.

- Leverage Our Place
- Enable Student Success
- Transform Society
- Fuse Intellectual Disciplines
- Value Entrepreneurship
- Be Socially Embedded
- Conduct Use-Inspired Research
- Engage Globally
- Practice Principled Innovation

For the 10th year in a row, ASU was named the most innovative university in the nation, recognizing the university's culture of groundbreaking research and partnerships as well as its commitment to helping students thrive in college and beyond.

The ASU faculty is at the forefront nationally in advancing research and discovery. The university's more than 5,400 faculty members inspire new ways of thinking, innovating and solving problems socially, culturally and economically in our region and in the international community. ASU has more than doubled its research funding and been recognized as one of the fastest-growing research universities in the nation over the past 10 years. ASU reported \$904 million in research expenditures for fiscal year 2023, up from \$797 million the prior year.

- 12 MacArthur fellows
- 5 Nobel laureates
- 11 Pulitzer Prize winners
- 11 National Academy of Engineering members
- 41 Guggenheim fellows
- 163 National Endowment for the Humanities fellows
- 299 Fulbright American Scholars
- 26 National Academy of Sciences members
- 6 National Academy of Medicine members
- 8 National Academy of Education members
- 10 National Academy of Public Administration fellows

# Greater Phoenix

**Phoenix is known for year-round sun, desert beauty, sophisticated urbanscapes, southwest culture and so much more.**

## **Climate**

Enjoy 300 days of sunshine a year and an average temperature of 76 degrees.

## **Arts and culture**

Greater Phoenix is a rich arts and culture environment with diverse museums, theater, concert halls and cultural centers, such as the renowned Heard Museum, Phoenix Art Museum, Arizona Science Center, Phoenix Symphony, Arizona Opera, Ballet Arizona and the Arizona Theatre Company.

## **Outdoors**

Phoenix has a number of lakes just a short drive away offering opportunities for boating, sailing, windsurfing, water and jet skiing, fishing and more. The area is home to dozens of parks and preserves — both in and around the city — with hundreds of miles of multi-use trails for hiking and biking. The state is home to three national parks, including the Grand Canyon, and other popular destinations like Sedona.

## **Semiconductor industry**

Greater Phoenix has long been a hotbed of semiconductor industry research and development. Since passage of the CHIPS and Science Act and the resulting renewed focus on boosting microelectronics production in the U.S., Arizona has seen many new fabrication facilities under construction from both companies with a longtime presence in the area and businesses new to the region. TSMC, in particular, has multiple large fabs under construction in north Phoenix, while Intel is expanding their facilities as well.

## **Cost of living**

Greater Phoenix offers the diverse amenities of a major metropolitan region without the high cost of living. As the fifth largest city in the U.S. and one of the most dynamic and rapidly growing regions in the nation, living and working here is both exciting and affordable.

## **Low tax position**

Low personal income taxes and low effective property tax rates offer affordability and opportunities for everyone to thrive.

## **Business and industry**

Arizona is home to a surging industrial ecosystem, early stage entrepreneurs and tech-savvy millennial talent who are breaking new ground across a wide range of industry growth sectors. What's more, Arizona offers a robust portfolio of programs and resources supporting both large and emerging tech companies. The state's rich startup culture continues to thrive and is a preferred choice for technology companies seeking growth. Leading startups have collectively taken advantage of Arizona's high-skills talent base. Established companies, especially those in the microelectronics industry, have also chosen the state as one of the best to grow their operations through numerous new fabrication facilities and offices. Arizona's solid reputation and assertive stance on innovation led Fast Company to rank Arizona No. 1 in the country for "entrepreneurial activity."

# Qualifications and desired attributes for the Director of the School of Electrical, Computer and Energy Engineering

## ASU seeks a school director with the following qualifications, professional experiences and attributes:

- A PhD in electrical or computer engineering or related field and a distinguished record of teaching and research appropriate for appointment at the rank of professor with tenure in ECEE.
- Demonstrated excellence in leadership of people, programs and resources within an academic environment.
- An innovative, curious and creative thinker who will leverage the Fulton Schools' faculty strength and institutional resources to create a clear vision for ECEE and foster a culture of academic excellence, growth and transformational impact.
- A strong scholar who will continue to build and diversify ECEE's already strong research portfolio by facilitating the collaboration of cross disciplinary teams, identifying center level opportunities, and stewarding current relationships and fostering new ones with public and private sector partners including industry, government agencies, foundations, and philanthropists.
- Commitment to providing a quality learning environment at all levels with experience serving the needs of a complex student population with multiple learning modalities and program delivery.
- Strong interpersonal skills and relationship management capabilities; ability to interact with and engage with a wide array of internal and external constituencies.
- Leadership style that energizes and inspires others and fosters clear communication, collaboration and engenders a respectful and collegial work environment.
- Readiness to serve as the chief ambassador for the school, fostering industry and community relationships and enhancing the school's national and international reputation.
- Commitment to the ideals of ASU's mission and Charter: access, excellence, and impact.

**Qualifications, desired attributes and additional information about the position, the School of ECEE, the Fulton Schools, and ASU can be found in the leadership profile: [ecce.engineering.asu.edu/about/leadership](https://ecce.engineering.asu.edu/about/leadership)**

**For best consideration, applications should be submitted by March 25, 2025, to the AGB Search portal at: [ASU Director, School of Electrical, Computer and Energy Engineering](#).** Candidates are requested to submit a letter of interest that describes the breadth of experience that will contribute to leading an interdisciplinary school and how the ASU Charter reflects on future plans. Candidates should also submit a current curriculum vitae and the names and contact information for five references (references will not be contacted during initial review and will only be contacted after candidate notification).

Nominations and expressions of interest in the Director opportunity are encouraged. Please direct them to [ASUDirectorECEE@agbsearch.com](mailto:ASUDirectorECEE@agbsearch.com) or to the AGB Search consultants listed below.

### **Kimberly Templeton, J.D., Principal**

Kimberly.Templeton@agbsearch.com | 540.761.9494

### **Nancy Targett, Ph.D., Executive Search Consultant**

Nancy.Targett@agbsearch.com | 302.233.5202

### **Anne Hoffman, Executive Search Associate**

Anne.Hoffman@agbsearch.com | 805.490.9161

**AGB  
SEARCH**

A background check is required for employment. Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, age, disability, veteran status, sexual orientation, gender identity or any other basis protected by law. (See [asu.edu/aad/manuals/acd/acd401.html](https://asu.edu/aad/manuals/acd/acd401.html) and [asu.edu/titleIX/](https://asu.edu/titleIX/).) In compliance with federal law, ASU prepares an annual report on campus security and fire safety programs and resources. ASU's Annual Security and Fire Safety Report is available online at [asu.edu/police/PDFs/ASU-Clery-Report.pdf](https://asu.edu/police/PDFs/ASU-Clery-Report.pdf). You may request a hard copy of the report by contacting the ASU Police Department at 480-965-3456.