KNOCKLEDGE ENTERPRISE DEVELOPMENT

2015 An Award-Winning Year of Innovation

#1 in the U.S. for innovation

#1 ASU #2 Stanford #3 MIT

-U.S. News & World Report
Knowledge Enterprise Development

Arizona State University Knowledge Enterprise Development is responsible for the research, innovation and economic development associated with the university.

ASU has built its research enterprise on the principles of conducting transdisciplinary, use-inspired and socially embedded research. One of the fastest growing research enterprises among U.S. universities, ASU continuously addresses emerging challenges via the research and economic development engines created through its knowledge enterprise.

Research Expenditures and Funding

One of the fastest growing research enterprises among universities with more than $100 million in research expenditures.

National Science Foundation HERD Survey FY2014

#5 for earth sciences expenditures, ahead of Berkeley, MIT and Penn State

#6 for social sciences expenditures, ahead of Princeton, Penn and Cornell

#11 for National Aeronautics and Space Administration (NASA) funding

#10 in the nation for research expenditures among institutions without a medical school, ahead of Caltech, Princeton and Carnegie Mellon

#9 for Health and Human Services (including NIH) funding among institutions without a medical school
# Facts and Rankings

1st school of sustainability in the nation

#1 public university chosen by international students

— Institute of International Education 2015

Named one of the nation’s most sustainable colleges for 6 years in a row for its use of renewable energy, LEED-certified buildings and support for alternative transportation.


ASU partners globally to advance education and research, with experts and leaders from multiple countries including Ireland, Australia, the Netherlands, Vietnam and China.

#4 among U.S. universities for international Students, ahead of Illinois, Urbana-Champaign; Northeastern; Purdue; and UCLA

#5 in the nation for percentage of Fulbright Student applicants awarded a grant

#8 among Best Colleges for Veterans, ahead of Utah and Rutgers

#18 among Top Universities for Silicon Valley Jobs, ahead of UC Irvine and Cornell

# Faculty Excellence

2 Nobel Laureates

6 Pulitzer Prize winners

10 National Academy of Engineering members

13 National Academy of Sciences members

38 National Endowment for the Humanities members

66 fellows of the American Association for the Advancement of Science
ASU was ranked #1 among America’s “Most Innovative Schools” for 2016 by U.S. News & World Reports. The ranking, based on a survey of college officials around the country, places ASU ahead of #2 Stanford and #3 MIT.

Making 3-D printed cars a reality

Local Motors debuted the world’s first 3-D printed car in 2015. The company is engaging faculty and students from ASU’s Ira A. Fulton Schools of Engineering to conduct materials research and testing to help bring the next generation of vehicle technology to market.

Charles Arntzen named the most creative person in business 2015

Fast Company magazine honored ASU scientist Charles Arntzen as #1 among the “100 Most Creative People in Business 2015.” Arntzen was chosen for his pioneering role in developing ZMapp, a therapeutic produced in tobacco plants to fight Ebola.

NASA releases image of Earth taken by ASU camera

NASA has released a richly textured image of the Earth taken by the Lunar Reconnaissance Orbiter Camera (LROC), operated by ASU. Professor Mark Robinson, a professor in ASU’s School of Earth and Space Exploration, is the principal investigator for LROC.
NASA selects ASU to lead CubeSat mission

ASU will design, build and operate a spacecraft the size of a shoebox that will orbit the moon. The Lunar Polar Hydrogen Mapper (LunaH-Map) CubeSat will produce a detailed map of the moon’s water deposits.

ASU to lead second national engineering center

ASU’s new $18.5 million Engineering Research Center (ERC) uses geotechnical engineering to address some of the world’s biggest environmental and infrastructure development challenges. ASU is now one of only two universities in the U.S. to lead two prestigious NSF-funded ERCs. The other center, focused on solar energy, was awarded in 2011.

ASU develops world’s first white laser

Reinforcing the Ira A. Fulton Schools of Engineering’s cutting-edge reputation, a team of ASU scientists and graduate students developed the world’s first white laser. Popular Science named the groundbreaking development one of the top 100 breakthroughs of the year.

Uncovering the earliest known fossil of the human genus

ASU anthropologists were part of a team that discovered a 2.8-million-year-old jawbone in Ethiopia, the earliest known fossil on the ancestral line that led to humans.

Sustainability at ASU

Eight ASU sustainability experts attended at the 2015 United Nations Framework Convention on Climate Change Conference of the Parties in Paris, France, Nov. 30 through Dec. 11. ASU expertise was represented in areas ranging from international law to ecology to ideology, policy and equity.
Entrepreneurial Spirit

NeoLight is a medical device company founded by ASU students (now alums) that aims to eradicate infant jaundice casualties across the world with the help of smaller and more effective devices. The startup received valuable office space at ASU SkySong, seed funding and mentorship as part of the ASU Edson Student Entrepreneur Initiative, and has gone on to raise $800,000 in external funding.

BetR-block, a 2015-2016 ASU Edson Student Entrepreneur Initiative startup co-founded by ASU undergraduate student Chris Frettoloso, is creating sustainable building blocks from recycled paper and other cellulose materials that serve as a substitute for lumber. The startup won the 2015 Startup Connect AZ conference pitch contest.

Unlike universities that confine entrepreneurship to business and engineering schools, entrepreneurship is infused throughout all academic disciplines at ASU.
Environment for Innovation

ASU continues to be one of the top 100 research universities worldwide. In a 2015 report, based on data compiled from the National Academy of Inventors and the Intellectual Property Owners Association, ASU was named one of the top 50 international universities for the number of patents issued to its researchers, ranking ahead of Yale University and Duke University.

Scottsdale was named one of the top 10 cities in which to launch a startup, thanks to its close partnerships with Arizona State University. The ASU-Scottsdale union allows the city to foster collaboration between entrepreneurs, students and community members. Examples of such entrepreneurship-advancing spaces and programs include SkySong, the ASU Scottsdale Innovation Center, along with the Edson Student Entrepreneur Initiative and the Furnace Technology Transfer Accelerator.

Economic Impact

ASU partners with Arizona Commercial Advisors (ACA), Greater Phoenix Economic Council (GPEC) and Tucson Region Economic Opportunities (TREO) to attract and expand economic development in Arizona.

66,217 jobs created in FY14

More than 80 companies have launched based on ASU innovations and have attracted more than $500 million in external funding, including $76 million in FY15.

Technology to market

ASU was awarded $1 million from the DoD to create a new Pracademic Center of Excellence in Technology Transfer (PACE/T2) to leverage ASU’s proven method and record of success to support technology transfer and commercialization from DoD laboratories. The center is a collaboration led by ASU’s Entrepreneurship and Innovation Group, in association with other ASU units including Arizona Technology Enterprises (AzTE). AzTE is ASU’s exclusive intellectual property management and technology transfer organization.

Leading the charge on innovative partnerships

SkySong, the ASU Scottsdale Innovation Center, was awarded the 2015 Silver Excellence in Economic Development Award by the International Economic Development Council. The award recognizes the City of Scottsdale and SkySong for being “pacesetting organizations...leading the charge” on economic development efforts that have an impact on local as well as global endeavors.
Advancing research, innovation, strategic partnerships, entrepreneurship and economic development

Visit knowledgeenterprise.asu.edu for additional information.