

College of Engineering

# SYSTEMS ENGINEERING

## Experts in Complex Design

As our world becomes increasingly complicated, systems engineers make it all work together. They use imagination and technical skills to design and manage complex interactions between machines, people, software, hardware, materials and energy. Their work improves health care, transportation, defense and space systems, for example.



### DESTINATION OF CHOICE

Established in 1961, the UA systems engineering department was the first of its kind in the nation, and the curriculum leads the way in large, complex systems. Course topics include probability and statistics, system theory, decision analysis and simulation. U.S. News & World Report ranks the University of Arizona at No. 16 for public systems and industrial engineering schools.

### REWARDING CAREER PATHS

Systems engineering is a growing field with a median salary over \$95,000, according to the Bureau of Labor Statistics. Graduates' technical expertise and business acumen is highly valued by government agencies and private companies, such as aerospace programs and biomedical labs.



»» [sie.engineering.arizona.edu](http://sie.engineering.arizona.edu)



### REMARKABLE RESEARCH

Systems engineers at the University of Arizona are handling areas of NASA's OSIRIS-REx mission. In addition to space exploration, the department is leading progress in a number of fields:

- Computer technology and data systems
- Infrastructure and energy
- Industrial and manufacturing operations
- Biomedical systems
- Security/cybersecurity



“ With 100% conviction and certainty, my education at the University of Arizona prepared me for my career. I have always felt indebted to the outstanding professors and influencers I met there. ”

*Alum Ann Wilkey, Sandia National Laboratories*

### LEARNING FROM EXPERIENCE

Outside the classroom, students participate in a variety of activities to build leadership skills and prepare for the workforce.

- National and international conferences, with research paper submission
- Paid internships with longtime industry partners
- Formal networking opportunities with faculty, alumni and industry
- Senior design projects with experienced industry mentors
- Research opportunities and field experience
- Student chapters of professional organizations, such as IEEE
- Student clubs and national competitions

### A PLACE FOR EVERYONE

Various engineering clubs – American Indian Science & Engineering Society; National Society of Black Engineers; Out in Science, Technology, Engineering, and Mathematics; Society of Hispanic Professional Engineers, and Society of Women Engineers, for example – help ensure all students feel welcome and connected.

“ The University of Arizona is extremely unique. People are really open to cross collaboration. ”

*Roberto Furfaro, professor*



#### Recruiting and Admissions

520.621.6032 – [enr-admissions@arizona.edu](mailto:enr-admissions@arizona.edu)

#### Advising

520.621.6551 – [advisor@sie.arizona.edu](mailto:advisor@sie.arizona.edu)