Engineering Career Fair Spring 2020
Connecting partnerships for technology and talent
ASU Charter

ASU 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.
Fulton Schools of Engineering

The largest and most comprehensive engineering college in the United States

Interdisciplinary structure
6 schools
2 campuses + online
Cross-campus partnerships with arts, business, sustainability, sciences

Academic programs
25 undergraduate degree programs
46 graduate programs
23,903 students (~7,000 online)
4,540 graduates across all degree levels

Faculty
~350 tenured/tenure-track faculty
~100 lecturers and professors of practice
29 young investigator awards over the past four years

Research and innovation
$115M in FY2019
Lead two NSF ERCs (partner on one other)
Lead DHS Center for Accelerating Operational Efficiency

Entrepreneurial outputs
192 patents
24 startups in the last three years

Global capacity-building programs in Vietnam and Pakistan
## Building engineers, inspiring innovators

**Our Transdisciplinary Partners at ASU**

- School of Arts, Media and Engineering
- Herberger Institute for Design and the Arts
- School of Earth and Space Exploration
- College of Liberal Arts and Sciences
- The Biodesign Institute
- College of Integrative Sciences and Arts
- Global Security Initiative
- School for the Future of Innovation in Society
- Julie Ann Wrigley Global Institute of Sustainability
- W. P. Carey School of Business

### Cross-college programs
- Innovation and venture development
- The Design School
- W. P. Carey School of Business
- Technological entrepreneurship and management
- W. P. Carey School of Business
- User experience
- College of Integrative Sciences and Arts

### 25 undergraduate programs • 46 graduate programs • 2 campuses+online

<table>
<thead>
<tr>
<th>School of Biological and Health Systems Engineering</th>
<th>School of Sustainable Engineering and the Built Environment</th>
<th>School of Computing, Informatics, and Decision Systems Engineering</th>
<th>School of Electrical, Computer, and Energy Engineering</th>
<th>School for Engineering of Matter, Transport and Energy</th>
<th>The Polytechnic School</th>
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</thead>
<tbody>
<tr>
<td>Marco Santello, Director</td>
<td>Ram Pendyala, Director</td>
<td>Sandeep Gupta, Director</td>
<td>Steve Phillips, Director</td>
<td>Lenore Dai, Director</td>
<td>Leila Ladani, Director</td>
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<tr>
<td>833 students</td>
<td>1,771 students</td>
<td>7,773 students</td>
<td>3,353 students</td>
<td>3,891 students</td>
<td>5,858 students</td>
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<tr>
<td>707 undergraduate</td>
<td>1,380 undergraduate</td>
<td>5,901 undergraduate</td>
<td>2,369 undergraduate</td>
<td>3,153 undergraduate</td>
<td>5,422 undergraduate</td>
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<tr>
<td>126 graduate</td>
<td>391 graduate</td>
<td>1,872 graduate</td>
<td>974 graduate</td>
<td>738 graduate</td>
<td>436 graduate</td>
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- Biomedical engineering
- Civil engineering
- Construction engineering
- Construction management
- Environmental engineering
- Sustainable engineering

### Robotics and autonomous systems

- Computer engineering
  - Computer science
  - Computer systems engineering
  - Engineering management
  - Industrial engineering
  - Informatics
  - Software engineering
- Electrical engineering
  - Aerospace engineering
  - Biological design
  - Chemical engineering
  - Materials science and engineering
  - Mechanical engineering
  - Solar energy engineering and commercialization

- Aeronautical management technology
- Engineering
- Engineering education systems and design
- Environmental and resource management
- Graphic information technology
- Human systems engineering
- Information technology
- Manufacturing engineering
- Systems engineering

### Fall 2019 Enrollment

- 833 students: 707 undergraduate, 126 graduate
- 1,771 students: 1,380 undergraduate, 391 graduate
- 7,773 students: 5,901 undergraduate, 1,872 graduate
- 3,353 students: 2,369 undergraduate, 974 graduate
- 3,891 students: 3,153 undergraduate, 738 graduate
- 5,858 students: 5,422 undergraduate, 436 graduate
Producing talent

Supply of graduates helps fuel Phoenix being named #3 city for tech jobs (TIME Money June 2017)

#7 for bachelor’s degrees granted in U.S.

#9 for bachelor’s degrees granted to Hispanics

#18 for bachelor’s degrees granted to women

Rankings from 2017 American Society for Engineering Education Profiles
Broadening participation

4,336 International
5,227 Underrepresented
5,295 Female
Diversity and Inclusion @ FSE

• **Articulate** our collective vision/mission for diversity and inclusion for students, faculty, staff and industry partners

• **Identify** strategies and practices that support a diverse workplace and an inclusive environment.

• **Measure**...implement and monitor

• **Take a leadership role** in nationally disseminating our approach
  • Emphasis on how we achieve results through partnerships and at scale.
What does your company look like in 2030?

We are your partner to…

- **Accelerate** your talent acquisition and upskilling.
- **Leverage** capacity of Fulton Schools faculty to advance research, technology development and business translation.
- **Enhance and build** greater brand awareness as a corporate leader within the largest engineering institution in the nation.
Learning Pathways for Future Workforce

**Open Courses**
- Not for university credit
- Online, self-paced learning on demand
- Developed by ASU faculty
- Low to no cost
- Purpose is to upskill around specific competencies
- Goal is to introduce technical topics and provides pathways to other credentials
- 8-20 hours per course
- 4-6 open courses can lead to a specialization

**Short Courses**
- Not for university credit
- Agile training options delivered in various modalities
- Industry relevant topics
- Developed and taught by ASU faculty and industry experts
- Purpose is to upskill around specific competencies with increased rigor & engagement
- Goal is to enable learner to rapidly apply content knowledge and build in-demand skills
- 20-40 hours

**Professional Certification**
- Not for university credit
- Agile training options delivered in various modalities
- Industry relevant topics
- Taught by ASU faculty and industry experts
- Industry-relevant projects
- FSE-recognized professional certification
- Purpose is to upskill around specific competency via completion of a project
- Goal is to provide real-world application to professionals seeking a high impact return
- 3-6 months

**Undergraduate**
- Earn university credit
- Enhanced courses focus on relevant topics
- Faculty engagement and feedback
- Taught by ASU faculty
- Accredited programs
- Financial aid
- Condensed 7.5 week format possible
- Transfer pathways
- 120 credits completed over 4-6 years to earn a degree

**Graduate**
- Earn university credit
- Enhanced courses specialized on relevant topics
- Faculty engagement and feedback
- Taught by ASU faculty
- Accredited programs
- Financial aid
- Unique assessments based on graded assignments, exams and applied projects
- 10 courses completed over 2-4 years to earn a degree
- 5 courses completed to earn a graduate certificate

**Value Proposition:** Global Alumni Network, Career Resources, 24/7 Learner Support, Focused on Student Success
Engaging across the student experience

From E2 Camp through graduation

Building brand awareness throughout the experience

Student projects, events, guest speakers, hackathons, research, faculty engagement, scholarships, internships, recruitment and other events
Arizona’s 3 university presidents promote research as economic driver.
Dispelling the darkness leads Vijay Vittal to Regents Professor honor
Partnering on student pathways

State Farm, ASU announce partnership on Pathways for the Future initiative
Partnering on new degree programs

New entrepreneurship master’s degree combines design, business, engineering
Partnering on student entrepreneurship

Congratulations to the 2020 Innovation Open winners!
Partnering for an entrepreneurial workforce

First E+I Career Fair connects students with startups
Vice Dean James Collofello
Academic and Student Affairs
James.Collofello@asu.edu
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