

Finding a home in the Ira A. Fulton School of Engineering

50 YEARS of
ENGINEERING
ARIZONA STATE UNIVERSITY



ASU IRA A. FULTON
SCHOOL OF ENGINEERING
ARIZONA STATE UNIVERSITY

Ira A. Fulton School of Engineering "Access, Excellence, Impact"

Vision: Leading Engineering Discovery and Innovative Education for Global Impact on Quality of Life.

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SCHOOL OF ENGINEERING
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Ira A. Fulton School of Engineering "Access, Excellence, Impact"

Mission: Provide an Environment Rich in Transdisciplinary Research, Education, Entrepreneurship, and Leadership Resulting in Successful Engineers and Technologies that Benefit Society.

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Who "is" the Ira A. Fulton School of Engineering?

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Nine academic units

- Harrington Department of Bioengineering
- Department of Chemical Engineering
- Department of Civil and Environmental Engineering
- School of Computing and Informatics
- Del E. Webb School of Construction
- Department of Electrical Engineering
- Department of Industrial Engineering
- School of Materials
- Department of Mechanical and Aerospace Engineering



Reputation and Rankings

- Top 50 ranking for engineering programs nationally:
 - 39th of 105 undergraduate programs ranked
 - 47th of 185 graduate programs ranked
- Five of 10 graduate specialties rank in top 30; all in top 50
- Computer science Ph.D. program ranks 51, moving up from 55 last year
- DEWSC continues to be one of the top construction schools in the nation



2007 Graduate Specialty Rankings

- 17 – Industrial
- 22 – Aerospace
- 23 – Environmental
- 24 – Bioengineering
- 29 – Electrical
- 31 – Mechanical
- 34 – Civil
- 35 – Materials ⁽²⁰⁰⁶⁾
- 39 – Computer engineering
- 45 – Chemical

Students and Alumni

Student Demographics – President Crow priority -- need to improve!

- African American-3%
- Hispanic-10%
- Native American-2%
- International-18%
- Women-19%

Honors Students

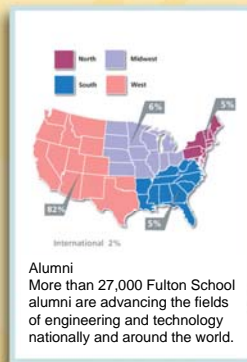
- IAFSE students represented 15% of all students attending Barrett, The Honors College at ASU.

Merit Scholars

- IAFSE students represented 22% of first-time freshmen Merit Scholars and 20% of total Merit Scholars attending ASU.

Scholarship Awards

- 358 students received a total of \$636,000 in private funds for merit-based scholarships.



*Source: Institutional Analysis, Fall 2005 21st day

What do faculty do?

- Teach undergraduate and graduate classes
- Lead research in the laboratory, field or virtual space. Faculty conducted over \$50 million in research productivity last year.
- Mentor graduate and undergraduate students and post-doctoral researchers conducting research
- Serve on department, school and university committees
- Active involvement in professional associations, national research programs, review proposals and articles

What does it take to be successful?

Engineer 2020 – National Academies Press

- Strong analytical skills
- Practical ingenuity
- Creativity (innovation, invention, think outside the box, art)
 - Craig Barrett: "Ideas create wealth; Education creates jobs"
- Good communication
- Business & management skills
- Leadership skills
- High ethical standards
- Professionalism
- Dynamism, agility, resilience, flexibility
- Life-long learners

We want these attributes
for our students!

We (IAFSE) need to embody
these same attributes

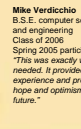
Fulton Undergraduate Research Initiative (FURI)

- With the initiatives set out in FURI, you can greatly expand and enrich your undergrad research experience AND be on the top of the hiring list when it comes to starting your career.
- Students, in collaboration with mentors, will make proposals to fund the work they want to perform. Undergrads earn money for creating knowledge based upon the scholarly method. Motivated students will find a thrilling experience in the intellectual community while enriching their graduate school aspirations or entry into industry. What better way to maximize your potential in engineering?
- Students will be paid an hourly rate of \$8.50 for 10 hours weekly equaling a total of \$1360 per semester. Students will be paid bi-weekly. Of course, students must perform to the mentor's satisfaction to receive the entire semester employment. The cost of supplies, up to \$400, may be covered. Mentors will receive \$500 (after the student completes the semester in FURI).

Ryan Bellman
B.S.E. mechanical
engineering
Class of 2007
Honors Thesis
Spring 2005 participant
"The research has been
very beneficial in showing
me additional opportunities
within the field. The
symposium was also an
excellent experience to
share my research."



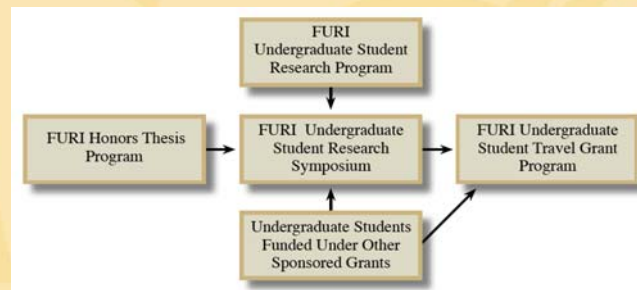
Sarah Kennedy
B.S.E. bioengineering
Class of 2006
Spring 2005 participant
"I have found that FURI has
bestowed much needed structure
and support for undergraduate
engineering research at ASU. I
have been able to experimentally
demonstrate the viability of my
research that would have not been
possible otherwise."



Mike Verdichio
B.S.E. computer science
and engineering
Class of 2006
Spring 2005 participant
"This was exactly what I
needed. It provided invaluable
experience and provided
hope and optimism for the
future."



Fulton Undergraduate Research Initiative (FURI)



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For more information visit...

<http://www.fulton.asu.edu/fulton/>