EXPANDING faculty, facilities & programs

3,350 square feet of makerspace planned in Jubel Hall

NEW PHD PROGRAM IN IMAGING SCIENCE, one of only two such programs in the U.S.

17 new faculty members joined engineering during the past two years, out of 94 tenured/tenure-track faculty

NEW MASTER OF SCIENCE IN CYBERSECURITY ENGINEERING

CONSTRUCTION OF TWO NEW ACADEMIC BUILDINGS, JUBEL HALL AND MCKELVEY HALL, UNDERWAY

Jubel Hall (left) will open in 2019 and McKelvey Hall in 2020

3,350 square feet of makerspace planned in Jubel Hall

17 new faculty members joined engineering during the past two years, out of 94 tenured/tenure-track faculty

NEW PHD PROGRAM IN IMAGING SCIENCE, ONE OF ONLY TWO SUCH PROGRAMS IN THE U.S.

1,292 Undergraduate students
466 Full-time master’s students
297 Part-time master’s students
394 PhD students

INTERNATIONAL STUDENTS
11% Undergraduate students
66% Full-time master’s students
63% PhD students

TOP COUNTRIES
China
India
South Korea
Taiwan
Iran
Japan
Canada
Vietnam
Singapore
Turkey
Saudi Arabia

UNDERREPRESENTED BACKGROUNDS
14% Undergraduate students
9% Master’s students
2% PhD students

WOMEN STUDENTS
30% Undergraduate
20% Master’s
28% PhD

APPLICATION DATA FOR FALL 2017
Undergraduates
Master’s
PhD
6,456 applied
2,084 applied
636 applied
14.1% admitted
52.8% admitted
25.6% admitted
301 enrolled
249 enrolled
67 enrolled

42% of first-year students are women or from underrepresented backgrounds

42 & 37
Engineers come from 42 states, the District of Columbia and 37 countries

CS131
Undergraduate class with the highest enrollment at WashU

27% of undergraduate varsity athletes are Engineering majors
Test uses nanotechnology to quickly diagnose Zika virus

Researchers have developed a test that quickly detects the presence of Zika virus in blood.

Testing begins for student-created app to aid Alzheimer’s diagnosis

With the aim of streamlining the diagnosis of Alzheimer’s disease, a student-led team has designed an online app to help doctors more quickly evaluate patients. The app is being tested at Washington University School of Medicine.

Studying the brain’s suspension system in TBIs

New research from a team of engineers takes a closer look at this “suspension system” and the insight it could provide to limit or perhaps prevent traumatic brain injury.

Common heart ailment target of new research

Jon Silva and his team will study how small molecules and proteins interact with ion channels in the heart to cause and prevent arrhythmia, when the heart beats too fast, too slow, or is too unstable.

A probiotic stress fix

An engineer at WashU is using a mouse model to develop a probiotic that, when mixed into yogurt or taken as a pill, could combat the negative health effects of adrenaline rush and excessive stress.

At WashU, we now teach coding to the majority of the university, that’s not just STEM majors and computer science majors.”

Study casts doubt on the warming implications of brown carbon aerosol from wildfires

As devastating wildfires raged in California wine country, a team of environmental engineers have made a new discovery about wildfire smoke and its effect on the atmosphere.

Pushing the imaging envelope

With support from the National Institutes of Health, an engineer at WashU plans to push the envelope of microscopic imaging to better visualize the molecules involved in Alzheimer’s disease.

Setton named chair of WashU biomedical engineering

Lori Setton, a renowned researcher into the role of the degeneration and repair of musculoskeletal tissues, has been named chair of the Department of Biomedical Engineering.

Better than a pill

With a new $1.7 million award from the National Institutes of Health, a team plans to develop a silk-based system to better alleviate the pain and discomfort of osteoarthritis.

Nonprofit: $1M
Other government: $1M
Industry: $715K
Other private sources: $910K

Federal sponsors
NIH: 37%
NSF: 33%
DOE: 16%
DOD: 14%
NASA: 1%

Federal = $32M

54% increase in research awards during the past six years

94 tenured/tenure-track faculty
33 full-time teaching faculty
10:1 undergraduate student-to-faculty ratio
### Financial Report

**Total Gross Revenue**

$126,528,000

**Total Expenses**

$119,158,000

**Funds Reserved**

$4,863,000

**Net Results**

$2,507,000

### Sources of Income (FY17)

- **Tuition:** $79.3M
  - **Grants & contracts:** $28.1M
  - **Gifts & endowment:** $16.2M
  - **Other income:** $2.9M

### Expenses

- **Salaries & benefits:** $47.5M
- **Central Fiscal Unit/space:** $26.5M
- **Gift aid:** $20.6M
- **Operations:** $15.6M

### Top Companies

- Accenture
- Amazon
- Anheuser-Busch
- AT&T
- Bain & Company Inc.
- bioMerieux
- Boeing
- Capital One
- Cerner Corp.
- Citigroup
- Deloitte Consulting LLP
- Epic
- Environmental Systems Design Inc.
- Exxon Mobil Corp.
- FactSet Research System
- Garmin International
- Google
- L’Oreal USA Inc.
- McMaster-Carr
- Microsoft Corp.
- PricewaterhouseCoopers
- Sense Corp
- Square
- ZS Associates

### Top Graduate Schools & Postdoc Fellowships

- Boston University
- California Institute of Technology
- Carnegie Mellon University
- Case Western Reserve University
- Columbia University
- Cornell University
- Duke University
- Georgia Institute of Technology
- Harvard University
- Johns Hopkins University
- Massachusetts Institute of Technology
- Northwestern University
- Stanford Law School
- University of California, Berkeley
- University of Wisconsin – Madison

### Alumni

- **2017 Alumni Achievement Awards**
  - Libby Allman, BS ’91
  - Vice President of Manufacturing and Product Procurement, Hallmark Cards
  - Brian Hoelscher, BS ’85
  - Executive Director and Chief Executive Officer, Metropolitan St. Louis Sewer District
  - Raghu Sugavanam, MS ’78
  - Founder and Chief Technology Officer, Interpreta
  - Peter Young, BS ’80
  - Chief Executive Officer, Chemcentral Group

- **Engineering Entrepreneurship Award**
  - Michael Lefenfeld, BS ’02
  - Founder and Chief Executive Officer, SiGNa Chemistry

- **Dean’s Awards**
  - David Gast, BS ’53, AB ’53, MS ’54
  - Board Chairman (retired), Carl F. Gast Co.
  & Carol Gast, BS ’56

### Outcomes

- **63%** Post-graduation employment
- **25%** Graduate, medical or law school
- **12%** Internship, co-op, research, other.

### Outcomes for Graduate Students

- **96%** of BS graduates secured opportunities within six months of graduation

### Starting Salary by Major

- $65,071
  - Biomedical Engineering
- $70,222
  - Chemical Engineering
- $101,000
  - Computer Engineering
- $96,896
  - Computer Science
- $50,000
  - Electrical Engineering
- $69,435
  - Mechanical Engineering
- $76,663
  - Systems Science & Engineering

### Scholarships

- 426 students received scholarship and fellowship support in FY17
- 45% of undergraduate Engineering students receive financial aid
- $35K average need-based scholarship awarded
2017

in pictures

CSFORALL SUMMIT
The two-day national event, designed to promote and support computer science curriculum for K-12 students, took place here Oct. 16-17.

845
DEGREES AWARDED

300
ENGINEERS FROM ACROSS THE COUNTRY ATTENDED ARCHHACKS, AN ANNUAL STUDENT-LED HACKATHON

301
FIRST-YEAR ENGINEERING STUDENTS

ALUMNA LIZZY CRIST NAMED 2017 NCAA WOMAN OF THE YEAR

300

AN EPIC SOLAR ECLIPSE

#WashUengineers

Washington University in St. Louis
SCHOOL OF ENGINEERING & APPLIED SCIENCE