

# 2017 ENGINEERING DISCOVERY DAYS

## HIGH SCHOOL INFORMATION SESSION SATURDAY SCHEDULE

Time	Program	Location
9 - 10:00 a.m.	College of Engineering Welcome and Overview	Guggenheim 220
10:15 - 11 a.m.	Chemical Engineering	Benson Hall 117
	Civil & Environmental Engineering	More 230
	Computer Science & Engineering, Electrical Engineering, and Human Centered Design & Engineering (combined session)	Guggenheim 220
	Materials Science & Engineering	Mueller 153
	Aeronautics & Astronautics	Guggenheim 218
11:15 a.m. - noon	Bioengineering	Foege Hall N130
	Industrial & Systems Engineering	Mechanical Engineering 246
	Mechanical Engineering	Guggenheim 220

## COLLEGE OF ENGINEERING CONTACT INFORMATION

Engineering Student Academic Services • [engr.uw.edu/advising](http://engr.uw.edu/advising)

301 Loew Hall, Box 352180 • Seattle, WA 98195-2180 • Phone: (206) 543-1770 • Email: [engradv@uw.edu](mailto:engradv@uw.edu)

### William E. Boeing Department of Aeronautics & Astronautics

[aa.uw.edu](http://aa.uw.edu)

211 Guggenheim Hall • Phone: (206) 543-1950

Students in William E. Boeing Department of Aeronautics & Astronautics design, develop, test, and produce aircraft, missiles, spacecraft and satellites. Aerospace technology also has "earthbound" applications like making race cars and golf balls more aerodynamic. Study subjects include aerodynamics, aircraft and spacecraft design, flight dynamics and controls, structural analysis and design, and aircraft and spacecraft propulsion.

### Bioengineering

[depts.washington.edu/bioe](http://depts.washington.edu/bioe)

107 W.H. Foege Bldg. • Phone: (206) 685-2000

Bioengineers integrate principles from across engineering disciplines and the natural sciences to advance healthcare technology and delivery. Following a foundation in chemistry, biology, physics, physiology, fluid and solid mechanics, mass and heat transport, electronic circuits, and bio-signals, students may choose to study tissue and protein engineering, muscle regulation, biomaterials, implantable and wearable prosthetics, drug and gene delivery, medical imaging, therapeutic ultrasound, nano- and molecular engineering, microfluidics, computational modeling, synthetic biology, point-of-care diagnostic devices, and global health.

### Chemical Engineering

[cheme.washington.edu](http://cheme.washington.edu)

105 Benson Hall • Phone: (206) 543-2250

Chemical engineers study, design and operate processes to provide food, water, energy, clothing, medicine and materials; transforming raw materials into useful products- including food, water, and clothing, petroleum, pulp and paper, pharmaceuticals, consumer products, biotechnology, electronic materials, nuclear engineering, polymers, composites, and coatings. They also return spent products and by-products to the environment in an ecologically sustainable manner.

### Civil & Environmental Engineering

[ce.uw.edu](http://ce.uw.edu)

201 More Hall • Phone: (206) 543-2390

Plans, designs, constructs and manages facilities such as airports, buildings, bridges, dams, water, and sewage systems. Subjects include structures, transportation, environmental engineering, geotechnical engineering, construction, and water resources, hydrology and hydraulic systems.

### Paul G. Allen School of Computer Science & Engineering

[cs.uw.edu](http://cs.uw.edu)

AC101 Allen Center • Phone: (206) 543-1695

Computer Science & Engineering combines mathematical theory, scientific inquiry, creativity, and hands-on invention. Our students and faculty engage in research, courses, and work in many areas such as artificial intelligence, graphics and animation, virtual reality, programming languages, computational biology, and data visualization.

### Electrical Engineering

[ee.washington.edu](http://ee.washington.edu)

AE100R Allen Center • Phone: (206) 221-5270

UW EE students design, produce, and operate devices and systems that use electric and electromagnetic energy for sensing, processing, visualizing and use of information. Subjects of study include circuits, systems and controls (robotics); signal and image processing; electronics, electronic devices, and photonics; computers; energy systems; electromagnetics and optics

### Human Centered Design & Engineering

[hcde.uw.edu](http://hcde.uw.edu)

428 Sieg Hall • Phone: (206) 543-2567

Putting people first, HCDE students and faculty research, design, and engineer interactions between humans and technology. HCDE faculty and students are advancing design knowledge by using innovative techniques to study human activity and then translating that knowledge into meaningful information and system designs.

### Industrial & Systems Engineering

[depts.washington.edu/ie](http://depts.washington.edu/ie)

G10 Mechanical Engr. Bldg. • (206) 543-1427

Using mathematical tools, students learn to extract meaning from a sea of data and find the keys to unlocking a system's true potential. IEs focus on the integration of people, materials, information, equipment, and energy to design, implement, and manage integrated systems to achieve optimum performance. Students study system productivity improvement, experiment design, linear and stochastic optimization, modeling, statistical quality control, reliability, simulation, human factors, scheduling and inventory control, and supply chain systems.

### Materials Science & Engineering

[mse.uw.edu](http://mse.uw.edu)

302 Roberts Hall • Phone: (206) 543-2600

Materials scientists and engineers develop new materials, process methods, equipment, and material uses. Examples include developing biomaterials for tissue engineering; composites and metals for aerospace; ceramics for energy applications; computational techniques for materials development; eco-materials for green technologies; genetically engineered molecules and semiconductors for electronics; magnetic materials for information storage/processing, biomedicine and energy conversion; and polymers for telecommunications and solar energy.

### Mechanical Engineering

[me.washington.edu](http://me.washington.edu)

143 Mechanical Engr. Bldg. • (206) 543-5090

UW ME students design and manufacture mechanical devices and systems. Subjects include conversion of thermal, chemical, solar, and wind energies into mechanical energy through engines and other power plants; design and manufacturing processes, especially as applied to transportation systems (airplanes, automobiles, trucks, etc); application of engineering principles to the study of biological systems; ultra-high precision system dynamics and control; and analytical numerical, and experimental fluid and structural analysis.

# 2017 UW MAKER SUMMIT

EXHIBITS, WORKSHOPS, SPEAKERS & MORE!

**Saturday, April 22, 11 am–5 pm**

AREA 01 Community Center, Maple Hall  
and CoMotion MakerSpace, 215 Fluke Hall



ART



DIGITAL  
ART



FILM



GIZMOS



OPEN MIC

The 2017 UW Maker Summit begins with a keynote from researcher, educator, and entrepreneur **Beth Kolko, Ph.D.** and will feature a full day of educational sessions and workshops, art exhibit, maker project showroom, meet and greet with the makers, as well as a closing keynote with a reception and dinner.



Visit the **AREA 01** website for the schedule of events,  
sign up for workshops and reserve dinner tickets:

[www.washington.edu/area01/maker-summit-2017](http://www.washington.edu/area01/maker-summit-2017)

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