HOLMES IS WHERE THE HEART IS

From recent alumni, here are a few testimonies shared by those that experienced it first-hand, right here at Holmes Hall, where the College of Engineering is located.

> "Spending four years as a student-athlete in the UHM CoE taught me discipline, dedication, and perseverance. I am especially thankful for my professors who set high standards and helped me reach them, along with my peers who inspired me with their persistent work ethic. My experiences at the UHM CoE have molded me into a confident problemsolver ready to tackle challenges faced within the civil engineering field."

> > *

-Rika Okino (CE 2020) Kalani High School

"The engineering department was very accommodating, helpful, and understanding despite my hectic football schedule. By the end of my undergrad curriculum, I felt well prepared and confident in my abilities as an engineer."

> -Taaga Tuulima (ME 2019) 'Iolani School

"The College of Engineering at the University of Hawai`i prepared me to be a competitive applicant to top graduate programs in the nation and set me up for success in my Ph.D. studies. During my time as an undergraduate, I was able to find great faculty mentors who advocated for me and encouraged me to pursue academic research. Through these experiences, I improved my communication, leadership, and problem-solving skills, which have been instrumental in my success in graduate school."

> -Sasha Yamada (EE 2019) Kahuku High School



COLLEGE OF ENGINEERING Inspired by the principles of sustainability and resilience.



2540 Dole St., Holmes Hall 240 Honolulu, HI 96822 (808) 956-7727 www.eng.hawaii.edu







THERE'S NO PLACE LIKE HOLMES

Graduate

Students

The UH Manoa College of Engineering is an indispensable facet of sustainable living in Hawai'i and the Asia-Pacific region. It is recognized as leading the development of innovative solutions to meet the increasingly complex needs of our society.



To date, the College has awarded over 10,600 engineering degrees (BS, MS, and PhD).



The College operates a Career Fair for its students every Fall and Spring semester with approximately 80 companies and organizations

in attendance, representing both Hawai'i companies and some larger employers from the West Coast.





Over \$450,000 was awarded by the College last year in scholarships.





Research expenditures from external funding sources has risen to \$8.4 million per year.



Student

* Based on AY 2020-2021 facts provided by the UH Manoa College of Engineering. For more information, visit www.eng.hawaii.edu/about/facts



CIVIL & ENVIRONMENTAL



Civil and Environmental Engineering (CEE) focuses on the activities of people and their interaction with the environment.

The civil engineer conceives, plans, designs, constructs, operates, and maintains buildings, bridges, highways, airports, railways, tunnels, waterways ports and harbors, dams, water supply and wastewater treatment systems, and earthworks. Important considerations of the civil engineer in providing infrastructure and buildings is improved health and safety for people, minimized impact to the environment, sensitivity to costs and resources, and overall sustainability. Civil engineering continuously improves its methods and each new or upgraded component improves the standard of living for large populations. The cities we live in and most of their vital infrastructure are the creation of civil engineers.

www.cee.hawaii.edu

BS, MS, PhD - Civil Engineering BS - Construction Engineering

ELECTRICAL & COMPUTER



Electrical engineering and computer engineering are concerned with the exciting fields of electronics, computers, information technology, and the basic forms of energy that run our world.

Electronics continue to bring forth new breakthroughs in solid-state technology (transistors, integrated circuits, VLSI chips, microprocessors, lasers, optical fibers), which in turn fuel the unprecedented revolution in telecommunications (internet, wireless, and digital signal processing), computers (software, security, and networking), instrumentation (biomedical, intelligent), and many other areas.

It is a rapidly changing field that requires engineers to continually acquire new knowledge and skills. Areas of specialization include software development, embedded systems and microcontrollers, cybersecurity, computer hardware circuits, mobile computing, cloud computing, big data, and networking.

www.ee.hawaii.edu BS, MS, PhD - Electrical Engineering BS - Computer Engineering

ENGINEERING SCIENCE



The Engineering Science program provides opportunities for quality education, research, and service in engineering disciplines that are not covered by the other college programs.

Special focus is given to emerging areas and providing an interdisciplinary education. Currently, the program offers concentrations in two areas: aerospace engineering and biomedical engineering. We seek to promote research, leadership, and service among our graduates, emphasizing the evolving nature of how engineering contributes to society.

www.es.hawaii.edu RS

MECHANICAL



Mechanical Engineering (ME) is a broad and diverse engineering discipline that concerns the design and manufacturing of virtually everything, from small devices to large systems.

Mechanical engineers play a central role in such industries as automotive, aerospace, biomedical, microelectronics, computers, power generation and energy conversion, renewable energy, HVAC, automation and robotics, and materials and manufacturing. Mechanical Engineering students receive formal education about materials, solid and fluid mechanics, thermodynamics, heat transfer, control, instrumentation, design, machinery, and manufacturing in school. Their education in the ME department will also provide them with such skills as creative thinking, analytical tools, problem solving, and teamwork. These valuable skills could help the ME students to launch a career beyond some of the industries listed above, including consulting, marketing, management, banking, finance, and government agencies.

www.me.hawaii.edu BS, MS, PhD