

UH Mānoa College of Engineering Programs and Activities

- The College has 4 bachelor degree programs in Civil and Environmental Engineering, Mechanical Engineering, Electrical Engineering and a new program in Computer Engineering. All but Computer Engineering are ABET accredited, and accreditation will be sought for Computer Engineering at the next ABET visit.
- Enrollment and degree productivity in the College's BS degree programs is tabulated below with enrollment reaching over 1,000 for the first time since 1994. There are approximately an additional 250 students who are identified as pre-engineering. The College has worked hard on K-12 STEM outreach and recruitment to help increase the College's student enrollment.
- The College developed and leads the Engineering Consortium with the assistance of the UH System Provost' office that has evolved in the last four years with a principal goal of *assisting and promoting the recruitment, retention and graduation of engineering students across the UH system, regardless of their starting point in the UH system.* The main focus up to now has been on standardizing the lower division engineering curriculum, to simplify the transfer of students and on offering the lower division curriculum on line using instruction from any UH campus. The Consortium led by Kapi'olani CC won a 5 year, \$5M grant to support the effort and targeted at Native Hawaiians.
- The College has lent assistance to UH Hilo in the design of their proposed General Engineering BS program.
- The College devotes considerable resources to supply and train graduate engineers for the infrastructure work force needs of Hawai'i, such as water, waste, transportation, construction, and the Military's work force needs at Pearl Harbor and NAVFAC.
- The College has developed a list of College focus areas:
 - Renewable energy
 - Biomedical Engineering
 - Coastal Infrastructure
 - Computer Engineering and Computer Modeling & Simulation
 - Autonomous, Unmanned Systems
 - Water, Waste and Environmental Engineering
 - Recycling, Re-manufacturing and Corrosion
 - Communications, Radar and Cyber Physical Systems
- The College is developing research and programmatic strengths in these areas that would eventually lead to certificate and degree programs. Most of these focus areas are interdisciplinary in nature and involve other UH Mānoa academic units and possibly units from other UH Colleges.
- A proposal for a graduate certificate in renewable energy has been submitted to the UH Mānoa administration and a similar venture is being developed for Biomedical engineering. Recently the College hired a new faculty member in Coastal Infrastructure as part of the UH Mānoa Coastal Communities Cluster hire. It is assumed that in time that this will

develop programmatic features. The College has worked with the UH Mānoa Information and Computer Science department to launch the Computer Engineering BS program.

- The College now has two faculty members with significant experience in astronomical technology and many other faculty that have background knowledge in communications, signal processing and mechanical design issues that are the basis for much of the technology associated with astronomy. The College continues to seek meaningful partnerships with IfA in this regard just as it has successfully done with SOEST and JABSOM.

Major	Fall 2011	Fall 2010	Fall 2009	Fall 2008	Fall 2007
Total	1,011	959	925	916	953
Civil	371	372	365	361	367
BS	290	292	295	300	305
MS	62	64	51	43	48
PhD	19	16	19	18	14
Computer	40	1			
BS	40	1			
Electrical	309	294	286	305	323
BS	242	218	216	232	250
MS	37	47	38	45	44
PhD	30	29	32	28	29
Mechanical	291	292	274	250	263
BS	246	241	233	217	222
MS	36	41	27	19	26
PhD	9	10	14	14	15

College of Engineering Enrollments

Major	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007
Total	180	191	202	180	133
Civil	78	76	84	74	46
BS	61	61	59	59	32
MS	16	14	23	13	12
PhD	1	1	2	2	2
Electrical	56	64	66	60	58
BS	38	49	55	46	45
MS	15	10	8	11	9
PhD	3	5	3	3	4
Mechanical	46	51	52	46	29
BS	29	40	43	35	24
MS	12	9	6	9	3
PhD	5	2	3	2	2

College of Engineering Degrees Awarded