

STATE OF HAWAII  
UNIVERSITY OF HAWAII  
UNIVERSITY OF HAWAII AT MĀNOA  
OFFICE OF THE PROVOST  
**COLLEGE OF ENGINEERING**

FUNCTIONAL STATEMENT

**OFFICE OF THE DEAN – Org Code: MADNEG**

The Dean serves as the chief executive officer of the College and is responsible for the activities, curricula, personnel, and budget of the College, including its academic departments, research institutes, and national and regional programs; serves as the principal advocate for the College's faculty, staff, and students and is a key member of the Vice Chancellor for Academic Affairs' management group; ensures that the College's goals and missions are aligned with and supportive of the Mānoa campus and the UH system visions, missions, and development goals and clearly articulates this perspective and responsibility to the faculty, staff, and students; oversees the College's marketing and public relations efforts to maximize financial returns, ensure stability, and encourage manageable growth; provides professional leadership and represents the College and the University in the local, national, and international scientific community; and works closely with UH System and Mānoa administrators in a variety of matters related to engineering. The Dean provides leadership and direction to the associate and assistant dean, unit directors, department chairs, and other direct reports to ensure the College's effective achievement of academic, research, operational, and public affairs initiatives and services. The Dean establishes policies, guidelines, and plans for the effective functionality of the College; allocates and reallocates resources; and ensures the University's commitment to diversity, equity, and cultural values.

Advisory Groups to the Dean:

External Advisory Council: The Engineering Dean has developed a vision to help guide the future evolution of the College. The primary purpose of the Engineering Dean's Council is to assist the College in moving toward this vision. The Engineering Dean's Council will additionally foster closer ties between the College of Engineering and its stakeholders. To ensure this, the Engineering Dean's Council includes, but is not limited to, its alumni and leaders of industries, businesses and organizations that employ its graduates and collaborate with the College's research, education and outreach programs.

Internal Administrative Council: This group is composed of the Dean, Associate Dean, Assistant Dean, Department Chairs, College's Faculty Senate president, and key staff. Bi-weekly meetings (as the dean's schedule permits) provide an opportunity for the dean to update staff on various activities, receive feedback on issues, develop policies, and conduct other business necessary for the operation of the College.

Engineering Faculty Senate: All faculty in the college are members of the faculty senate. The senate provides a forum for college faculty to discuss issues of interest such as workload, promotion and tenure procedures and criteria, recruiting students at the schools and in the community, performance of College administrators, and other items of concern to the faculty.

Engineering Alumni Association: Members of the Engineering Alumni Association of the University of Hawai'i (EAAUH) are alumni and friends of the College. According to EAAUH's articles of incorporation, the association's objectives include "sponsoring, funding, and assisting the College's educational and research and development programs" and fostering better relationships between the College's faculty, students, alumni and the University of Hawaii Alumni Association as well as promoting fellowship among the members of EAAUH.

Engineers' Student Council: The College has a number of student organizations that are student chapters of professional engineering societies. Many of these organizations are discipline specific so the student council, Engineers Council of the University of Hawaii (ECUH), coordinates the activities among the various student organizations. ECUH promotes communication between the civil, electrical and mechanical engineering students.

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**ACADEMIC SUPPORT & RESEARCH**

FUNCTIONAL STATEMENT

**OFFICE OF THE ASSOCIATE DEAN – Org Code: MAATEG**

Under the direction of the Dean, the Office of the Associate Dean is responsible for the following:

- research mission and enterprise;
- technology transfer and intellectual property initiatives;
- lab safety;
- local, national, and international collaborative research initiatives and agreements;
- engineering shops and computer labs;
- faculty mentoring program;
- undergraduate and graduate academic programs oversight
- accreditation; and
- distance education.

**OFFICE OF STUDENT AND ACADEMIC SERVICES – Org Code: MAAAE**

Under the direction of the Dean, the Office of Student and Academic Services is responsible for the following:

- recruitment and retention of community college transfer and Native Hawaiian students;
- enrollment management;
- course scheduling;
- academic advising;
- student records and institutional data;
- scholarships;
- internships, externships, and career guidance;
- student organizations;
- student project grants and research experience for undergraduates programs;
- international academic exchange agreements;
- convocation ceremonies;
- computer hardware and software support for student instructional labs and for faculty and staff; and
- Native Hawaiian Science and Engineering Mentorship Program.

**OFFICE OF ADMINISTRATIVE SERVICES – Org Code: MAOSEG**

Under the direction of the Dean, the Office of Administrative Services is responsible for the following:

- budget development, allocation, and administration;
- extramural funds administration and management;

- procurement and property management;
- personnel management and transactions; and
- facilities management.

**OFFICE OF OUTREACH RELATIONS – Org Code: MAPAEG**

Under the direction of the Dean, the Office of Outreach Relations is responsible for the following:

- K-12 outreach
- first year student experience;
- internal and external messaging and communication;
- marketing/public outreach programs and materials;
- newsletters, videos;
- website and social media management; and
- coordination of events including student recruitment/retention, student orientation, employment; fundraising; alumni and donor relations.

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**INSTRUCTIONAL PROGRAMS**

FUNCTIONAL STATEMENT

**DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING – Org Code: MACE**

The Department of Civil and Environmental Engineering's undergraduate program culminating in the Bachelor's degree in civil engineering (CEE) is accredited by the national accreditation agency, the Accreditation Board for Engineering and Technology (ABET). The instructional programs in Civil and Environmental Engineering are designed to meet the educational demands of business, industry, and government. The curriculum develops depth in various areas including construction engineering, environmental engineering and water resources, geotechnical engineering, coastal engineering and hydraulics, structural engineering, transportation engineering, and sustainable infrastructure. The BS in CEE provides undergraduate students with the broad educational background essential to modern civil and environmental engineering practice including an understanding of societal and environmental problems. The Bachelor's degree in construction engineering (CNST) provides the undergraduate student with all the basics of all major disciplines of civil engineering and specialization in the area of construction engineering.

Civil and Environmental Engineering's graduate program includes both a masters and doctoral degrees. The department plans, directs, develops, coordinates, and manages the graduate academic and professional education programs of the College. It assists in the management, review, development, and assessment of graduate programs, courses, and curricula including the appointment and review of graduate faculty and graduate chairs.

**DEPARTMENT OF ELECTRICAL ENGINEERING – Org Code: MAEE**

The Department of Electrical Engineering's two undergraduate programs are accredited by the national accreditation agency, ABET. The two undergraduate programs include a Bachelor of Science degree in electrical engineering and a Bachelor of Science degree in computer engineering. The Electrical Engineering program provides instruction in a variety of sub-disciplines including bioelectronics; biomedical engineering; communications; computers, computer-aided design; control theory; integrated circuits; lasers and optics; microwave systems; networking; signal and image processing; and solid-state devices. The undergraduate electrical engineering curriculum has a foundation of fundamental courses and specialized advanced courses. Students experience hands-on design throughout the program.

Electrical Engineering's graduate program includes both a masters and doctoral degree. The department plans, directs, develops, coordinates, and manages the graduate academic and professional education programs of the College. It assists in the management, review, development, and assessment of graduate programs, courses, and curricula including the appointment and review of graduate faculty and graduate chairs.

## **DEPARTMENT OF MECHANICAL ENGINEERING – Org Code: MAME**

The Department of Mechanical Engineering's undergraduate program is accredited by the national accreditation agency, ABET. Mechanical engineers conceive, plan, design, and direct the manufacture, distribution, and operation of a wide variety of devices, machines, and systems used for energy conversion, environmental control, materials processing, transportation, design and manufacture of consumer products, materials handling, process control, and measurement. The Mechanical Engineering program provides its students with a foundation in the traditional areas of mechanical engineering (engineering mechanics, thermal sciences, and materials) as well as in the emerging fields of biomedical engineering to improve and extend life, nanotechnology, which has applications that are just now coming into focus, and multi-scale modeling.

The Bachelor of Science in Engineering Science program will serve as an incubator for new programs with the initial two tracks in biomedical engineering and aerospace engineering.

Mechanical Engineering's graduate program includes both a masters and doctoral degree. The department plans, directs, develops, coordinates, and manages the graduate academic and professional education programs of the College. It assists in the management, review, development, and assessment of graduate programs, courses, and curricula including the appointment and review of graduate faculty and graduate chairs.

## **HAWAI'I ADVANCED WIRELESS TECHNOLOGIES INSTITUTE – Org Code: MACAC**

The Hawai'i Advanced Wireless Technologies (HAWT) Institute implements a multidisciplinary approach to develop innovative solutions to broad applications in the wireless technology area. The major research areas include: radio frequency (RF) and millimeter-wave devices and circuits, advanced antenna array design, propagation modeling, biomedical devices and measurement systems, reinforcement learning and optimization, and renewable energy.

The Director provides the broader vision and administers the HAWT Institute programs. This includes developing and executing the Center's strategic plan; administering and managing the Institute; raising private, federal, and state funding; developing industry and University research collaboration; developing opportunities for undergraduate and graduate students research participation; and promoting the advancement of wireless industry and communities in Hawai'i.