July 24, 2009

Council of Chief Academic Officers
University of Hawaii
2444 Dole Street Bachman 204
Honolulu, HI 96822

Dear Council Members:

I transmit herewith a copy of Senate Resolution No. 105, which was adopted by the Senate of the Twenty-fifth Legislature of the State of Hawaii, Regular Session of 2009.

Sincerely yours,

\[Signature\]

CAROL TANIGUCHI
Clerk of the Senate

Enclosure
REQUESTING THE UNIVERSITY OF HAWAII SYSTEM TO DEVELOP A
COMPREHENSIVE APPROACH TO THE TEACHING AND TRAINING OF
ENGINEERING AT UNIVERSITY CAMPUSES STATEWIDE.

WHEREAS, the State's economic development goal of
encouraging an innovation-based economy relies on workforce
proficiencies in science, technology, engineering, and
mathematics and requires that students have broad opportunities
to learn the advanced skills necessary to succeed in a more
complex society; and

WHEREAS, currently the University of Hawaii System offers a
number of engineering programs statewide, ranging from applied
technical education programs at the Community Colleges to
Bachelor, Master, and Doctoral Degree programs at the University
level; and

WHEREAS, further development of engineering programs is a
matter of statewide concern and would provide wide-ranging
academic and economic opportunities for the State; and

WHEREAS, additional engineering programs would address
state needs for a skilled workforce with both experience and
training in high priority areas for science and technology
economic development in the State; and

WHEREAS, it is essential for the future long-range
development of the State to develop, promote, and support
science, technology, engineering, and mathematics (STEM)
research, educational and training programs on Neighbor Islands
that seek to attract and develop new, potentially growth science
and technology-oriented industries; and

WHEREAS, additional engineering curriculum offerings would
allow the University of Hawaii System to excel in applied and
basic science, technology, engineering, and mathematics research
fields that provide the hands-on experiences essential for its
graduates to be competitive in the global discovery and
innovation enterprise; now, therefore,
BE IT RESOLVED by the Senate of the Twenty-fifth Legislature of the State of Hawaii, Regular Session of 2009, that the University of Hawaii System is requested to develop a comprehensive approach to the teaching and training of engineering at University campuses statewide; and

BE IT FURTHER RESOLVED that the University of Hawaii System is requested to consult with the Council of Chief Academic Officers, University of Hawaii System Vice President for Research, University of Hawaii System Vice President for Academic Planning and Policy, University of Hawaii at Manoa Vice Chancellor for Research, and University of Hawaii at Hilo Vice Chancellor for Research; and

BE IT FURTHER RESOLVED that in developing a comprehensive approach to the teaching and training of engineering statewide, the University of Hawaii System is requested to include, but not be limited to the following considerations:

(1) An assessment of engineering academic and workforce needs in the State;

(2) Ensuring the provision of adequate and accessible engineering education and facilities that are designed to meet the science and technology-oriented economic development opportunities and needs of Neighbor Island communities;

(3) The cost of program implementation on a statewide, campus-by-campus basis, including the current budgetary environment, initial implementation, and a review of continuing operational costs;

(4) Potential articulation and transfer among campuses;

(5) Academic considerations, such as accreditation and faculty availability, and how the effort fits with existing or planned programs at other campuses;

(6) An evaluation of the current proposals by the University of Hawaii at Hilo to establish an applied-oriented undergraduate Bachelor of Science degree engineering program that focuses on sustainable
energy, food security, robotics and data manipulation
while weaving throughout this program concepts of
indigenous engineering from Native Hawaiian and
broader Pacific Islander cultures, and Maui Community
College to establish an engineering technology
program; and

(7) A proposed implementation schedule; and

BE IT FURTHER RESOLVED that the University of Hawaii System
is requested to submit its findings and recommendations,
including any budgetary requests and proposed legislation, to
the Legislature no later than twenty days prior to the convening
of the Regular Session of 2010; and

BE IT FURTHER RESOLVED that certified copies of this
Resolution be transmitted to the Chairperson of the Board of
Regents, President of the University of Hawaii System, Council
of Chief Academic Officers, University of Hawaii System Vice
President for Research, University of Hawaii System Vice
President for Academic Planning and Policy, University of Hawaii
at Manoa Vice Chancellor for Research, and University of Hawaii
at Hilo Vice Chancellor for Research.

I hereby certify that this is a full, true, and
correct copy of the original filed in this office.

Dated: APR 17 2009

Assistant Clerk of the Senate
State of Hawai‘i