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## SENATE CONCURRENT RESOLUTION

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

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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, the House of Representatives concurring, 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 Concurrent 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.