

HOUSE COMMITTEE ON HIGHER EDUCATION

HR 146, URGING UNIVERSITY OF HAWAI'I WEST OAHU TO ESTABLISH A
GRADUATE-LEVEL INFORMATION ASSURANCE PROGRAM

and

HCR 189, URGING UNIVERSITY OF HAWAI'I WEST OAHU TO ESTABLISH A
GRADUATE-LEVEL INFORMATION ASSURANCE PROGRAM.

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Room 309, Hawaii State Capitol

Honorable Chair and Members of the House Committee on Higher Education, thank you for this opportunity to provide you with comments and information regarding House Resolution 146 and House Concurrent Resolution 189, urging the University of Hawai'i - West Oahu to establish a graduate-level Information Assurance Program.

The Department of Information and Computer Sciences (ICS) in the College of Natural Sciences at the University of Hawai'i, Mānoa campus is currently working toward this goal. The ICS department currently teaches three undergraduate courses (ICS 425 – Computer Security and Ethics, ICS 426 – Computer System Security and ICS 491 – Special Topics in Secure Coding) and one graduate level course ICS 623 – Data Security. With these courses as a base for an information assurance program the department offers degrees as a Bachelor of Science in Computer Science and the Bachelor of Arts in Information and Computer Sciences. The later degree is very flexible and allows students to focus on issues such information assurance.

The ICS department also in partnership through a Memorandum of Understanding with the University of Washington – Seattle and is under the umbrella of their National Center of Academic Excellence in Information Assurance Research for over two years. This has allowed the ICS department to work closely with Dr. Barbara Endicott-Popovsky, Director at Center of Information Assurance and Cybersecurity, for over seven years. Because of the agreement and partnership, University of Hawai'i students who successfully complete the three undergraduate

ICS courses in security with Dr. Endicott-Popovsky are eligible to obtain a Certificate in Information Assurance stating they now comply with the Committee on National Security Systems 4011 – Network Technology and 4012 – National Information Assurance Training Standard for Senior Systems Managers. Over the past year 13 students have completed the certificate program. The expectation is that the department will be able to produce 30 students a year with this certification.

In addition to general advising of ICS students, I advise a student group called the “Grey Hats.” This student group’s focus is on information assurance issues. In this light, these students study cyber attacks and defenses. The ICS department supports this activity by setting up laboratories for them to compete in Collegiate Cyber Defense Competitions (CCDCs.) Over the last three years the Grey Hats have competed in three of these regional competitions. They have placed an unofficial first in the first test of the virtual competition, and solid second and third in the following years. These competitions have pitted the team against schools such as the Air Force Academy, Pennsylvania State University – Altoona campus, Utah State University, University of New Mexico, University of Alaska, etc. The ICS department finds that these types of competitions offer students the challenge and direction in their information assurance studies.

Graduates who focused on information assurance from the ICS department have done well. The ICS department does not track every student once they have graduated, but we do know that students who graduate with an information assurance background are employed by Boeing, Booz-Allen-Hamilton, National Security Agency, Referentia, Secure DNA, U.S. Department of Justice, and the U.S. Department of Defense in information assurance positions.

Currently the Information and Computer Sciences Chair, Dr. Martha Crosby and Dr. Barbara Endicott-Popovsky are expanding the delivery of information assurance courses through a National Science Foundation Grant. Under this grant, Teaching Strategic Operational and Defense Cyber Security, they are currently teaming with George Washington University to expand the delivery of information assurance courses across several campuses across the country.

Thought the program is still in the early stages of development at the University of Hawai‘i, the Department of Information and Computer Sciences welcomes collaboration in this initiative. The department would like to expand these offerings to all students interested in information assurance and work with all programs in this area.

The Department of Information and Computer Sciences appreciates this opportunity to provide the House Committee on Higher Education with information on the department’s status of information assurance at the University of Hawai‘i at Mānoa, thank you very much.