

Support with Amendments**House Ways and Means Committee*****HB 281 – Computer Science – Curriculum and Professional Development
(Securing the Future: Computer Science Education for All)*****Tina Bjarekull, President of MICUA**

February 8, 2018

On behalf of Maryland’s independent colleges and universities and the 64,000 students they serve, thank you for the opportunity to provide this testimony in support of HB 281 – Computer Science – Curriculum and Professional Development (Securing the Future: Computer Science Education for All) – with an amendment. If enacted, House Bill 281 would establish the Maryland Center for Computing Education and provide for the development of a Maryland State Computer Science Education Plan. It would expand computer science instruction in K-12 schools, including at least one computer science course in every public high school by 2021-2022, with a special focus on increasing the enrollment of students with disabilities; female students; and students from racial, ethnic, and other demographic groups that are underrepresented in the field of computer science. Further, it would provide competitive grants to local school systems, colleges and universities, nonprofit organizations, and related entities to support robust teacher professional development opportunities in computer science through the establishment of the Computing Education and Professional Development Fund.

We strongly support the establishment of the Maryland Center for Computing Education and efforts to expand and strengthen the pipeline of computer science students P-20. Eleven of the thirteen MICUA member institutions offer degree programs in computer science, computer information systems, computer engineering, or closely related fields. In addition, eleven MICUA member institutions prepare K-12 teacher candidates. MICUA members include the only institution in the State focused exclusively on engineering and information technology, Capitol Technology University. Both Capitol Technology University and Johns Hopkins University have been designated as Centers of Excellence in computer science related fields: Capitol Technology University as a Center of Academic Excellence by the National Security Agency and the Department of Homeland Security, and Johns Hopkins University as a Department of Defense Center of Academic Excellence in Cyber Defense and Information Assurance. In 2014, Stevenson University’s undergraduate Computer Information Systems program became one of only six undergraduate programs in the nation to earn “The National Centers of Digital Forensics Academic Excellence” accreditation by the Defense Cyber Crime Center.

Although MICUA member institutions enroll only 15% of college students statewide in Maryland, they graduate 40% of all master's degrees, 27% of all STEM bachelor's degrees, and 27% of all new teacher candidates in the State. MICUA members are committed to building a pipeline of Maryland students who have the knowledge and skills to succeed in highly technical and critical fields in computer science. Collaboration with the new Maryland Center for Computing Education and partners statewide will complement ongoing efforts at MICUA institutions to expand their computer science programs and attract even more undergraduate and graduate students to this career field.

MICUA members have a strong history of collaboration with the University System of Maryland, Maryland Association of Community Colleges, Maryland State Department of Education, and other key stakeholders who would be involved in Center initiatives. We have worked together with these partners on issues including dual enrollment, college and career readiness, transfer and articulation, STEM education, teacher preparation, and distance education. As a current example, the President of MICUA serves on the Advisory Board for the Maryland Mathematics Initiative, led by the University System of Maryland, with several MICUA member institutions participating in this initiative.

We support an amendment to the bill that embodies this spirit of collaboration. This amendment states that “the Center shall work collaboratively with nonprofit institutions of higher education in the State, including public senior higher education institutions; Historically Black Colleges and Universities; independent institutions of higher education; and the community colleges of the State.”

MICUA members thank Delegate Miller for her leadership on this issue and urge a favorable Committee report.

MICUA Proposed Amendments

House Bill 281 – Computer Science – Curriculum and Professional Development

On page 4, after line 18, insert:

(3) THE CENTER SHALL WORK COLLABORATIVELY WITH NONPROFIT INSTITUTIONS OF HIGHER EDUCATION IN THE STATE, INCLUDING:

- (I) PUBLIC SENIOR HIGHER EDUCATION INSTITUTIONS;
- (II) HISTORICALLY BLACK COLLEGES AND UNIVERSITIES;
- (III) INDEPENDENT INSTITUTIONS OF HIGHER EDUCATION; AND
- (IV) THE COMMUNITY COLLEGES OF THE STATE.