

Preliminary Report of the University of Massachusetts Cybersecurity Task Force

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EXECUTIVE SUMMARY

Cybersecurity and privacy have become critical issues in our information-driven and knowledge-based economy. In order to support all the industry sectors in the Commonwealth and the region to meet cybersecurity workforce needs, the University of Massachusetts, in collaboration with the Business Higher Education Forum (BHEF) has undertaken a workforce development plan.

Any instructional/curricular developments should address both the need to develop “cyber enabled” staff and the need to spread “cyber awareness” across the many disciplines that encounter cybersecurity issues. This calls for instruction at a variety of levels: CISSP (Certified Information Systems Security Professional) type certificate programs, 2+2 community college transfer programs, undergraduate programs along lines defined by the NSA and DHS, as well as a spectrum of specialized undergraduate and graduate programs focused on different aspects of cybersecurity.

The Report (see URL above) contains recommendations intended to launch a leadership role for the University of Massachusetts that requires collaborations with other universities and colleges together with partnerships that leverage the capabilities and resources of industry, foundation, and government sectors.

Some recommendations:

- *UMass President should create a Massachusetts cybersecurity industry-education network (MCIEN) advisory board to advise the system regarding workforce needs, curricular design and articulation, and research areas. This should follow the structure proposed by the BHEF planning work done under the Gates grant in collaboration with UMass. This effort should be coordinated with the Massachusetts Advanced Cyber Security Center (ACSC).*
- *A liaison position for the Massachusetts cybersecurity industry-education network should be established in the President’s office. Among other responsibilities, the MCIEN liaison should work to create internship and job opportunities for students across the system in the cybersecurity sector.*
- *A system-wide center for cybersecurity research (UMCCR), analogous to the Center for Clinical Translational Science, should be established, with one campus designated as the lead campus and an executive committee with representatives from all campuses. Support should be made available, on a competitive basis, for research assistantships, post-doctoral positions, and seed funds.*
- *Each UMass campus should develop degree and certificate programs appropriate to its strengths and student body, and make as many of the programs as feasible available via online and blended modes to a broader audience via UMass Online and at the UMass Center in Springfield*
- *The UMass campuses and MA public Community Colleges, working through ABLE4STEM, should partner to obtain CAE-2Y designations at the CCs and create transfer pathways into UMass CAE certified 4-year degree programs.*