Topic: Create a cyber security undergraduate concentration in computer science

Issue: Securing the country’s most vital computer networks is a top economic and national security priority. The State of Maryland – with its vast resources of federal facilities, academic institutions, industry strengths and intellectual capital is ideally positioned to lead in this effort. The CS and ECE Departments have launched the Maryland Center for Cybersecurity (MC²) which will create both a research and teaching focus in the area of cybersecurity.

Recommendation: To meet the educational goals of enhancing cybersecurity, it is recommended that the department approve an undergraduate cyber security concentration in computer science to develop a pool of IA professionals who can address the wide range of cyber technology issues in government, industry, and academia. Specifically, students who are interested in pursuing a cyber concentration will take the same foundational courses in computer science that other students take, but will be limited in their choice of electives in order to ensure they receive in-depth education in topics such as network and distributed system security, operating systems security, and cryptography (see attached Computer Science Cyber Security Concentration Undergraduate Curriculum Checklist.) All other computer science and non-computer science graduation requirements remain the same.

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