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SAFEGUARDING THE FUTURE OF HOMELAND SECURITY

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ABSTRACT

Homeland security is both a complex and a dynamic field, which involves a wide-variety of professions and information technology skill sets. Information security remains a primary concern for the National Security Agency (NSA) and the Department of Homeland Security. Continued challenges to the confidentiality, integrity, and availability of distributed computing drove the innovation of a new concentration in Homeland Security within the B.S. in Information Technology program at Middle Georgia State College. This paper will present the educational components of the Homeland Security concentration as well as discuss modifications to the Information Security and Assurance program. The programs design takes into account the outcomes from the Center of Excellence in Information Assurance Education (CAE) with the intent of moving the institution into a recognized status.

Keywords

Homeland Security, Curriculum Development, Information Assurance, NSA

OUTLINE

The Homeland Security concentration involves detecting, reporting, and responding to cyber threats; advanced detection methods of intrusion detection and penetration testing; public policy and legal issues with regards to homeland security; the role of intelligence in counter-terrorism; fundamentals of strategic planning required for the maintenance of domestic information technology security; and, advanced methods designed to secure access to sensitive materials. Students within the new concentration will learn about digital evidence, forensic science, incident response, public policy related to terrorism and organized crime, intrusion detection systems, penetration testing, intelligence and counter-terrorism, logical access controls, identity management, and homeland security issues. The panel will present the framework for designing and implementing a program change that includes Homeland Security. The presenters will demonstrate the qualitative methods that were utilized to collect feedback and data for the program design. A discourse will show the planned implementation with expected results for the institution. Attendees will be given time to have an open dialogue on the program.

The panel will engage in a pedagogical question and answer session, after presentation of their findings and lessons learned in the development of the new curriculum. Instructors and security professionals alike are expected to find the panel discussion of interest.