Cyber Security: Academia Increases Focus

Lance Hoopes





CAE-JAE



Center of Academic Excellence in Information Assurance Education

Designated April, 2009







MIS Information Security Courses



More Technical More Management





Our CNSS Certificates & Courses

Course	Certificate / Standard	Certificates Earned
Information Security in Public & Private Sectors	NISTISSI 4011 (or CNSS 4011) Information Systems Security (INFOSEC) Professionals	1,058
	CNSS-4012 Senior System Managers	1,058
Information Security, Risk Management & Disaster Recovery	CNSS-4016 Risk Analysts	454
Systems Security Management	CNSS-4013 System Administrators	248





Enterprise Information Security Certificates

Successfully complete the three security courses



110 EIS Certificates Earned

Commercial Certifications



Information Systems Audit and Control Association

- CISM
- CISA
- CRISC
- CGEIT



The International Information Systems Security Certification Consortium

- CISSP
- SSCP
- CCFP
- CSSLP

ISACA Model Curriculum

ISACA Model Curriculum

- CISM Certified Information Security Manager
- CRISC Certified in Risk and Information Systems Control
- CISA Certified Information System Auditor
- CGEIT Certified in Governance of Enterprise IT





Center of Academic Excellence in Information Assurance Education

- National Initiative For Cybersecurity Education (NICE)
- 17 Different Knowledge Units (or areas of coverage)
- 5 additional Knowledge Units of focus
- Lots of institutional criteria on:
 - Centers
 - **Publications**
 - Research
 - Action Programs
 - Outreach

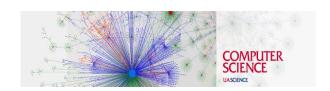


UA Cybersecurity Interaction









School of Sociology

School of Government & Public Policy





NSF Grants \$5.4M

- Cybersecurity Scholarship-for-Service
 - 2 years graduate school paid
 - Student must serve 2 years with government as cybersecurity professional
 - Students have mentoring and participate in information security research topics

 HackerWeb – explores hacker communities and how they interact



Other Research

- Electrical and Computer Engineering Autonomics Computing
 - http://www2.engr.arizona.edu/~hpdc/director.html
- Computer Science
 - Secure software development
 - Wireless security

- MIS Big Data Analytics and cybersecurity
- MIS Deception detection





Industry Interaction

How can industry help?

- Information Security related internships
- Sponsored research
- Partnering

