TURNING THE RISING TIDE OF CYBERSECURITY THREATS

WITH CYBER ATTACKS ON THE RISE, THERE'S A GROWING NEED FOR DIGITAL FORENSIC PROFESSIONALS WITH THE KNOWLEDGE AND SKILLS TO INVESTIGATE TECHNOLOGY CRIMES AND KEEP COMPUTER NETWORKS SAFE.

INFORMATION SECURITY
CAREER CENTRAL

Powered by CAPELLA UNIVERSITY

SUMMARY

FROM DATA THEFT AND DESTRUCTION TO HACKER SABOTAGE AND BLACKMAIL, CYBERATTACKS ARE A VERY REAL AND COSTLY HAZARD. ACCORDING TO ISACA'S 2015 GLOBAL CYBERSECURITY STATUS REPORT, INFORMATION SECURITY ISSUES REMAIN A TOP PRIORITY, WITH 83 PERCENT OF RESPONDENTS RANKING CYBERATTACKS AS ONE OF THE TOP THREE THREATS FACING ORGANIZATIONS TODAY.[1]

This increase in cyberthreats has prompted significant growth in the information security job market and triggered a worrisome skills shortage crisis. Burning Glass reports a 74 percent jump in cybersecurity job postings from 2007 to 2013, doubling the rate of all other information technology jobs.[2]

74%

JUMP IN CYBERSECURITY JOB POSTINGS

As the information security environment grows increasingly complex, the industry needs comprehensive educational programs that deliver the skills and knowledge to protect data assets and investigate cybercrime. **Capella University meets this need with Digital Forensics programs designed for working professionals.**

Capella University has been designated by the National Security Agency (NSA) and the Department of Homeland Security (DHS) as a National Center of Academic Excellence in Information Assurance/Cyber Defense (CAE IA/CD) for academic years 2014-2021.

1. ISACA 2015 Global Cybersecurity Status Report. http://www.isaca.org/Pages/Cybersecurity-Global-Status-Report.aspx
2. Burning Glass Report on Cybersecurity Jobs. http://www.burning-glass.com/media/4187/Burning Glass Report on Cybersecurity Jobs.pdf

RAPID GROWTH OF CYBERCRIME

STUDY AFTER STUDY HAS SHOWN THE RAPID GROWTH OF CYBERCRIME. This growth has not been matched by an increase in information security professionals to combat these security threats, leaving businesses, governments, and individuals at high risk for victimization.

SOLUTION

Digital forensics professionals with the right skill sets are needed to protect our data assets and investigate complex cyberthreats. This workforce needs to be educated effectively, comprehensively, and quickly through educational programs that are designed around industry standards and meet the needs of working professionals.

RESULTS

Capella University offers a Master's specialization and a post-baccalaureate certificate in Digital Forensics. These programs feature the foundational knowledge and specialized abilities that information security professionals need to fill the skills gap that threatens our information security safety.

THE WORKFORCE NEEDS TO BE EDUCATED EFFECTIVELY, COMPREHENSIVELY, AND QUICKLY.

MOTIVATED CYBERCRIMINALS

THANKS TO THE HIGH VALUE OF PERSONAL, HEALTH, AND FINANCIAL DATA, CYBERCRIMINALS ARE INCREASINGLY MOTIVATED TO FIND NEW AND INNOVATIVE WAYS TO INTRUDE ON PROTECTED DATA SYSTEMS. Securing this information is a top priority for business and political leadership. In his 2015 State of the Union Address, President Obama twice referenced cybercrime and called for immediate action to meet these evolving threats.

Information security isn't just a concern for industry insiders and politicians, though. Consumers are feeling uneasy as well, especially in the health care industry. The nonprofit ERCI listed "data integrity failures in health information technology (IT) systems" as its top patient safety concern for 2014.[3]

COSTS

These growing concerns are a direct response to an increase in the severity, frequency, and cost of cyber crime incidents. The Global State of Information Security Survey 2015 shows a reported 8% increase in detected security threats in 2014 and a 24% growth in the financial losses associated with those incidents.[4]

24%

GROWTH IN FINANCIAL LOSSES FROM SECURITY THREATS

3. Top 10 Patient Safety Concerns for Healthcare Organizations. https://www.ecri.org/components/hrc/pages/RMRep0414_Focus.aspx

4. Global State of Information Security Survey: Financial services. http://www.pwc.com/gx/en/consulting-services/information-security-survey/industry/financial-services.jhtml

AFFECT ON THE JOB MARKET

In a survey by research firm Enterprise Strategy Group, information technology professionals were asked to identify skills shortages that they considered problematic for their organizations. For the fourth consecutive year, information security shortages topped the list, with over a quarter of respondents identifying it as a problem.[5]

The Bureau of Labor Statistics predicts that this trend will continue, projecting a 37 percent increase in security analyst jobs from 2012 to 2022. This equates to an estimated 27,400 new jobs and shows a growth rate that is significantly higher than the 11 percent average increase for all occupations.[6]

27,400
NEW SECURITY ANALYST JOBS

SOLUTION

In order to combat the information security skills shortage, institutions of higher learning need to **develop programs that deliver the competencies needed to prevent, respond to, and investigate cyber crime.**

THE RIGHT EDUCATION

These educational challenges are best met by an accredited university that can meet the growing demands of the information security workforce by providing digital forensics degree and certificate programs that are:

- **Practical**, featuring hands-on learning experiences
- **Tailored** to improve targeted competencies
- **Flexible** and convenient for working professionals
- **Designed** to provide immediate on-the-job impact
- **Provides** knowledge to support preparation for relevant certifications
- **Marketable** in today's information security sector

5. New Research Data Indicates that Cybersecurity Skills Shortage To Be a Big Problem in 2015. http://www.esg-global.com/blogs/new-research-data-indicates-that-cybersecurity-skills-shortage-to-be-a-big-problem-in-2015/?linkId=11643133

6. The Bureau of Labor Statistics. http://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm

RESULTS

Capella University has responded to the troubling growth of cybercrime with Digital Forensics programs that prepare information security professionals for the practical and legal challenges associated with investigating cybercrimes and protecting computer networks in a variety of professional settings.

DIGITAL FORENSICS POST-BACCALAUREATE CERTIFICATE PROGRAM

Capella University's Digital Forensics certificate program educates students on how to find, handle, and transport hidden data, evaluate computer forensics investigation tools and procedures, and create reports to present evidence at trial.

Capella University's Digital Forensics certificate program is aligned to the Digital Forensics and Security Incident Analysis and Response focus areas of the CAE in IA/CD designation and provides students with foundational knowledge required to sit for the Certified Cyber Forensics Professional (CCFP) and Certified Hacking Forensics Investigator (CHFI) exams.

DIGITAL FORENSICS MASTER'S SPECIALIZATION

Capella's Master's in Digital Forensics program prepares information security professionals for performance-effective computer forensics and the legal challenges associated with conducting computer forensics investigations. The core curriculum in this program includes the domains of knowledge represented in several leading security certifications, including CISSP®.

The Master's in Digital Forensics program is designed around industry standards and provides students with the foundational information that contributes to the knowledge required to sit for the Certified Cyber Forensics Professional (CCFP) and Certified Hacking Forensics Investigator (CHFI) exams.

ABOUT CAPELLA

NATIONAL SECURITY AGENCY DESIGNATION

Capella University has been designated by the National Security Agency (NSA) and the Department of Homeland Security (DHS) as a National Center of Academic Excellence in Information Assurance/Cyber Defense (CAE IA/CD) for academic years 2014-2021. The CAE IA/CD designation is based on updated academic criteria for Cybersecurity education and affords each CAE institution the opportunity to distinguish its strengths in specific IA/CD focus areas.

HANDS-ON LEARNING

Capella's secure virtual lab provides hands-on experience in state-of-the-art technology—including EnCase ® and NetWitness—that simulates law enforcement and federal security investigations.

ABOUT CAPELLA

Capella University (www.capella.edu) is a regionally accredited online university* that offers online degree programs designed to help working adults advance in their careers. Capella graduate and undergraduate specializations as well as certificate programs.

EXCEPTIONAL FACULTY

Most of Capella's faculty members in the school of Business & Technology have doctorates in addition to deep teaching experience and real-world expertise. Many hold current positions in small businesses, government, non-profit, consulting, and higher education.