

# Security Assured Information Systems (SAIS)

## Certificate of Advanced Study

### UNIVERSITY OF PITTSBURGH | SCHOOL OF COMPUTING AND INFORMATION

The SAIS is a 15-credit certificate program designed to meet the needs of professionals with a Bachelor of Science or a Master of Science degree in Information Science or a related field in order to expand their professional skills and qualifications in the security assured information systems field.

### CORE COURSES

**INFSCI 2150**  
Information Security and Privacy  
available **online** Spring 2015

**INFSCI 2170**  
Cryptography  
available **online** Spring 2015

**TELCOM 2821**  
Network Security

### ELECTIVES

In addition to the three core courses, students must complete one Networking or Systems and Technology course or one SAIS course. Examples of these courses include but are not limited to:

**INFSCI 2540** Software Engineering  
**INFSCI 2621** Security Management  
**INFSCI 2731** Security in E-Commerce

**TELCOM 2120** Network Performance  
**TELCOM 2813** Security Management  
**TELCOM 2825** Network Systems & Network  
Infrastructure Protection

### ADMISSIONS REQUIREMENTS

#### Prerequisites

- ▶ Successful completion of at least one 3-credit college course with a grade of B or better in each of the following:
  - Structured programming language
  - Statistics
  - Mathematics
- ▶ BS/BE degree (post-baccalaureate CAS) **OR** MS degree (post-Master's CAS) from an accredited college or university with a 3.0 or better in a related field (e.g., computer science, information technology, telecommunications, computer or electrical engineering, etc.)

### CNSS CERTIFICATIONS

Pitt has been designated as a National Center of Academic Excellence in information assurance education (CAE/IAE) since 2003 and in information assurance research (CAE-R) since 2008 jointly by the National Security Agency (NSA) and the Department of Homeland Security (DHS). Pitt is also one of only 15 CAEs in the United States whose IA curriculum has been certified to meet five Committee on National Security Systems (CNSS) standards for IA education.

Students completing the SAIS CAS will be eligible for the following Committee on National Security Systems (CNSS) certifications:

**CNSS 4011** (Information Security Professionals—INFOSEC)  
**CNSS 4012** (Designating Approving Authority—DAA)  
**CNSS 4013** (System Administrators in Information Security Systems—INFOSEC)

Students who choose TELCOM 2813 and TELCOM 2825 additionally receive the following CNSS certifications:

**CNSS 4014** (Information Security Officers—Advanced Level)  
**CNSS 4015** (System Certifiers)

## SAIS LEAD FACULTY



**James Joshi** is an associate professor in the Information Science and Technology program. He leads the Laboratory for Education and Research on Security Assured Information Systems (LERSAIS) at Pitt. Joshi is interested in advanced access control, distributed and multimedia systems security, systems and network survivability, IPv6 and mobile security, and secure information sharing.



**Prashant Krishnamurthy** is an associate professor in the Telecommunications and Networking program. His research interests include information and network security, wireless security and wireless data networks. Current research activities include wireless network virtualization, resilience in wireless networks, positioning and localization in wireless systems and location based social networks (with Dr. K. Pelechrinis).

## SECURITY AND THE INFORMATION SCIENCES AT PITT

We are widely recognized for our excellence in cybersecurity research and education. Since 2003, when we were first designated a National Center of Academic Excellence in Information Assurance Education (CAE-IAE), our curriculum and research have been at the forefront of emerging trends in the field.

Led by Dr. James Joshi, the Laboratory for Education and Research on Security Assured Information Systems (LERSAIS) has been central to the establishment of a premier research program on security and the development of high quality education in security and information assurance at Pitt. LERSAIS focuses on four research areas: (1) security models for emerging applications; (2) systems survivability; (3) wireless information assurance; and (4) cryptography and network security. In 2014 we were newly designated a CAE-IA/Cyber Defense Research (2014-2021). This most recent designation reflects Pitt's ability to meet the increasing demands of the program criteria and contributes to the protection of the National Information Infrastructure.

In recognition of the leading-edge research in information assurance and cybersecurity conducted by LERSAIS faculty, the school has received more than \$2 million in funding for projects and education from the NSF, Department of Defense (DoD), Cisco and other agencies. Learn more about LERSAIS: [www.sis.pitt.edu/lersais](http://www.sis.pitt.edu/lersais)

## APPLY TODAY

### Application Checklist

- Official transcript
- Two letters of recommendation
- Personal statement
- Resume

### Questions?

Contact [sciadmit@pitt.edu](mailto:sciadmit@pitt.edu) or  
visit: <http://www.dins.pitt.edu/cas/sais/>

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