Master of Science in Computer and Information Systems Security

Jointly offered by the Department of Computer Science in the School of Engineering and the Department of Information Systems in the School of Business, the Master of Science in Computer and Information Systems Security is designed primarily for students interested in professional roles in business, industry or government. Program graduates will serve as leaders within the computer and information systems security community and as strategic partners within the enterprises in which they work. They will stay attuned to, and anticipate changes in, the computer and information systems security environment and ensure that security solutions create a sound, competitive, cost-effective advantage for the enterprise.

Graduates of the program will be prepared to take leading roles in planning, organizing, managing, designing and configuring security solutions in public and private organizations and will be familiar with state-of-the-art security technologies and best practices. The program takes a broad interdisciplinary approach to computer and information systems security that will help students develop the ability to see the larger organization, social, political, ethical and economic aspects of information security and offers a unique graduate-level curriculum that is both technically and managerially oriented.

The curriculum requires 30 credit hours and is divided into three components:

**Core:** 15 credit hours required of all students and designed to provide a common foundation to the discipline

- CISS 618 Database and Application Security
- CISS/INFO 622 Network and Operating Systems Security
- CISS 624 Applied Cryptography
- CISS 634 Ethical, Social and Legal Issues in Computer and Information Systems Security
- CISS/INFO 644 Principles of Computer and Information Systems Security

**Electives:** 12 credit hours selected from CISS course offerings or, with the approval of program co-directors, from course offered by the Departments of Computer Science, Information Systems, Criminal Justice or Forensic Science

**Practice component:** 3 credit hours, taken near the end of the student’s course work, allows the student to apply principles to practice

**Contacts:**

Dr. Gurpreet Dhillon  
Department of Information Systems,  
School of Business  
(804) 828-3183  
gdhillon@vcu.edu

Dr. Meng Yu  
Department of Computer Science,  
School of Engineering  
(804) 827-3986  
myu@vcu.edu