The unique skills of cybersecurity professionals are in short supply and are vital to the security of businesses today and in the future. Cybersecurity is a focus of a broad range of disciplines, particularly, business and information technology.

The technologies and methods used to ensure the protection of information systems, as well as the confidentiality, integrity, and authenticity of information is the focus of the graduate certificate in Cybersecurity and Information Assurance Management. These topics and skills are priorities in the business world and are critical to the well-being and success of all organizations.

The vast majority of cybersecurity job openings are within the private sector and exist across all industries. Cybersecurity is one of the fastest growing employment segments in IT. As technology grows and progresses, with our devices and lives becoming more and more interconnected, the challenges of cybersecurity and information assurance will continue to grow. This presents a career to those with the necessary skills that will be exciting, rewarding, fast-paced, and highly sought after.

**Admission requirements**

The graduate certificate program is open to all individuals holding a bachelor’s, master’s or Ph.D. degree in areas such as business, social sciences, technology, engineering, or related disciplines.

In order to receive a Graduate Certificate, the student must have an average graduate cumulative grade point of 3.0 or better on a 4.0 scale in the certificate courses taken. Students admitted only to the certificate program will have non-degree graduate status but will earn graduate credit for the courses they complete.

If the four-course sequence approved by the graduate advisor is completed with a grade of B or better in each of the courses taken, the student will, upon application, be admitted to the Master of Business Administration or to the Master of Science in Information Science and Technology. The certificate courses taken by students admitted to the program will count towards the MBA program or the M.S. in Information Science and Technology degree program.

Once admitted to the Certificate program, a student will be given three years to complete the program as long as a B or better average is maintained in the courses taken.
COURSE DESCRIPTIONS

REQUIRED CORE COURSES

BUS 5910 Privacy and Information Security Law
Explores a variety of issues concerning the use, disclosure, and protection of information (personal, organizational, health, and financial) from a legal perspective. A focus on understanding, planning, protecting, and responding to data breaches and other information risk and threats. Case studies based on litigation are reviewed and analyzed.
Prerequisites: Understanding of Management Information Systems

IST 6780 Adv Human and Organizational Factors in Cybersecurity
In-depth examination of human and organizational factors in cybersecurity and information assurance. Examines current challenges to protecting the integrity, availability, and confidentiality of information, as well as tools, methods, principles, and analytics for fraud prevention, insider threat detection, and forensic investigations. Project Required.
Prerequisites: None, but recommended: IS&T 3333 or IS&T 6336 or Comp Sci 3600 or another introductory cybersecurity or information assurance course.

ELECTIVE COURSES (CHOOSE TWO)

ERP 5240 Enterprise Application Development and Software Security
This course provides conceptual foundation and hands on experience in web and mobile based (HTML5) applications development deployed through an enterprise platform. Enterprise development tools, such as SAP HANA Cloud Platform, will be used to build these apps. This course also covers software cybersecurity from a web and mobile perspective.
Prerequisites: Programming knowledge and either ERP 2110 or preceded or accompanied by ERP 5110.

IST 6335 Mobile Technology for Business
Overview of mobile technology use in business environments. Topics include: mobile industry; mobile network and wireless standards; mobile devices; mobile web design and app development; social and user experience issues; mobile marketing and commerce. Project required.
Prerequisites: IST 3333 or equivalent.

IST 6336 Foundations of Internet Computing
The foundations of Internet Computing include computer networks and Web sites. Networks are covered thoroughly and research directions for networking and information security are discussed. Web site design and research findings about site usability considerations are examined.
Prerequisites: IS&T entrance requirements, including solid programming knowledge.

IST 6641 Adv Electronic and Mobile Commerce
Fundamental concepts of management and application to IT and support of commerce. Examines the use of IT in business processes and the management issues of integrating IT into organization processes to gain a competitive advantage. Includes a major end-or-semester project.
Prerequisites: Knowledge of management information systems.