

# CERTIFICATE IN CYBERSECURITY MANAGEMENT

The purpose of this certificate is to prepare students for valuable and exciting careers either directly in or related to the field of Cybersecurity. The relevance of this field has been shown to be increasingly important in several industries, including healthcare, tourism, finance, fintech, logistics, and many others.

Cybersecurity personnel understand not only the operational components of the technology, but also the organizational implications of policies and compliance and strategic value of governance. Employees in functional and service areas will be more valuable to the organization if they best understand the value and implications that the wide range of cybersecurity will have on organizational decision-making and controlling organization resources. The content students gain by completing this certificate will place them in that select group of employees who will be able to leverage their knowledge for the betterment of their workplace.

The Certificate in Cybersecurity Management expects to target both current students and working professionals of for-profit and non-profit businesses who wish to begin or expand their knowledge of Cybersecurity. These individuals could presently be working in the field of Information Systems or in other functional or service areas of an organization. They might also be finishing their undergraduate degree in any area of study but wish to complement that degree with specialized knowledge of Cybersecurity.

Mentoring and advising about career prospects and skills are integrated into the program. As a part of the program, students will have access to the Career Services & Professional Development Center, which will help students find the most appropriate position for their interests and skill set. Faculty from the Information Systems department also will provide guidance and advising for students in the program.

Develop key skills for students in their preparation or advancement for work in the Cybersecurity field, including but not limited to positions such as:

- Chief Information Security Officer.
- Forensic Computer Analyst.
- Information Security Analyst.
- Penetration Tester.
- Security Architect.
- IT Security Engineer.
- Security Systems Administrator.
- IT Security Consultant.

## Distinguishing Program Features

The certificate will be offered at the main campus of SF State, which is close to the Silicon Valley high-tech district, San Francisco financial district, with plenty of opportunities for part-time and full-time work.

### Admissions Requirements

Students who are currently enrolled in the College of Business, Computer Science, Mathematics, and Statistics at SF State and maintaining a minimum GPA of 2.0 will be eligible to apply. Non-current SF State

students who have completed an Associate Degree from community colleges in quantitative disciplines such as Information Systems, Computer Science, Mathematics, or Statistics with a 2.5 GPA are eligible to apply. Business professionals with the appropriate background are also eligible to apply. The application will be handled by the Department of Information Systems.

To be admitted to the certificate, students must have completed 56 units with a GPA of 2.0. All coursework required for the certificate must be completed with a minimum GPA of 2.0 and only course completed with grades of C- or better. In addition, in order to be admitted in the certificate, the students must complete the prerequisite courses ISYS 363 and ISYS 350 with a C- or better. Students who have not completed the two prerequisite courses, can be admitted to the certificate conditionally and can be expected to complete the courses as conditions of full admission.

Students who complete the GWAR for their major have met the writing competency for the certificate.

Non-matriculated students can take these courses through the College of Professional & Global Education.

## Program Learning Outcomes

- a. Knowledge of the interaction between cybersecurity with business operations.
- b. Leverage cybersecurity technologies to protect enterprise business processes and assets from security threats.
- c. Knowledge of tools to implement applications based on emerging cybersecurity technologies to safeguard enterprise strategy and operations.

## Cybersecurity Management, Certificate – 12 units

Code	Title	Units
ISYS 463	Information Systems Analysis and Design	3
ISYS 464	Managing Enterprise Data	3
ISYS 565	Managing Enterprise Networks	3
ISYS 575	Information Security Management	3