# **INFORMATION SECURITY** AND CYBER LEADERSHIP, CERTIFICATE

Industry data indicates that pathways to cybersecurity jobs are changing. More than half of cybersecurity professionals start their careers in another field and then transfer to cybersecurity. In fact, in terms of diversity and inclusion, women, Black/African American and Hispanic/ Latinx cybersecurity professionals are more likely to come from a nontechnical background into the field of cybersecurity. This program covers the knowledge and skills required for professionals to better understand and integrate the critical human and sociotechnical aspects of professional responsibilities associated with the complicated technology planning, applications, and management in cyber environments. An additional aim is to foster leadership qualities that allow students to step into administrative positions in cybersecurity and human-technology integration environments.

## **Learning Outcomes**

- 1. Explain the structure of a cybersecurity system, implement the system, handle the system operations, and evaluate the system efficiency
- 2. Strategically analyze the external and internal environments of an organization to create and facilitate a human-systems integration process
- 3. Create teams for human-systems integration environments and facilitate team communication and coordination

### **Degree Requirements (12 Hours)**

Students in this certificate must complete 12 hours of coursework.

### Required (Core) Courses (6 Hours)

Course	Title	Credits
ISCI 780	Information Networks	3
Select one of the following:		
ISCI 795	Special Topics in International Information Iss	ues
ISCI 787	Seminar in Applied Information Systems for Information Specialists	
Total Credit Hours		6

**Total Credit Hours** 

### **Elective Courses (6 Hours)**

Students in this certificate program must complete 6 hours in courses such as the following:

Course	Title	Credits
ISCI 560	Data Visualization	3
ISCI 709	Fundamentals of Data and Digital Communications	3
ISCI 726	Knowledge Management for Library and Information Professionals	3
ISCI 768	Challenges in Information Intensive Organization Administration	on 3
ISCI 770	Design and Management of Databases	3
ISCI 772	Strategic Intelligence for Information Professionals	3

ISCI 776	Web Technologies for Information Specialists	3
ISCI 788	Implementing Data and Digital Communications	3
ISCI 795	Special Topics in International Information Issues	3

Note: the program advisor(s) will help students choose courses based on their career interests and goals.