

Courses eligible to double count for both Cybersecurity Analytics and Operations BS/MS

- GR courses used in either as application focus requirement OR replacing up to six credits from the following courses: IST 451, IST 454, or IST 456.
- UG courses used in the graduate elective requirement.

Course	Title	Credits
IST 432	Legal and Regulatory Environment of Information Science and Technology	3.0
IST 451	Network Security	3.0
IST 454	Computer and Cyber Forensics	3.0
IST 456	Information Security Management	3.0
IST 504	Foundations of Theories and Methods of Information Sciences and Technology Research	3.0
IST 554	Network and Management Security	3.0
IST 815	Foundations of Information Security and Assurance	3.0
IST 820	Cybersecurity Analytics	3.0

****Culminating Experience - Thesis, Scholarly paper, or Capstone course (3-6 credits)**

Students may choose a thesis, scholarly paper or capstone course to fulfill the culminating experience.

Thesis

Students who choose the thesis option must register for 6 credits of IST 600, write a satisfactory thesis accepted by the master's committee, the head of the graduate program, and the Graduate School, and pass a thesis defense. Selecting the thesis option may require more than 1-year to complete. Students who choose the thesis option must also complete IST 505.

Scholarly Paper

Students who choose the scholarly paper option must register for 3 credits of IST 594 and complete the scholarly paper. The scholarly paper will be a focused piece of technical work that applies the student's expertise and knowledge base, and that is documented and presented as a scholarly paper report.

Capstone Course

Students who choose the capstone course option must register for IST 584 to complete the capstone course requirement. This course uses a Cyber event simulation (often referred as Cyber Range), which by its nature, allows for a variety of real-world Cybersecurity scenarios/problems to be simulated for students. Students are expected to utilize the knowledge and skills gained in previous coursework to solve each Cybersecurity scenario/problem in a given week of the class.

This course is only offered during summer (1yr plan) and spring (2yr plan).

Typical Course Offerings*	
Fall Offerings	Spring Offerings
IST 504 – Foundations of Theories and Methods	DS 560 E/O
IST 520 – Foundations in Human-Centered Design	IST 503 – Foundations of IST Research
IST 530 – Foundations in Social Informatics	IST 505 – Foundations of Research Design
IST 543 – Foundations of Software Security	IST 510 – Foundations in Computational Informatics
IST 557 – Data Mining: Techniques and Applications	IST 521 – Human-Computer Interaction: The User and Technology
IST 577 – Human Factors of Security & Privacy	IST 525 – Computer-Supported Cooperative Work
IST 597 – Topics Vary	IST 526 – Development Tools and Visualizations for Human-Computer Interactions
IST 815 – Foundations of Information Security and Assurance	IST 541 – Qualitative Research in IST
IST 830 E/O – Cybersecurity Project Management – next offerings Fall 2025, Fall 2027, Fall 2029.	IST 554 – Network Management and Security
	IST 558 – Data Mining II
	IST 561 – Data Mining Driven Design
	IST 564 – Crisis, Disaster, Risk Management
	IST 584 (also summer) – Cyber Simulation Event
	IST 594 (also summer) – Research (Scholarly Paper)
	IST 597 – Topics Vary
	IST 820 – Cybersecurity Analytics
*Course offerings subject to change	IST 825 – Technologies for Web and E-Commerce Application Security