

Cybersecurity Certificate

2024-2025 Course Listing

Course Name	Credits	Course Description
4 classes (12 credits)		
CIS563 Information Assurance & Security	3	This course examines the topic of information assurance (IA) and security from an enterprise risk management (ERM) perspective. Information assurance is the practice of managing information-related risks to ensure that (only) authorized parties have access to the “right” information at the “right” time. Of course, there are trade-offs to consider – organizations cannot afford to implement the most rigorous security measures for every source of information to protect against every source of risk. Enterprise risk management provides a framework for identifying, evaluating, prioritizing, and mitigating IT-related risks based on the organization’s objectives, strategy, risk appetite, and culture.
CIS606 Application Software Infrastructure	3	The course introduces students to programming/software development (using Python), data analytics (using Python), IT project management, and cybersecurity. It provides students with a basic understanding of these four critical information technology areas to help them choose among MCIS specializations/certifications and career pathways.
CIS620 IT Communications Infrastructure	3	Technical aspects of information communications, business considerations; wireless technology, architecture, and applications. Upon completion of CIS620, successful students will be able to (1) Describe, explain, name, list, identify, and recognize the concepts, components, and uses of operating systems/networking. (2) Demonstrate through hands-on activities the ability to set-up and troubleshoot hardware and software for a computer network in Linux and Windows. (3), compare and contrast various approaches to networking, describe or identify tradeoffs to each approach, and explain or recognize ways to choose which type of network to implement in a given situation.
CIS623 Cybersecurity Prerequisites: CIS620	3	Detailed examination of modern security topics, blending coverage of many of the domains of the CISSP with those of the CEH: Access Control, Network Security, Risk Management, Software Development Security, Cryptography, Architecture, Operations, Business Continuity, Legal/Ethical issues, as well as attack, defense, and counter-measure mechanisms.

Questions?: cobgradinfo@colostate.edu | (800) 491-4622 x2