CYBERSECURITY DATA ANALYTICS (CYSA)

CYSA 520   Principles of Cybersecurity for Data Analytics   3 Hours
A study of cybersecurity to support the principles of confidentiality, integrity, and availability as it applies to data analytics. Topics include evaluating system configurations, performing threat analysis, designing risk mitigation techniques, and understanding applicable policies, laws, and regulations.
Recent Term(s) Offered: fall 2022; fall 2023; fall 2024

CYSA 522   Cybersecurity Risk and Compliance   3 Hours
This course examines risk management and compliance using cyber analytics from an information assurance and cybersecurity perspective. Additionally it will explore the impact the design and integration of cybersecurity policies and procedures within the organization. Topics covered include: risk management; risk assessments; threat, vulnerability and exploit analysis; risk prioritization; risk mitigation; business impact analysis disaster recovery planning; incident response and recovery; compliance and regulation at a state, federal, and international level; and audits.
Recent Term(s) Offered: spring 2022; spring 2023; spring 2024; summer 2024

CYSA 524   Cybersecurity Orchestration Using Data Analytics   3 Hours
A study of proactively defending and continuously improving the security of the enterprise with emphasis on using data analytics. Topics include leveraging intelligence and threat detection techniques, analyzing and interpret data, identifying and addressing vulnerabilities, determining preventative measures, and effectively responding to and recovering from incidents.
Prerequisite(s): BDAN 513 (may be taken concurrently) or BA 513 (may be taken concurrently)
Recent Term(s) Offered: spring 2022; spring 2023; spring 2024

CYSA 526   Enterprise Cybersecurity Platforms   3 Hours
An examination and utilization of enterprise-level security platforms used for comprehensive threat detection, investigation, and response solutions. Topics include implementing and configuring Security Information and Event Monitoring (SIEM) and Security Orchestration Automation and Response (SOAR) tools, designing and developing custom dashboards and visualizations, and applying data analytics techniques and machine learning algorithms to enhance threat detection capabilities and automate cybersecurity operations.
Prerequisite(s): CYSA 520 (may be taken concurrently) with a minimum grade of D or CYSA 524 (may be taken concurrently) with a minimum grade of D
Recent Term(s) Offered: None

CYSA 596A   GFCB Graduate Certificate Assessment - Cybersecurity Data Analytics   0 Hours
This course tracks the student skills attainment summary and artifacts for the graduate certificate in Cybersecurity Data Analytics.
Recent Term(s) Offered: fall 2024

CYSA 599   Cybersecurity Data Analytics Portfolio   0 Hours
This course tracks the student skills attainment summary and artifacts for the MS Cybersecurity Data Analytics program and the graduate certificate in Cybersecurity Data Analytics.
Recent Term(s) Offered: fall 2024