ISA 4805: Penetration Testing

3 Credit Hours

Prerequisite: ISA 3210 and ISA 3200, 60 credit hours with a minimum GPA of 2.0, and Admission to the Coles College Undergraduate Professional Program or student in a Coles College Partner Program that includes this course.

This course contains a detailed examination of real world information security knowledge, enabling recognition of vulnerabilities, exploitation of system weaknesses, and implementation of safeguards against threats. Through hands-on exercises and a final project students will learn the art of penetration testing. Students who complete this course will be equipped with the knowledge necessary to analyze and evaluate systems security.

ISA 4810: Cyber Defense

3 Credit Hours

Prerequisite: ISA 3210, ISA 4200 and ISA 4220, 60 credit hours with a minimum GPA of 2.0, and Admission to the Coles College Undergraduate Professional Program or student in a Coles College Partner Program that includes this course.

This course discusses the hardware/software tools and techniques associated with the protection of computer systems and networks. Students learn how to protect network resources as deployed in a typical organization. Course topics include policy and practice associated with the protection of communication resources, intrusion detection systems, firewalls, and use of various tools for system and network protection.

ISA 4820: Information Security and Assurance Programs and Strategies

3 Credit Hours

Prerequisite: ISA 4213, 60 credit hours with a minimum GPA of 2.0, and (Admission to the Coles College Undergraduate Professional Program or student in a Coles College Partner Program that includes this course.)

The course integrates learning from across the ISA program and encourages the student to develop skills in synthesis and communication (both written and oral) as well as teaching new material about the role of the CISO and the strategic and tactical planning and operation of the information security department in a variety of organizations. Outside speakers will supplement the course and provide the student additional, outside perspective on the information security industry.