

CIS-CMPTR SCI & INFO SYSTEMS (CIS)

CIS 1940 Special Topics in Computer & Information Sciences (1-3 Credits)

Current topics of interest in the area of computers and information sciences will be discussed. Content may include particular computer languages, CIS research, current industry developments, software and hardware innovations.

CIS 2252 Cybersecurity Ethics (3 Credits)

This course delves into the world of computer and information ethics, exploring both the theoretical underpinnings and practical applications. We'll be examining the foundations that guide ethical decision-making in the realm of computing and information technology. By exploring methodologies for reaching sound ethical conclusions, you'll gain the tools to navigate complex situations in this ever-evolving field.

CIS 2321 Systems Analysis & Design (3 Credits)

The focus of the term will be the application of software engineering techniques in the information systems life cycle. There is an emphasis on project management and formal techniques for doing analysis, design, and implementation. Various software engineering analysis and design tools and techniques are covered: information gathering for defining system requirements, data modeling with entity-relationship diagrams, process modeling with data flow diagrams or use cases, data dictionaries, and prototyping. Current topics, such as agile development, extreme programming, Rapid Application Development (RAD), Scrum and the Unified Modeling Language (UML) are also presented. The student gains hands-on practice in project management and systems development through exercises in PERT/CPM, user requirements gathering, data and process modeling, and prototyping.

CIS 2530 Introduction to Cybersecurity (3 Credits)

This course equips students with a comprehensive foundation in cybersecurity, preparing them for the industry-standard CompTIA CySA+ certification exam. By participating, students will develop the necessary skills to launch a successful career in cybersecurity. The curriculum integrates best practices and frameworks established by leading organizations including CompTIA, NSA, and NIST.

CIS 2941 Internship in Computer Information Technology (1-3 Credits)

This is a planned work-based experience that provides students with an opportunity to fine-tune skill sets learned in course work and enhance workplace skills through supervised practical experiences related to their career objectives. Individual objectives will be developed to address technology competencies. Each earned credit of internship requires a minimum of 50 clock hours of work. Refer to the Internship Handbook for additional information.