COLLEGE OF INFORMATION SCIENCE & TECHNOLOGY (CIST)

CIST 1300 INTRODUCTION TO WEB DEVELOPMENT (3 credits)
This course will provide students with a practical introduction to web development. By learning the basic skills needed to develop an interactive website, students will develop an understanding of the web development task and an appreciation of the importance of the Internet in both business and academic environments. Specific technical topics to be covered include XHTML, CSS, the Unix/Linux operating system, web server software, and a programming language. As part of the class, each student will develop a working website.
Prerequisite(s)/Corequisite(s): MATH 1120 or MATH 1130 or MATH 1220 (or equivalent) with C- or better, or permission of the instructor

CIST 1400 INTRODUCTION TO COMPUTER SCIENCE I (3 credits)
An introduction to programming within the context of a high level modern programming language. Coverage of fundamental programming concepts and program design including arrays, user defined types, and objects. This course has a required laboratory component; students must register for a laboratory section when enrolling in lecture.
Prerequisite(s)/Corequisite(s): MATH 1320, and either CSCI 1200 or CSCI 1280 or CIST 1300 with C- or better, or permission of the instructor

CIST 1510 CULTURE AND HISTORY OF VIDEO GAMES (3 credits)
This course is an overview of the history of video gaming; its evolution, genres, and how games and gaming relate to their audience and the world in which we live. Topics include Project Management, HCI, GUI Design, Pattern Language(s), game design, console evolution, gaming/industry milestones, gaming cultures and subcultures, and the profound impact gaming has had on life in the modern world.
Prerequisite(s)/Corequisite(s): Not open to non-degree graduate students.

CIST 1600 INTRODUCTION TO PROGRAMMING USING PRACTICAL SCRIPTING (3 credits)
Practical scripting is an introductory course using a script programming language. The course covers fundamental programming concepts and program design such as data types, condition and control statements, and managing program complexity. The focus of the course is on practical applications of programming in other academic areas, such as automation of tasks, and data visualization.
Prerequisite(s)/Corequisite(s): Not open for students who have completed CIST 1400 and CSCI 1620

CIST 1940 INTRODUCTION TO FUNCTIONAL PROGRAMMING (3 credits)
This course provides an introduction to the functional programming language SML. Topics covered are beneficial for a number of courses in the CSCI curriculum including CSCI 2030, CSCI 3660, and CSCI 4220.

CIST 2100 ORGANIZATIONS, APPLICATIONS AND TECHNOLOGY (3 credits)
This course provides an introduction to organizations and the role information and information systems play in supporting operations, decision-making, processes, quality management, and strategic activities of an organization. In addition, the course covers management of the IS function, strategic and regulatory issues of telecommunications, and ethical and legal issues.
Prerequisite(s)/Corequisite(s): Sophomore standing, or permission of the instructor.
Distribution: Social Science General Education course

CIST 2500 INTRODUCTION TO APPLIED STATISTICS FOR IS&T (3 credits)
The course emphasizes the function of statistics in information science and technology including topics such as descriptive statistical measures, probability discrete probability, sampling, estimation analysis, hypothesis testing, regression, and analysis of variance. A well-known computer package will be used to support the problem-solving process.
Prerequisite(s)/Corequisite(s): MATH 1220 or permission of an instructor

CIST 3000 ADVANCED COMPOSITION FOR IS&T (3 credits)
Advanced Composition for IS&T provides students with instruction and practice in academic writing for the technical sciences. The course focuses on principles of rhetoric and composition, advanced library-based research techniques, academic modes of writing suited to the technical sciences, style, grammar, and punctuation, all with attention to adapting writing to suit the needs of various academic and professional audiences.
Prerequisite(s)/Corequisite(s): ENGL 1160 (or placement in a 3rd year writing course) and junior standing, or permission of the instructor. Not open to non-degree graduate students.
Distribution: Writing in the Discipline Single Course

CIST 3110 INFORMATION TECHNOLOGY ETHICS (3 credits)
The course will cover the development and need for issues regarding privacy and the application of computer ethics to information technology.
Prerequisite(s)/Corequisite(s): ENGL 1150 or placement in a second or third-year writing class, and sophomore standing
Distribution: Humanities and Fine Arts General Education course

CIST 3600 INFORMATION SECURITY, POLICY AND AWARENESS (3 credits)
This course will cover the planning and development for information governance, security policies and procedures, and security awareness. (Cross-listed with CYBR 3600)
Prerequisite(s)/Corequisite(s): CIST 2100; CIST 3110, which may be taken concurrently.

CIST 4540 COMPUTER SECURITY MANAGEMENT (3 credits)
The purpose of this course is to integrate concepts and techniques from security assessment, risk mitigation, disaster planning, and auditing to identify, understand, and propose solutions to problems of computer security and security administration. (Cross-listed with CYBR 4540, CYBR 8546, ISQA 8546)
Prerequisite(s)/Corequisite(s): IASC 4360 or permission of the instructor.

CIST 4910 SYSTEMS DEVELOPMENT IN OPEN SOURCE COMMUNITIES (3 credits)
This course will expose students to systems development in open source communities. The course will engage existing open source communities in the advancement of open source code, tooling, processes, and methodologies.
Prerequisite(s)/Corequisite(s): CIST 1400, CIST 2100, and CSCI 1620