

Career Path: Cybersecurity

Cybersecurity specialists help all types of organizations identify weaknesses in IT systems and suggest solutions to make these systems as secure as possible. They also design firewalls, monitor the use of data files, and regulate access to safeguard information and protect the network. Staying up-to-date on current virus reports and protecting networks from these viruses is a major aspect of a cybersecurity specialist's job.



Recommended Courses:

For students interested in careers in cybersecurity, the following elective courses are recommended. These courses enhance student's knowledge of investigative techniques and cybersecurity strategies and develop their ability to communicate clearly.

JUS2210 Community Relations and the Police

Introduces the history of community relations and the police. This course explores public relations programs and strategies.
Prerequisite: JUS1100

JUS2225 Criminal Investigations

Introduces criminal investigation procedures. This course explores the historical development of criminal investigations; how investigation processes relate to the various functions of law enforcement; the collection, organization and preservation of evidence; and the constitutional limitations of criminal investigation.
Prerequisite: JUS1100

JUS3315 Terrorism

Examines the history and causes of terrorism. This course concentrates on the structure and function of major terrorist groups and the response of democratic governments in combating terrorism. Includes an investigation of terrorist activities, legal viewpoints, and media responsibility. Prerequisite: JUS1100 or NTS1102

JUS4403 Cyber Crime

Introduces the links between computers, crime, and social control. This course includes an analysis of the technological, social, economic, and political context from which cybercrime has emerged. Students consider social and political relations to cybercrime, as well as social policy questions of privacy and freedom on the Internet.
Prerequisite: JUS1100

These courses are recommended as liberal arts or free electives:

BUS4420 Data-Mining for Business Analytics

Provides an overview of the fundamental principles and techniques of data-mining for business analytics. Examines case studies to place data-mining techniques in context, and to develop data-analytic thinking. Emphasis will be placed on real-world applications to illustrate that proper application of data-mining is as much an art as it is a science. Students will work "hands-on" with analytics/data mining software. Prerequisites: BUS2210 or MAT2215

CIS2201 Advanced Spreadsheets

Provides students with experience using spreadsheet applications, such as Microsoft Excel. Topics include building complex worksheets; importing and exporting data; using mathematical, financial, and statistical functions; developing macros; consolidating spreadsheets; creating templates; and utilizing "what if" analyses.
Prerequisite: CIS1115

ITM1100 Introduction to Information Technology

Explores fundamental technical issues pertaining to computers and information technology. This course introduces hardware and software components of an information system and explores their mutual relationship, dependency, and historical evolution.

ITM2210 Introduction to Database Management

Provides an overview of the skills and knowledge necessary for the development and management of relational database systems. Topics include database creation, modeling structures, physical and logical components, accessing techniques, and SQL. Concepts are explored through the use of MS Access.

Career Paths are not minors or concentrations and will not be noted on a student's transcript or diploma. Career Paths are suggested electives to fill elective credits.