# Computer Info Systems (CIS)

### **Courses**

**CIS A105** Introduction to Personal Computers and Application Software **3 Credits** 

Develops computer literacy by emphasizing basic hands-on use of personal computers, operating systems, and application software to include word processing, spreadsheets, databases, presentation graphics, and the Internet.

**Registration Restrictions:** Keyboarding skill of 30 wpm or better is recommended.

#### CIS A110 Computer Concepts in Business 3 Credits

Employs popular productivity software, operating system software, and computer hardware from a business perspective. Examines personal computer software packages, the information processing cycle, and beginning programming concepts. Emphasizes solving business problems utilizing spreadsheet and database software applications.

Registration Restrictions: Recommended: MATH A105 and (CIS A105 or familiarity with personal computers, basic software applications and keyboarding of at least 30 wpm.)

### CIS A210 Contemporary Business Applications Development 3 Credits

Develops business applications using contemporary technologies and programming languages. Designs user interfaces and integration with other development platforms such as spreadsheets and databases.

**Registration Restrictions:** If prerequisite is not satisfied, approved UAA mathematics placement test score and current programming experience are required.

**Prerequisites:** CIS A110 with a minimum grade of C and (MATH A121 with a minimum grade of C or MATH A151 with a minimum grade of C).

### CIS A250 Basic Web Page Development for Business Applications 3 Credits

Focuses on fundamentals of designing and developing web pages for business applications using the most recent versions of Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Includes concepts related to best practices for managing design processes, selecting service providers, prototyping, testing and accessibility compliance.

**Special Note:** Students may apply no more than 3 credits from CIS A250 or CIS A350 toward graduation requirements.

May Be Stacked With: CIS A350

### CIS A280 Managerial Communications 3 Credits

Focuses on improving writing, presentation, and teamwork skills within a managerial environment. Emphasizes the development of professional communication strategies based on audience analysis techniques. Lab sessions provide practical, hands-on exercises with emphasis on collaborative report writing and managerial presentations.

Prerequisites: CIS A110 with a minimum grade of C and (COMM A111 with a minimum grade of C or COMM A241 with a minimum grade of C) and WRTG A212 with a minimum grade of C.

#### CIS A295 Computer Programming Internship 1-6 Credits

Provides computer programming and/or end-user support work to include maintenance of information systems equipment and/or networks, and software experience in a faculty-approved position. **Special Note:** Requires 75 hours of work experience for each credit. Maximum of 3 internship credits may be used to meet major requirements.

**Registration Restrictions:** Department permission required. Student must be in good standing in the College of Business and Public Policy. Cumulative GPA of 2.75 or higher.

Prerequisites: CIS A210 with a minimum grade of C.

#### CIS A310 Analysis of Business Systems 3 Credits

Presents an overview of systems analysis concepts and computerbased tools for use in the analysis of business information systems. Directed toward the development of communication skills needed for determining business system requirements and conveying those requirements to developers and system stakeholders. Concepts and tools will be applied to community-based, student-led projects.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing. AAS Business Computer Information Systems students may register with instructor approval.

**Prerequisites:** CIS A210 with a minimum grade of C and CIS A280 with a minimum grade of C.

### CIS A330 Database Management Systems 3 Credits

Covers principles of database management systems, including relational database concepts, design, and application, methods of file organization, query languages, and online transaction processing systems. Students will design and implement a database project during the semester.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

**Prerequisites:** CIS A210 with a minimum grade of C.

### CIS A345 Managing Data Communications and Computer Networks 3 Credits

Introduces the rapidly changing environment of data communications over local area networks and over switched and private voice lines. Focuses on the control and management of data in a distributed environment, the technology issues associated with data communications, and current trends in the industry.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing. **Prerequisites:** CIS A110 with a minimum grade of C.

### CIS A350 Advanced Web Page Development for Business Applications 3 Credits

Focuses on advanced features of designing and developing web pages for business applications using the most recent versions of Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Includes concepts related to best practices for managing design processes, selecting service providers, prototyping, testing and accessibility compliance. Also includes basic client-side programming for web pages using current scripting techniques such as JavaScript and jQuery.

**Special Note:** Students may apply no more than 3 credits from CIS A250 or CIS A350 toward graduation requirements.

May Be Stacked With: CIS A250

**Prerequisites:** CIS A210 with a minimum grade of C or CS A109 with a minimum grade of C or CS A110 with a minimum grade of C or CS A111 with a minimum grade of C or CSCE A201 with a minimum grade of C or CSE A205 with a minimum grade of C.

# **CIS A361** Advanced Contemporary Business Applications Development **3 Credits**

Develops business applications using contemporary technologies and programming languages at an advanced level. Designs user interfaces and integrates them with other platforms such as spreadsheets and databases.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

**Prerequisites:** CIS A210 with a minimum grade of C.

#### CIS A376 Management Information Systems 3 Credits

Focuses on developing understanding of the role of Information Systems (IS) to achieve business goals and objectives. Emphasizes developing students' skills to become informed participants in the formation and implementation of IS requirements.

**Registration Restrictions:** Completion of all GER Tier 1 (basic college-level skills) courses and junior standing. BBA students must be admitted to upper-division standing.

**Prerequisites:** CIS A280 with a minimum grade of C or COMM A241 with a minimum grade of C.

Attributes: UAA Integrative Capstone GER.

### CIS A390 Selected Topics in Management Information Systems 1-6 Credits

Study of specific current issues, techniques, and trends in Management Information Systems (MIS).

**Special Note:** May be repeated for a maximum of 9 credits with a change of subtitle. Maximum of 9 elective credits may be used for the BBA MIS degree.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A210 with a minimum grade of C.

#### CIS A395 Programmer/Analyst Internship 3 Credits

Provides computer programmer/analyst work experience in a faculty approved position.

**Special Note:** Requires 225 hours of work experience. Maximum of 3 internship credits may be used to meet major requirements.

**Registration Restrictions:** Department permission required. Student must be in good standing in the College of Business and Public Policy. Cumulative GPA of 2.75 or higher.

Prerequisites: CIS A210 with a minimum grade of C.

#### CIS A410 Project Management 3 Credits

Essentials of planning, scheduling, and managing information system projects; risk assessment and risk management; and project management tools. Involves students in the development of a project plan for a community-based information system development project. **Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

**Prerequisites:** CIS A310 with a minimum grade of C and CIS A330 with a minimum grade of C and CIS A376 with a minimum grade of C.

### CIS A430 Client-Server Programming for Business Applications 3 Credits

Covers basic client-server system concepts and business application development using client-server development tools. Students will write advanced business application programs using client-server design and development tools with programming languages in order to interface with Database Management System (DBMS) software for interactive processing. Emphasizes application development, program design, program testing, and certification in the client-server environment.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

**Prerequisites:** CIS A210 with a minimum grade of C and CIS A330 with a minimum grade of C and CIS A376 with a minimum grade of C.

#### CIS A445 Advanced Network Management 3 Credits

Provides practical knowledge about the installation, configuration, administration, and operation of networks in local area and wide area settings. The operation and interconnectivity between commercially available software will be explored as well as the utilization of different communication protocols on the same network.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

Prerequisites: CIS A345.

CIS A460 Web Development in the .Net Environment 3 Credits
Development of data-driven web applications within the .Net
environment. Uses ASP.Net and C# as the development environment.
Special Note: Assumes previous programming experience with HTML and CSS.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

**Prerequisites:** CIS A210 with a minimum grade of C and (CIS A250 with a minimum grade of C or CIS A350 with a minimum grade of C or JPC A345 with a minimum grade of C) and CIS A376 with a minimum grade of C.

CIS A470 Data Warehouses and Business Intelligence 3 Credits
Introduces students to the theory and practice of data warehouses
for enterprises and business intelligence for enterprise resource
planning (ERP) systems. Surveys processes of extraction, cleansing,
consolidation and transformation of heterogeneous data into a single
enterprise data warehouse. Reviews how business intelligence can be
derived from data warehouses.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

May Be Stacked With: CIS A670

### CIS A489 Systems Design, Development and Implementation 3 Credits

Engages students in the design, development and implementation of an information system project. Students working in small teams integrate and apply MIS concepts and skills, conduct independent research, develop an implementable system for a community organization, and present written and oral reports.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

**Prerequisites:** CIS A376 with a minimum grade of C and CIS A410 with a minimum grade of C and (CIS A430 with a minimum grade of C or CIS A460 with a minimum grade of C).

# CIS A490 Advanced Topics in Management Information Systems 3 Credits

Study of advanced current issues, techniques and trends in management information systems (MIS). Students will be required to conduct research.

**Special Note:** May be repeated with a change of subtitle/topic. Maximum of 9 elective credits may be used for the BBA MIS degree. Check course schedule for specific titles being offered.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing. **Prerequisites:** CIS A210 with a minimum grade of C.

**CIS A495** Systems Analyst/User Support Internship **3 Credits**Provides systems analyst or user-support work experience in a faculty approved position.

**Special Note:** Requires 75 hours of work experience for each credit. May be taken more than once up to a maximum of 6 credits. Maximum of 3 internship credits may be used to meet major requirements.

**Registration Restrictions:** Department permission required. Student must be in good standing in the College of Business and Public Policy. Cumulative GPA of 2.75 or higher.

**Prerequisites:** CIS A210 with a minimum grade of C and CIS A376 with a minimum grade of C.

### CIS A498 Individual Research Project 1-6 Credits

In a simulated professional environment, students complete an MIS project, prepare a project report, and make a managerial presentation. **Special Note:** May be taken more than once for credit. Maximum of 3 credits may be used to meet degree requirements.

**Registration Restrictions:** College of Business and Public Policy majors must be admitted to upper-division standing.

**Prerequisites:** CIS A361 with a minimum grade of C and CIS A376 with a minimum grade of C.

CIS A670 Data Warehouse and Business Intelligence 3 Credits
Provides strategic knowledge and insight into the theory and design of
data warehouses for enterprises and business intelligence for enterprise
resource planning (ERP) systems. Analyzes processes of extraction,
cleansing, consolidation and transformation of heterogeneous data into
a single enterprise data warehouse. Students research how business
intelligence can be derived from data warehouses.

Registration Restrictions: Graduate standing

May Be Stacked With: CIS A470

CIS A692 Management Information Systems Seminar 3 Credits
Analysis of current and future implications of information systems (IS)

and emerging technologies for managers and decision makers. Focuses on the interaction of technology with business organizations including e-commerce, enterprise IS, and globalization issues.

Registration Restrictions: Graduate standing