BUSINESS INFORMATION SYSTEMS (BSIS)

See Course Description Symbols and Terms (https://catalog.csuchico.edu/academic-standards-policies/course-description-symbols-terms/) for an explanation of course description terminology and symbols, the course numbering system, and course credit units.

BSIS 308 Decision Analysis for Business **3 Units**
Typically Offered: Fall and spring
This course introduces students to qualitative and quantitative decision analysis techniques and practical tools for critical thinking and problem solving in business. A primary emphasis is on the problem solving process including problem identification, data collection and evaluation, analysis, consideration of alternatives, and the presentation of logical and persuasive conclusions. 3 hours lecture. (021798)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

BSIS 310 Foundation of Enterprise Technology Integration **1.5 Units**
Prerequisite: Open to declared Online MBA students only.
Typically Offered: Spring only
This course introduces students to the end-to-end business processes and how processes are supported by information technology. An understanding of the business process data flows, and how that impacts the functional areas of an organization, is supported with hands on ERP system exercises. Given this foundation, students build an integrative, process-oriented understanding of information systems and their deployment, management, and use within distributed and global organizations. The course focus is on enterprise systems using client-server database systems management. For this course students are expected to have demonstrated proficiency in the use of microcomputers and office automation software, including word processing, spreadsheets, and desktop databases. Waived with appropriate academic or professional experience. 1.5 hours lecture. (022153)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 1.5 units
Course Attributes: Upper Division

BSIS 420 Enterprise Resource Planning: Systems Configuration and Use **3 Units**
Prerequisite: MINS 301.
Typically Offered: Fall and spring
This course focuses on setting up an Enterprise Resource Planning (ERP) system for use in a global organization. Students learn how to configure a large system to support a global organization with multiple companies. Concepts, issues, current trends, and decision making are addressed through a cross-functional view of the enterprise. Project management skills are enhanced as the students work in cross-functional teams in order to configure and use a multi-company ERP system. 3 hours lecture. (001332)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

BSIS 444 Systems Project Management **3 Units**
Prerequisite: MINS 301.
Typically Offered: Fall and spring
Application of Project Management (PM) concepts and tools to systems projects. Students work in teams and apply PM concepts to projects and actual problems in organizations. 3 hours lecture. (001334)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 6 units
Course Attributes: Upper Division

BSIS 460 Data Analytics **3 Units**
Prerequisite: MINS 335.
Typically Offered: Spring only
This course focuses on how Data Analytics enables an organization to have fact-based, data-driven decision making under ever-evolving business situations. There are two crucial components that data scientist must know among others: (1) Data Repositories- the various types of data have to be gathered, cleaned up, modeled, and stored (e.g. SQL Server); (2) Analytics- analytical algorithms lead scientific investigation on phenomena of interest. Such algorithms include statistics, machine learning (i.e., supervised- and unsupervised-learning), forecasting, and optimization. 3 hours lecture. (022102)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

BSIS 461 Business Analytics with Python **3 Units**
Prerequisite: BSIS 308 (may be taken concurrently).
Typically Offered: Fall only
Specifically designed for non-programmers, the objectives of this course are for students to gain awareness of computer programming methods and techniques as means to develop applied business analysis and practical programming solutions. The proposed computer language to be used in the course is Python. 3 hours lecture. (022145)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division

BSIS 496W Strategic Issues for Information Systems Professionals (W) **3 Units W**
Prerequisite: Graduating senior standing, completion of all courses in upper-division core.
Typically Offered: Fall and spring
Concurrent enrollment in or prior completion of all other courses in upper-division core. A senior seminar with an emphasis on strategy and management of adoption, implementation, and use of information systems in business. An integrative course serving to organize the information learned from earlier information systems and business school courses. The class combines lectures, directed structured and semi-structured readings, case analysis, writing assignments, group work, and class discussion to provide an understanding of key and current information systems topics. Legal, ethical, environmental, and cultural issues related to selection and use of systems are addressed. 3 hours lecture. (001335)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Upper Division; Writing Course

BSIS 499 Special Problems **1-3 Units**
Prerequisite: Faculty permission.
Typically Offered: Fall and spring
This course is an independent study of special problems. You must register directly with a supervising faculty member. 3 hours supervision. (020567)
Grade Basis: Credit/No Credit
Repeatability: You may take this course for a maximum of 6 units
Course Attributes: Upper Division

BSIS 501 Advanced Excel Analysis and Reporting **1.5 Units**
Prerequisite: Open to declared Online MBA students only.
Typically Offered: Fall and spring
The purpose of this course is for students to develop and apply advanced Excel skills. The primary learning outcome is that students will gain advanced skills to use Excel productively. The course delivery is online including short lectures, activities, assessments, and scheduled virtual office hours. Functions explored include VLOOKUP and XLOOKUP functions; IF, and Nested IF Statements with OR/AND conditions; Use of the Data Tab (e.g., What-If analysis, and Forecasting Sheet); Simulations and Solvers. High-level overview includes: Analyzing Data with Pivot Tables; Exchanging Data with Other Programs; Sharing Excel Files and Incorporating Web Information; Customizing Excel and Advanced Worksheet Management; Programming with Excel. 1.5 hours lecture. (022144)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 1.5 units
Course Attributes: Upper Division

BSIS 503 ERP/SAP Knowledge and Applications for Managers **1.5 Units**
Prerequisite: Open to Online MBA and Online BADM BS students only.
Typically Offered: Fall and spring
This course introduces students to the concept, implementation, and use of Enterprise Resource Planning (ERP) to support organizational processes. The course emphasizes how businesses are using ERP platforms to understand their business processes and be more efficient and effective. Students learn about current trends and challenge in ERP, and have hands-on experience using an ERP system. 1.5 hours lecture. (022218)
Grade Basis: Graded
Repeatability: You may take this course for a maximum of 1.5 units
Course Attributes: Upper Division

BSIS 602 Introduction to Enterprise Systems **3 Units**
Typically Offered: Inquire at department
This course introduces students to the concept of enterprise information systems and databases as the application of technical resources to support organizational processes. Projects focus on introductory enterprise systems, client-server database systems management, and corporate data networking. 3 hours lecture. (020784)
Grade Basis: Graduate Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Graduate Division

BSIS 610 Business Analytics **3 Units**
Prerequisite: Classified MBA student.
Typically Offered: Fall only
An examination of applications and information system platforms designed to support and improve business decision making. Exposure to relevant quantitative methods and their potential business value, combined with hands-on use of current technology. Case studies requiring the development of clearly communicated recommendations supported by sound analysis. 3 hours lecture. (001081)
Grade Basis: Graduate Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Graduate Division

BSIS 620 Strategic Information System Management **3 Units**
Prerequisite: BSIS 610 or OSCM 607, Classified MBA student.
Typically Offered: Spring only
The analysis of the information requirements of an organization, including the strategic use of information systems, current information technology, future technology directions, the role of data base management systems and data communication systems in modern organizations, and the analysis and design of information systems. Uses SAP R/3. 3 hours lecture. (000117)
Grade Basis: Graduate Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Graduate Division

BSIS 625 Data Warehouse Systems **3 Units**
Typically Offered: Inquire at department
An examination and use of software products available to assist managers during decision-making. Application of several programs in the area of business intelligence including data warehousing, business analytics and strategic enterprise management. Course includes case studies requiring computer solution, professional report-writing, and development of conference-style presentations. 3 hours lecture. (020785)
Grade Basis: Graduate Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Graduate Division

BSIS 680 Data Modeling and SQL Programming for Analytics **3 Units**
Typically Offered: Fall only
This course primarily focuses on two foundational aspects of relational databases: data modeling and data manipulation (a.k.a. data wrangling and data blending). Topics include the techniques of data modeling, including conceptual, logical, and physical implementation through normalization and DDL (Data Definition Language), which is one of the three programming components of SQL (Structured Query Language). Another topic covered in the course is data wrangling using DML (Data Manipulation Language), which efficiently handles large and complex datasets. 3 hours lecture. (022664)
Grade Basis: Graduate Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Graduate Division

BSIS 683 Contemporary Topics in Business Analytics 3 Units
Prerequisite: BSIS 461, BSIS 680.
Typically Offered: Spring only
The course offers an exploration of the theoretical and philosophical foundations of analytics. Students are required to read academic research articles and industry technical whitepapers, participate in discussions, and demonstrate their understanding and technical skills through presentations. Additionally, students utilize off-the-shelf software to quickly grasp the essence of analytics. Topics include, but are not limited to, machine learning in general, artificial intelligence, natural language processing, and optimization methodologies. 3 hours lecture. (022665)
Grade Basis: Graduate Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Graduate Division

BSIS 693 Advanced Data Analytics 3 Units
Prerequisite: BSIS 460, BSIS 680, BSIS 683.
Typically Offered: Spring only
This project-based capstone course covers advanced topics in machine learning and statistical analysis. Example topics include, but are not limited to, unstructured data analysis (e.g., LDA topic modeling, machine learning/lexicon-based sentiment analysis), graph analysis (e.g., centrality measures: eigenvector centrality, betweenness centrality; searches: A*, All Pair Shortest Path, Dijkstra), and non-linear statistical analyses (e.g., polynomials: quadratic, cubic, quartic, and quintic trends through contrast coding for categorical variables). The course requires students to demonstrate their mastery of analytics by completing an individual project. 3 hours lecture. (022666)
Grade Basis: Graduate Graded
Repeatability: You may take this course for a maximum of 3 units
Course Attributes: Graduate Division