BUSN ANALYTICS & INFO SYSTEMS (BAIS)

BAIS 2010: Business Information Tech.
Mktg Analytics Prof Sales
This course provides an introduction to essential computer knowledge and skills necessary to equip business students with the foundational understanding necessary for effective computer usage. The curriculum covers a wide range of topics, from basic hardware components and operating system proficiency to software skills and security awareness. Additionally, students will develop proficiency in office applications, including word processors, spreadsheets, and presentation software.
3 credits
Prerequisites
24 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3000: Business Analytics and Info Sy
Mktg Analytics Prof Sales
The study of management information systems and decision support systems with a focus on computer-based model development techniques. This course also covers the relationship among advanced information technologies, business processes, and organization performance. Students may take either BAIS 3000 or GBUS 3100, but not both for credit toward a degree.
3 credits
Prerequisites
C Min in ACCY 2010 and ECON 2020 and (C min in BUSN 2300 or ECON 2300) and (C min in MATH 1200 or MATH 1210 or MATH 1250 or MATH 2512 or MATH 2612) and (C min in MATH 2611 or MATH 2511 or MATH 2711 and 54 Earned Credits
Potentially offered with the following Instruction Type(s):
Lecture
Course Fees:
$35.00

BAIS 3007: Systems Analysis and Design
Mktg Analytics Prof Sales
The course covers development methodologies, application systems development management, behavioral aspects of the development process, problems and feasibility assessment, information requirements determination, communication skills, interpersonal skills, logical specification, and physical design.
3 credits
Prerequisites
54 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3017: Applied Bus. Anlyt. Platforms
Mktg Analytics Prof Sales
An applications course that covers the techniques and methodologies used to build information presentation solutions on modern business analytics platforms such as Power BI and Tableau, to enable students to design and implement systems similar to those used in "real-world" organizations.
3 credits
Prerequisites
54 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3100: AI for Business Applications
Mktg Analytics Prof Sales
This course provides comprehensive fundamentals of and applications in the emerging fields of generative AI, prompt engineering, and text analytics. It focuses on designing effective interactions with AI-based large language models (LLMs) such as ChatGPT, Google Bard, etc. Students will learn the foundations of how to structure prompts to optimize the performance of generative AI tools to develop successful business applications. Techniques for analyzing and extracting information from texts are discussed. Students will also do hands-on exercises and projects throughout the semester. As a result, students will gain technical knowledge and practical expertise using AI LLMs in various AI-driven business domains.
3 credits
Prerequisites
ACCY 2010 with minimum grade of C and ECON 2020 with a minimum grade of C and (Math 1210 or 1250 or 1200 or 2512 or 2612 with a minimum grade of C) and (Math 2511 or 2611 or 2711 with a minimum grade of C) and (ECON 2300 OR BUSN 2300 with a minimum grade of C) and
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3200: Business Analytics Programming
Mktg Analytics Prof Sales
Study of programming languages and modeling techniques used to implement basic data analytics systems, including common analytics languages such as Python and R, as well as data file access and manipulation. This course offers experience in analytics languages that are beneficial for business professionals in the modern data-rich economy.
3 credits
Prerequisites
54 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3300: Bus. Application Programming
Mktg Analytics Prof Sales
Concepts of object-oriented design and programming for business applications. Topics to be covered include classes and objects, graphical user interface design, arrays, procedures, database file access, drag-and-drop, graphics, animation, and custom controls and objects. Experience in computer program analysis, design, and implementation for business applications.
3 credits
Prerequisites
54 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3400: Mobile App Dev. for Bus.
Mktg Analytics Prof Sales
An introduction to key concepts, current tools, and technologies for developing modern, GUI-based apps for tablet and mobile phone applications. Students will learn to create programs that facilitate productive and positive user experiences through effective user interface design and will become familiar with rapid development using pre-existing components. The course will also cover ways to use cloud-based and highly scalable facilities, such as Amazon Web Services or Microsoft Azure, to support multi-client mobile applications.
3 credits
Prerequisites
54 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3500: Managing Enterprise Technology
Mktg Analytics Prof Sales
This course provides students with the basic knowledge, skills, and attitudes required to service computer hardware, build a computer from parts, and install commonly used PC operating systems. It will also prepare them for the CompTIA A+ certification exam. Students taking this course must be familiar with computer hardware.
3 credits
Prerequisites
54 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3600: Csec and Inf. Assurance
Mktg Analytics Prof Sales
The study of information assurance and computer security with a focus on technology-based threats that organizations must address in the modern electronic commerce era. This course combines conceptual discussions and "hands-on" exercises to introduce this rapidly expanding area of study. The course also includes an exploration of global and ethical challenges related to computer security, privacy, and information assurance. Topics covered include operational, technical, and administrative aspects of information assurance.
3 credits
Prerequisites
54 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3700: Introduction to ERP with SAP
Mktg Analytics Prof Sales
This course introduces Enterprise Resource Planning (ERP) systems. Students get an in-depth look at some common business processes and how an organization's ERP system helps improve company performance. In addition, students will gain hands-on experience on how to run a company using an ERP system through the use of an advanced ERP simulation environment. Students taking this course must be familiar with database systems and basic business functions.
3 credits
Prerequisites
54 Earned Credits.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 3997A: Honors Thesis in BAIS
Mktg Analytics Prof Sales
Honors students engage in individual research and writing for their thesis project under the supervision of a faculty member. May be repeated for credit to a maximum of 6 hours. BAIS majors may apply a maximum of 3 credit hours of BAIS 3997A toward major field electives with department chair approval. A maximum of 3 hours may apply toward a minor in BAIS. Must be a student in the Sally McDonnell Barksdale Honors College. Must get approval from the Sally McDonnell Barksdale Honors College.
3 credits
Potentially offered with the following Instruction Type(s):
Thesis

BAIS 3999A: Topics in BAIS Abroad
Mktg Analytics Prof Sales
The study of business analytics and information systems topics across national and cultural boundaries. Students examine the nature and framework of international BAIS while studying abroad. May be repeated with permission from the department chair. Must be in good academic standing during the semester abroad. Must get academic approval from the dean's office and MAPS department chair prior to going abroad.
1 - 6 credits
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 4050: Distributed Bus. Info. Syss
Strategies and techniques for development of distributed business applications, with a focus on systems that can scale from very small to very large groups of users. Distributed server management concepts also will be covered.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 4080: Database Mgmt for Bus. Anlyt.
Mktg Analytics Prof Sales
A study of data structures, file processing, databases and database management. The course covers database design, implementation, and administration. Emphasis is on the relational data model, normalization, and structured query language (SQL) to establish a sound data platform for business analytics.
3 credits
Prerequisites
54 Earned Credits and One-Way coreq BAIS 3000.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 4090: Data Analytics
Mktg Analytics Prof Sales
The use of large business data in advanced business applications such as data analysis and predictive analysis. The course covers topics such as data warehousing, data mining, and business/data analytics. Techniques such as text analysis and natural language processing, machine learning, and AI are also studied.
3 credits
Prerequisites
BAIS 4080 and 54 Earned Credits.
Corequisites
BAIS 3000
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 4120: Client-side Web App. Dev.
Mktg Analytics Prof Sales
This course will cover the concepts, languages, and techniques used to engage in client-side website design and development and user experience (UX) design, with emphasis on HyperText Markup Language (HTML), JavaScript, and Cascading Style Sheets (CSS) technologies so that the student will be able to develop and maintain contemporary webpages for an e-business.
3 credits
Prerequisites
54 Earned Credits and One-Way coreq BAIS 3000.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 4190: Server-side App. Programming
Mktg Analytics Prof Sales
This course focuses on building server-side applications and includes the following: software development project management; the use of current tools and technologies for developing modern, GUI-based, client/server, mobile, and Software as a Service (SaaS) applications; the role of modularity in programming; rapid development using pre- existing components; and security-related concepts needed to succeed in server-based web applications that rely upon databases and SQL.
3 credits
Prerequisites
BAIS 4120 and 54 Earned Credits.
Corequisites
BAIS 4090, BAIS 4080, BAIS 4120, BAIS 3007, BAIS 3000, BAIS 3017, BAIS 3300 and BAIS 3200
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 6090: E-Commerce & Net Programming
Mktg Analytics Prof Sales
This course will present the basic concepts of e-commerce and Internet programming. The course will cover many languages and technologies such as JavaScript, VBSscript, VB.NET, Java, Perl, PHP, ASP, Active-X, and XML/XSL/CSS that will enable the student to develop and maintain Web pages for an e-business.
3 credits
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 6190: Advanced Information Syss Mgmt
Mktg Analytics Prof Sales
Advanced study of file processing, databases and database management systems within organizations, logical models (hierarchical, network, relational, and object-oriented), query, optimization, recovery, integrity, concurrency, security, distributed databases and client-server architecture, database machines, knowledge-based and text-based systems, and data mining and warehousing. Experience in practicing data analysis, design, implementation, and administration. Prerequisite requirements for this course may also be satisfied by consent of instructor.
3 credits
Prerequisites
BAIS 6400 with minimum grade of C.
Potentially offered with the following Instruction Type(s):
Lecture

BAIS 6200: Advanced Directed Study
Mktg Analytics Prof Sales
Students work with one or more faculty members to develop in-depth knowledge of the critical theories, research methods, and associated literature pertaining to a specific topical area. Drawing on this knowledge, the student will subsequently utilize the advice, coaching, and supervision of the mentoring faculty instructor(s) to conduct original research projects. A primary course goal is the creation of a manuscript(s) to be submitted for preparation at a scholarly conference and/or publication in a refereed journal.
3 credits
Potentially offered with the following Instruction Type(s):
Independent Study

BAIS 6400: Theoretical Fndtns of MIS/POM
Mktg Analytics Prof Sales
This course provides a general introduction and grounding in the MIS and POM areas and serves as a functional core course.
3 credits
Potentially offered with the following Instruction Type(s):
Seminar

BAIS 6650: Mgmt. of Information Systems
Mktg Analytics Prof Sales
The course covers the issues, strategies, and tactics for effective management of an enterprise's information technology resources. The course emphasizes the development of new conceptual/research models related to the impact of information systems within organizations.
3 credits
Potentially offered with the following Instruction Type(s):
Seminar

BAIS 6999A: Special Topics in MIS/POM
Mktg Analytics Prof Sales
This seminar covers a varying range of topics depending on the expertise of the instructor.
3 credits
Potentially offered with the following Instruction Type(s):
Seminar