# BUSINESS INFORMATION SYSTEMS BS

The Bachelor of Science in Business Information Systems requires completing a lower-division core prior to taking most upper-division core courses. Successful completion of the lower-division core allows students who have declared the Business Information Systems (BSIS) major to advance to the upper-division core and into their specialty option courses. Business Information Systems currently offers three options: business analytics (BANA), management information systems (MINS), and operations and supply chain management (OSCM).

**The option in business analytics.** The BANA option focuses on identifying, exploring, and analyzing data for solving business problems. Students learn how to design databases, build data warehouses, manage big data, develop reporting and business intelligence platforms, visualize data, create dashboards, and apply appropriate analytical methods for business decision-making. Some of the topics covered include data mining, machine learning (ML), artificial intelligence (AI), data wrangling, SQL, NoSQL, OLAP, OLTP, descriptive, predictive, and prescriptive analytics.

**The option in management information systems.** The MINS option is the bridge that connects business with technology by focusing on innovative uses of technology to address business needs or to harness business opportunities. MINS students learn how to design, implement, maintain, and secure data and information systems that support business operations and managerial decision-making. They can serve in various organizational roles such as IT project manager, systems or business analyst, IT consultant, business intelligence analyst, and user experience (UX) designer.

**The option in operations and supply chain management.** The OCSM option integrates information systems with logistics and supply chains. This program combines enterprise resource planning (ERP) with an international business approach. The OSCM option focuses on designing, planning, execution, controlling, and monitoring the supply chain activities, which include movement and storage of raw materials, work-in-process inventory, and finished goods from the point of origin (the supplier) to the point of consumption (the business or retail customer).

Students who have declared the BSIS major must receive a verified grade of C- or higher in each of the lower-division core courses in order to advance into most of the upper-division core and option courses. If students receive a grade of D+ or lower in one of the lower-division core courses, that course must be repeated until a grade of C- or higher is attained. Courses for the BSIS majors are listed under Course Requirements for the Major.

More information about College of Business programs, with helpful advising information for first-year and transfer students, is available by contacting

Business Student Advising and Services (https://www.csuchico.edu/cob/students/advising.shtml/)
Glenn Hall 321
530-898-4480
Email: businessadvisor@csuchico.edu

## Advising Requirement

Advising is mandatory for this program. Consult your department advisor or program coordinator for information.

## E-advising Tools

Use the interactive e-advising tools designed to help students graduate within four years. These tools can be accessed through the Student Center in the Portal (https://portal.csuchico.edu).

## Grading Requirement

All courses taken to fulfill program course requirements must be taken for a letter grade except those courses specified by the department as credit/no credit grading only.

Some courses require a minimum grade to progress in the program. Minimum grade requirements, including those listed on course requisites, are considered graduation requirements.

## Course Requirements for the Major: 75 units

Completion of the following courses, or their approved transfer equivalents, is required of all candidates for this degree. Courses in this program may complete more than one graduation requirement.

### Major Core

Students in the major must complete each of the following lower-division core courses with a C- or higher. The lower-division core must be completed prior to taking upper-division courses with the exception of BCOM 300W, and MINS 301, which can be completed prior to completing all the lower-division core. Students are advised to take MATH 107, but MATH 109 or MATH 120 will be accepted.

| Course | Title | Units |
|---|---|---|
| **Lower Division** | | |
| ACCT 201 | Introduction to Financial Accounting | 3 |
| ACCT 202 | Introduction to Managerial Accounting | 3 |
| BADM 101 | Business for the New Generation | 3 |
| BLAW 203 | Introduction to Business Law | 3 |
| ECON 102 | Principles of Macroeconomic Analysis | 3 |
| ECON 103 | Principles of Microeconomic Analysis | 3 |
| MATH 107 | Finite Mathematics for Business | 3 |
| MATH 108 | Statistics of Business and Economics | 3 |
| MINS 235 | Database Design | 3 |
| **Upper Division** | | |
| BCOM 300W | Communication in Business (W) | 3 |
| BSIS 308 | Decision Analysis for Business | 3 |
| FINA 307 | Survey of Finance | 3 |
| MGMT 303 | Survey of Management | 3 |
| MINS 301 | Corporate Technology Integration | 3 |
| MKTG 305 | Survey of Marketing | 3 |
| OSCM 306 | Operations Management | 3 |
| **Capstone** | | |
| BSIS 496W | Strategic Issues for Information Systems Professionals (W) | 3 |
| **Major Option** | | |

| | |
|---|---|
| Select one of the following options: | 24 |
| Business Analytics (p. 2) | |
| Management Information Systems (p. 2) | |
| Operations and Supply Chain Management (p. 2) | |
| **Total Units** | **75** |

# Major Option Course Requirements

Select at least one of the following options to complete the major course requirements.

## Business Analytics Option: 24 units

| Course | Title | Units |
|---|---|---|
| BSIS 460 | Data Analytics | 3 |
| BSIS 461 | Business Analytics with Python | 3 |
| MINS 335 | Database Application Development | 3 |
| MINS 526 | Business Intelligence and Data Warehousing: Design and Development | 3 |
| MINS 546 | E-Commerce and Cloud Computing in Business | 3 |
| Select nine units from the following: | | 9 |
| BADM 389 | Internship in Business Admin | |
| BSIS 420 | Enterprise Resource Planning: Systems Configuration and Use | |
| BSIS 444 | Systems Project Management | |
| BSIS 499 | Special Problems [1] | |
| MGMT 444 | Managing Project Teams | |
| MGMT 456 | Entrepreneurial Analytics | |
| MINS 350 | Business Systems Analysis | |
| MINS 498 | Special Topics in Management Information Systems [1] | |
| MINS 535 | Database Administration | |
| MINS 536 | Security and Privacy Issues in Information Technology | |
| OSCM 440 | Supply Chain Management | |
| OSCM 441 | Purchasing and Global Sourcing | |
| OSCM/MKTG 471 | Distribution Systems and Channel Management | |
| **Total Units** | | **24** |

[1] Must be taken for three units.

## Management Information Systems Option: 24 units

Advising is mandatory to understand course sequencing and prerequisite requirements.

| Course | Title | Units |
|---|---|---|
| BSIS 420 | Enterprise Resource Planning: Systems Configuration and Use | 3 |
| MINS 325 | Business Programming | 3 |
| MINS 335 | Database Application Development | 3 |
| MINS 346 | Data Communications and Networking | 3 |
| MINS 350 | Business Systems Analysis | 3 |
| Select nine units from the following: | | 9 |
| BADM 389 | Internship in Business Admin | |
| BSIS 444 | Systems Project Management | |
| BSIS 461 | Business Analytics with Python | |
| CSCI 565 | Server Side App Development | |
| MGMT 444 | Managing Project Teams | |
| MINS 498 | Special Topics in Management Information Systems [1] | |
| MINS 522 | Enterprise Resource Planning: Systems Administration | |
| MINS 523 | Enterprise Resource Planning: System Administration 2 | |
| MINS 526 | Business Intelligence and Data Warehousing: Design and Development | |
| MINS 535 | Database Administration | |
| MINS 536 | Security and Privacy Issues in Information Technology | |
| MINS 546 | E-Commerce and Cloud Computing in Business | |
| **Total Units** | | **24** |

[1] Must be taken for three units.

## Operations and Supply Chain Management Option: 24 units

| Course | Title | Units |
|---|---|---|
| OSCM 440 | Supply Chain Management | 3 |
| OSCM 441 | Purchasing and Global Sourcing | 3 |
| OSCM 442 | Integrated Supply Chain Planning | 3 |
| OSCM/AMAR 451 | Quality Management | 3 |
| OSCM/MKTG 471 | Distribution Systems and Channel Management | 3 |
| Select nine units from the following: | | 9 |
| AMAR 458 | Project Management | |
| BADM 389 | Internship in Business Admin | |
| BLAW 414 | Labor Law and Collective Bargaining | |
| BSIS 444 | Systems Project Management | |
| BSIS 461 | Business Analytics with Python | |
| MGMT 443 | Organizational Design and Change | |
| MGMT 444 | Managing Project Teams | |
| MGMT 445 | International Management | |
| MGMT 470 | Business Dynamics | |
| MGMT 471 | Managing Multiple and Complex Projects | |
| MGMT 489E | Practicum in Project Management | |
| MINS 335 | Database Application Development | |
| MINS 350 | Business Systems Analysis | |
| MINS 526 | Business Intelligence and Data Warehousing: Design and Development | |
| OSCM 489 | Intern/Cooperative Education [1] | |
| OSCM 498 | Special Topics in Supply Chain Management [1] | |
| **Total Units** | | **24** |

[1] Must be taken for three units.

# Honors in the Major

Honors in the Major is a program of independent work in your major. It requires six units of honors coursework completed over two semesters.

The Honors in the Major program allows you to work closely with a faculty mentor in your area of interest on an original performance or research project. This year-long collaboration allows you to work in your field at a professional level and culminates in a public presentation of your work. Students sometimes take their projects beyond the University for submission in professional journals, presentation at conferences, or academic competition. Such experience is valuable for graduate school and professional life. Your honors work will be recognized at your graduation, on your permanent transcripts, and on your diploma. It is often accompanied by letters of commendation from your mentor in the department or the department chair.

Some common features of Honors in the Major program are:

- You must take six units of Honors in the Major coursework. All six units are honors courses (marked by a suffix of H), and at least three of these units are independent study (399H, 499H, 599H) as specified by your department. You must complete each course with a minimum grade of B.
- You must have completed 9 units of upper-division coursework or 21 overall units in your major before you can be admitted to Honors in the Major. Check the requirements for your major carefully, as there may be specific courses that must be included in these units.
- Yourcumulative#GPA should be at least 3.5 or within the top 5% of majors in your department.
- Your GPAin your major#should be at least 3.5 or within the top 5% of majors in your department.
- Most students apply for or are invited to participate in Honors in the Major during the second semester of their junior year. Then they complete the six units of coursework over the two semesters of their senior year.
- Your honors work culminates with a public presentation of your honors project.

Honors in the Major is not part of the Honors Program. Each department administers its own program. Please contact your major department or major advisor to apply.

Students may apply for admission to the Honors in the Major Program in the College of Business through any of the options offered. An honors student must meet all the requirements of the chosen option with a grade point average that places them in the top five percent of students enrolled within the option or must have at least a 3.5 grade point average in the business major. Each honors student must also complete six units of the honors courses in their option with a grade of B or higher. These units must result in a research paper which is publicly presented. See BADM 499H and courses numbered 499H in each option of the course offerings section. Please consult your department for specific information.

See Bachelor's Degree Requirements (https://catalog.csuchico.edu/undergraduate-requirements/bachelors-degree-requirements/) for complete details on general degree requirements. A minimum of 39 units, including those required for the major, must be upper division.

# General Education Requirements: 43 units

See General Education (https://catalog.csuchico.edu/colleges-departments/undergraduate-education-academic-success/general-education/#gerequirementstext) and the Class Schedule (http://www.csuchico.edu/schedule/) for the most current information on General Education requirements and course offerings.

This major has approved GE modification(s). See below for information on how to apply these modification(s).

- BSIS 308 is an approved major course substitution for Upper-Division Mathematical Concepts and Quantitative Reasoning (UD-2).

# American Institutions Course Requirements: 6 units

The American Institutions graduation requirement, as mandated in Title 5, Section 40404 (https://govt.westlaw.com/calregs/Document/I56C041434C6911EC93A8000D3A7C4BC3/?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPage requires that students satisfactorily complete courses in United States history, the US Constitution, and government and American ideals (including California state and local government). At Chico State, HIST 130 meets the US history requirement (US-1), and POLS 155 meets the US Constitution and government requirement (US-2) and the California state and local government requirement (US-3). POLS 155 also fulfills three units of GE Area 4, Social and Behavioral Sciences. See Bachelor's Degree Requirements (https://catalog.csuchico.edu/undergraduate-requirements/bachelors-degree-requirements/#amin) for more information.

# Diversity Course Requirements: 6 units

You must complete a minimum of two courses that focus primarily on cultural diversity. At least one course must be in US Diversity (USD) and at least one in Global Cultures (GC). See Diversity Requirements (https://catalog.csuchico.edu/undergraduate-requirements/diversity-requirements/) for a full list of courses. Many courses taken to satisfy these requirements may also apply to General Education (https://catalog.csuchico.edu/colleges-departments/undergraduate-education-academic-success/general-education/).

# Upper-Division Writing Requirement

Writing Across the Curriculum (EM 17-009 (https://www.csuchico.edu/pres/em/2017/17-009.shtml/)) requires you to take four Writing (W) courses, two of which are upper-division courses designated for your major. Specifically, you must:

- Take one Writing (W) course.
- Take one Graduation Writing Assessment Requirement (GW) course.
  - Complete a GE English Composition (1A) course before taking the GW course.
  - Earn a grade of C- or higher to receive GW credit.

See Writing and Math Requirements (https://catalog.csuchico.edu/undergraduate-requirements/writing-math-requirements/) for details on additional writing requirements you need to complete for graduation.

## Major-Designated Courses

### Writing (W) Course

- BSIS 496W Strategic Issues for Information Systems Professionals (W)

### GWAR (GW) Course

- BCOM 300W Communication in Business (W)

# Definition of Blended Programs

A blended bachelor's and master's degree program combines an existing Chico State bachelor's degree with an existing Chico State master's

degree; the blended program allows up to 12 units of the graduate program units to be double-counted at the undergraduate level, for a minimum of 138 units to receive both degrees. Students who complete a blended program will receive both a bachelor's and master's degree. Upon completion of 120 semester units and with the completion of all requirements for the bachelor's degree, students in blended programs will be awarded the bachelor's degree. Upon completion of the requirements for the master's degree, students will be awarded the master's degree.

Students interested in applying to a blended program must be enrolled in a bachelor's degree program at Chico State and must meet and maintain the minimum GPA of the existing master's degree entrance requirements for all bachelor's coursework completed at the time of the application to the blended program, or show promise to reach this level as determined by the program. Once admitted to the blended program, students shall not be required to apply for admission to the master's program.

# Blended Business Information Systems BS + Business Administration MBA or Business Analytics MS

## Eligibility

The blended program is for highly motivated, well-qualified students. The program allows a student to apply after completing 60 units toward their bachelor's degree with a minimum GPA of 2.5.

## Application Procedure

Application deadlines: April 1 for fall start, November 1 for spring start.

Students who meet the eligibility criteria may submit an application for admission to the blended program (https://csuchico.my.site.com/BlendedProgram/s/). Formal application through Cal State Apply is not necessary and the student is not required to pay an application fee. GRE scores are not required. Students must meet the requirements outlined below to change to blended graduate status and continue toward the master's degree.

## Grading Requirement

Once in the blended program, students must maintain a minimum 3.0 GPA during their remaining undergraduate and graduate semesters.

## Transition to Graduate Status

Students can transition to the graduate program after completing all undergraduate degree requirements with a minimum 2.5 GPA in all coursework. The Office of Graduate Studies and the Graduate Coordinator will verify graduate program eligibility at the end of the semester in which the bachelor's degree is completed. Qualified students change to graduate status effective the following semester.

## Requirements for the Blended BS + MBA

**Business analytics option:** The blended program allows BSIS 460, BSIS 620, and MINS 526 to count toward both degrees.

**Management information systems option:** The blended program allows BSIS 460, BSIS 620, and MINS 526 to count toward both degrees.

## Requirements for the Blended BS + Business Analytics MS

**Business analytics option:** The blended program allows BSIS 460, BSIS 461, BSIS 620, and MINS 546 to count toward both degrees.

**Management information systems option:** The blended program allows BSIS 460, BSIS 461, BSIS 620, and MINS 546 to count toward both degrees.

Program Learning Outcomes (PLOs) are clear, measurable statements that describe how students demonstrate mastery of the knowledge, skills, and values of the discipline as appropriate to the degree. Graduates of this program are expected to achieve the following PLOs:

1. Resolve ethical dilemmas in a socially conscious manner; demonstrate self-awareness and empathy towards others; motivate and inspire others to achieve common objectives. Collaborate on tasks with diverse individuals in a team setting. Apply experiential learning to a business environment; transfer experiential learning from one business environment to another; recognize the underlying principles common to all business environments; work with other business units in an interdisciplinary fashion.
2. Evaluate information and draw inferences from data; define problems in a business environment; use data analytic tools (e.g., Excel, Tableau, SAP Predictive Analytic tools); use data to find solutions and justify decision making; use data as a basis for making recommendations. Analyze marketplace opportunities (i.e., entrepreneurial thinking); analyze business problems strategically; think creatively; innovatively problem solve.
3. Understand and manage data and information. Operate database management systems. Deploy and manage information technology infrastructure across organizational networks and cloud computing environments. Create and manage secure computing at all organizational levels. Design, deliver, and use technology for various domains, including supply chain management. Analyze systems in a variety of organizational settings. Manage the development of applications. Conduct organizational business analysis, assess operations, processes, and systems. Manage simple and complex projects in technical and business contexts, and integrate business processes through the implementation of enterprise systems in large organizations.