Business Administration, Management Information Systems Concentration, BS

The Concentration in Management Information Systems, offered by the <u>School of Information Systems and Technology</u>, merges information technology and business. Students gain practical knowledge and skills in applying technology to address business challenges and take advantage of business opportunities. Graduates of the MIS concentration are in high demand and go on to successful careers in businesses of all kinds and sizes, across all industries, as well as non-profits and public sector organizations.

• Program Learning Outcomes

Summary of Degree Units

Total	120
Concentration Requirements	27
Major Core Requirements	40
Major Preparation	15
University Graduation Requirements	38

Program Roadmaps

The 4-Year <u>Roadmap</u> is available online. Roadmaps should be used in consultation with the catalog and your advisor to identify additional requirements for completing the major (for example, course grade minimums). <u>Associate Degrees (ADT) Pathways</u> are also available online.

Major-Specific Graduation Requirements

All courses in the Concentration Requirements for Management Information Systems must be completed with a grade of "C or better". The following Preparation for the Major and Required for the Major courses must be completed with a grade of "C or better": <u>ENGL 2</u>, <u>MATH 70</u>, <u>BUS1 20</u>, <u>BUS2 90</u>.

University Requirements

Students must satisfy all of the major and <u>Undergraduate University Graduation Requirements</u>, which includes unit, GPA, and residency requirements as well as the below identified <u>General Education</u>, American Institutions, Graduation Writing Assessment, and Physical Education requirements. Courses that meet Undergraduate University Graduation Requirements are noted with an area designation (see <u>Course Note Abbreviations</u>).

Core Lower Division General Education (27 units)

Of the 39 units required by the university, 12 units may be satisfied by coursework outlined below. Courses that meet GE Areas A1, A2, A3, B4, or F must be passed with a "C-" or better to meet the requirement. Consult with a a major advisor for details.

Upper Division General Education (3 units)

Of the 9 units required by the university, 6 units may be satisfied by coursework outlined below. Consult with a major advisor for details.

American Institutions (6 units)

Complete one 6-unit sequence of American Institutions (US123) courses, which also satisfies GE Area D. Students may also satisfy the <u>American Institutions Requirement</u> with other courses, but these may not satisfy other GE areas.

The American Studies sequence (<u>AMS 10/AMS 11</u>; 6 units) satisfies the American Institutions Requirement and additional GE Areas (see course descriptions for details).

Consult with a major advisor to select the appropriate sequence.

African American Studies (6 units)

- AFAM 2A African Americans and the Development of America's History and Government 3 unit(s) (D)
- AFAM 2B African Americans and the Development of America's History and Government 3 unit(s) (D+US123)

Asian American Studies (6 units)

- AAS 33A Asian Americans in U.S. History I 3 unit(s) (D)
- AAS 33B Asian Americans in U.S. History II_3 unit(s) (D+US123)

Chicana and Chicano Studies (6 units)

- CCS 10A Mexican Americans and the Development of U.S. History and Government 3 unit(s) (D)
- CCS 10B Mexican Americans and the Development of U.S. History and Government 3 unit(s) (D+US123)

U.S. History and Government (6 units)

Complete One US1: US History Course

- AMS 10 Stories that Make America 3 unit(s) (C2+US1)
- HIST 15 Essentials of U.S. History 3 unit(s) (D+US1)
- HIST 170S Topics in American History: American Identities and Institutions 3 unit(s) (S+US1)

Complete One US23: US Constitution and California Government Course

- AMS 11 Visions of Democracy_3 unit(s) (D+US23)
- POLS 15 Essentials of U.S. & California Government 3 unit(s) (D+US23)
- POLS 16 Power and Ideas in American Politics 3 unit(s) (C2+US23)
- POLS 170V American Politics in Global Perspective 3 unit(s) (V+US23)

Physical Education (2 units)

All SJSU undergraduate students, regardless of major, have an opportunity to expand their knowledge and skills in physical activities. To accommodate students' needs and interests, the university offers a <u>diverse selection of activity courses</u>.

Graduation Writing Assessment Requirement

At SJSU, students must pass a Writing in the Disciplines (100W) course with a grade of C or better (C- not accepted) to meet graduation requirements. For this major, the <u>Graduation Writing Assessment Requirement (GWAR)</u> is satisfied by a course in the major.

Major Preparation (15 units)

- ECON 1A Principles of Economics: Macroeconomics_3 unit(s)
- ECON 1B Principles of Economics: Microeconomics 3 unit(s) (D)

- ENGL 2 Critical Thinking and Writing 3 unit(s) (A3) (or equivalent.)
- MATH 70 Mathematics for Business 3 unit(s) (B4) (Students who complete any of the following with a C or better may substitute it for MATH 70: MATH 30, 30X, 31, 31X, 32, 32X, 70X, 71, or 71X.)

Writing in the Disciplines (3 units)

- COMM 100W Writing Workshop: Writing for Influence 3 unit(s) (WID)
- ENGL 100WB Written Communication: Business 3 unit(s) (WID)
- LLD 100WB Writing Workshop for Business Students 3 unit(s) (WID)

Major Requirements (67 units)

Core Courses (40 units)

Lower Division Courses (13 units)

- BUS1 20 Financial Accounting 3 unit(s)
- BUS1 21 Managerial Accounting 3 unit(s)
- BUS3 80 Legal Environment of Business 3 unit(s)
- <u>BUS2 90 Business Statistics 3</u> unit(s) (Transfer students with <u>STAT 95</u> (C or better) may use this in lieu of <u>BUS2 90.</u>)
- BUS4 91L Computer Tools for Business 1 unit(s)

Upper Division Business Fundamentals Courses (15 units)

- BUS2 130 Introduction to Marketing 3 unit(s)
- BUS5 140 Fundamentals of Operations Management 3 unit(s)
- BUS3 160 Fundamentals of Management and Organizational Behavior 3 unit(s)
- BUS1 170 Fundamentals of Finance 3 unit(s)
- BUS2 190 Fundamentals of Business Analytics 3 unit(s)

Upper Division Business Integration and Perspectives Courses (12 units)

- BUS5 187 Global Dimensions of Business 3 unit(s)
- BUS3 189 Strategic Management 3 unit(s)
- PHIL 186 Professional and Business Ethics 3 unit(s) (S)
- One non-business global perspectives course in Area V 3 unit(s)

Concentration Requirements (27 units)

Additional requirements for graduation: to qualify for a baccalaureate degree in business administration with a management information systems concentration, all courses in the concentration must be completed with a grade of "C" (2.0) or better.

Required Courses (21 units)

- <u>BUS4 92 Introduction to Business Programming 3 unit(s)</u>
- BUS4 110A Fundamentals of Management Information Systems 3 unit(s)
- BUS4 110B Systems Analysis and Design 3 unit(s)
- BUS4 111 Networking and Data Communications 3 unit(s)
- BUS4 112 Database Management Systems 3 unit(s)
- BUS4 119B Business Strategy and Information Systems 3 unit(s)

Complete One Course From:

- BUS4 119A Practicum in MIS_3 unit(s)
- BUS4 119H Honors Practicum in MIS II 3 unit(s)

Additional Courses (6 units)

Complete two courses from:

- <u>BUS4 115 Advanced Networking and Data Communications 3 unit(s)</u>
- <u>BUS4 116 Advanced Database Management Systems 3 unit(s)</u>
- <u>BUS4 118A Cloud Computing for Data Professionals 3 unit(s)</u>
- BUS4 118B Business Intelligence 3 unit(s)
- BUS4 118C Information Security and Assurance Management 3 unit(s)
- <u>BUS4 118D Big Data 3</u> *unit(s)*
- BUS4 118H Honors Practicum in MIS L 3 unit(s)
- BUS4 118I Artificial Intelligence (AI) for Social Good 3 unit(s)
- BUS4 118S Special Topics in MIS_3 unit(s)
- BUS4 118W Web Based Computing 3 unit(s)
- <u>BUS5 181 Introduction to Entrepreneurship 3 unit(s)</u>

Total Units Required (120 units)

Business Administration, Management Information Systems Concentration, BS (2024-2025)

The following roadmap is a sample advising map to complete the degree program in four years. Please consult your <u>MyPlanner</u> and <u>major advisor</u> as you develop your individualized academic plan. Students must have completed 60+ units in order to enroll in SJSU Studies courses.

<u>Year 1</u> | <u>Year 2</u> | <u>Year 3</u> | <u>Year 4</u>

Year 1

Fall Semester (13 units)

- ECON 1B Principles of Economics: Microeconomics 3 unit(s) (D) 1
- ENGL 1A First Year Writing 3 unit(s) (A2)
- <u>GE Area A1</u> 3 unit(s)
- BUS3 12 Managing My life 3 unit(s) (E)
- Physical Education 1 unit(s)

Spring Semester (15 units)

- ECON 1A Principles of Economics: Macroeconomics 3 unit(s) 1
- ENGL 2 Critical Thinking and Writing 3 unit(s) (A3) 2
- MATH 70 Mathematics for Business OR MATH 70X Mathematics for Business 3 unit(s) (B4) ² Note: MATH 70X requires enrollment in MATH 70W.
- GE Area C2 3 unit(s)
- GE Area C1 3 unit(s)

Year 2

Fall Semester (16 units)

- BUS3 80 Legal Environment of Business 3 unit(s)
- BUS1 20 Financial Accounting 3 unit(s) 4
- GE Area D + US123 3 unit(s) 3
- <u>GE Area B1+B3</u> 3 unit(s) *
- BUS4 91L Computer Tools for Business 1 unit(s)
- GE Area F 3 unit(s)
- Complete the <u>Upper Division Writing Directed Self Placement</u>

Spring Semester (16 units)

- BUS2 90 Business Statistics 3 unit(s) 4
- BUS1 21 Managerial Accounting 3 unit(s)

- GE Area D + US123 3 unit(s) 3
- <u>GE Area B2+B3</u> 3 unit(s)
- BUS4 92 Introduction to Business Programming 3 unit(s) 4
- Physical Education 1 unit(s)
 Note: Complete 60 units to reach Upper Division Standing.

Year 3

Fall Semester (15 units)

<u>COMM 100W - Writing Workshop: Writing for Influence, ENGL 100WB - Written Communication: Business, OR LLD 100WB - Writing Workshop for Business Students 3 unit(s) (WID) 5</u>

BUS4 110A - Fundamentals of Management Information Systems 3 unit(s) 4

BUS4 110B - Systems Analysis and Design 3 unit(s) 4

BUS3 160 - Fundamentals of Management and Organizational Behavior 3 unit(s)

GE Area C1 or C2 3 unit(s) 6

Spring Semester (15 units)

- BUS4 111 Networking and Data Communications 3 unit(s) 4
- BUS4 112 Database Management Systems 3 unit(s) 4
- BUS5 140 Fundamentals of Operations Management 3 unit(s)
- <u>BUS5 187 Global Dimensions of Business</u> 3 unit(s)
- BUS2 190 Fundamentals of Business Analytics 3 unit(s)
- Apply to Graduate

Year 4

Fall Semester (15 units)

- <u>BUS4 119A Practicum in MIS</u> 3 unit(s) ⁴
- Management Information System Elective #1 3 unit(s) 4
- BUS2 130 Introduction to Marketing 3 unit(s)
- BUS1 170 Fundamentals of Finance 3 unit(s)
- BUS3 186/PHIL 186 Professional and Business Ethics 3 unit(s) (S) ⁷ Note: BUS3/PHIL 186 is a major requirement.

Spring Semester (15 units)

- BUS4 119B Business Strategy and Information Systems 3 unit(s) 4
- Management Information System Elective #2 3 unit(s) 4
- BUS3 189 Strategic Management 3 unit(s)
- SJSU Studies Area R 3 unit(s) 7
- SJSU Studies Area V 3 unit(s) 7

Note: Area V also fulfills Non-Business Global Perspectives (a major requirement).

Roadmap Notes

- 1 Preparation for the Major
- ² Preparation for the Major and a "C" grade or better
- 3 Consult an advisor to determine your best option
- ⁴ Course requires a "C" grade or better
- 5 Prerequisite Pass WST and a "C" grade or better is required
- 6 Transfer students may have completed this requirement
- ⁷ Prerequisite Pass WST
- * Either B1 or B2 must be taken with a <u>B3 Laboratory</u>.

L = Lab; X = Supplemental Workshop Required; W = Writing; WB = Writing for Business