

Decision Sciences

College of Business ■ Undergraduate Programs

Degrees and Programs Offered

Bachelor of Science
in Business Administration:
Concentration
in Decision Sciences
Minor in Decision Sciences
Master of Business Administration:
Emphasis in Decision Sciences
Master of Science
in Business Administration:
Emphasis in Decision Sciences

Career Options

Opportunities to use decision science techniques exist in every organization, whether public or private, large or small, manufacturing or service. More and more jobs require these skills.

Students completing the Decision Sciences concentration can move into jobs such as production planner, production controller, inventory controller, buyer, expeditor, production scheduler, distribution planner, quality control analyst, operations research analyst, management science analyst, financial analyst, market research analyst or consultant. (Some of these jobs, such as operations research or management science analyst, may require a master's degree.)

The Decision Sciences concentration (formerly Business Analysis) provides students with the skills necessary to analyze and solve practical business problems. The concentration courses allow students to acquire competence in decision-making through the use of professional business software, such as spreadsheet, forecasting and simulation packages. By selecting appropriate electives, students may prepare for a career using decision science techniques in operations, computer information systems, finance, marketing, design and industry, accounting, international business, office systems, general management or other areas within industry or government.

The Decision Sciences concentration is open to students at San Francisco State University working toward a Bachelor of Science degree in business administration. General education courses such as English, science and humanities, and core business courses in management, marketing, finance, accounting, business communications and quantitative methods make up about three-quarters of the coursework. The Decision Sciences concentration makes up the remainder.

Students learn decision science techniques used by world-class companies to provide the quality products and services needed for a competitive edge in world markets. Emphasis is placed on analysis as a means for improving quality and productivity. Concentration options cover modern methods of forecasting, simulation, and other powerful quantitative and computer-based tools that support managers' decisions. All concentration courses focus on real-world applications.

Concentration electives are used to broaden one's background in decision science and operations, or in other business functions including accounting, computer information systems, design, engineering, finance, international business and marketing. Majors in Design and Industry, Engineering, Applied Mathematics or Statistics should consider taking Decision Sciences concentration courses as electives in their program.

The courses in this concentration will help prepare students for the APICS certification tests. This certification is provided by the American Production and Inventory Control Society for professionals in operations management functions.

Computers are indispensable tools in business today, and the Decision Sciences concentration is supported by excellent computing facilities for students. Software specifically designed for the Decision Sciences program is available on all of the systems.

Program Requirements

The Bachelor of Science in Business Administration requires a minimum of 120 units for graduation. All majors in business are required to complete a minimum of 63 lower- and upper-division units in business and economics, including work in the major field and elective courses, as well as six units of prerequisite courses.

Approved community college courses may be substituted for the courses marked with an asterisk (*). Lists of acceptable courses from nearby community colleges may be obtained by visiting the College of Business Student Services Web site (www.sfsu.edu/~cobssc/) and assist.org. For colleges not included on the list, a detailed description of the course must be submitted to an advisor in the College of Business for evaluation. Community college courses are not accepted to meet the requirements of any upper division course (numbered 300 or above).

Bachelor of Science in Business Administration: Concentration in Decision Sciences

Prerequisites to Core Courses

SPCH 150	Fundamentals of Oral Communication
ENG 114	First-Year Written Composition
BUS 214	Second-Year Written Composition (or equivalent second year written composition course)
DS 110	Mathematical Analysis for Business
or	
MATH 110	Business Calculus
ECON 100	Introduction to Macroeconomic Analysis
ISYS 263	Introduction to Information Systems

Core Courses (42 units)

ECON 101	Introduction to Microeconomic Analysis
ACCT 100	Principles of Financial Accounting
ACCT 101	Principles of Managerial Accounting
DS 212	Business Statistics I
IBUS 330	International Business and Multicultural Relations
FIN 350	Business Finance
BUS 360	Business Communication
ISYS 363	Information Systems for Management
MGMT 405	Introduction to Management and Organizational Behavior
MGMT 407	Economics for Managers
or	
DS 411	Decision Modeling with Spreadsheets

continued on reverse



Decision Sciences

College of Business ■ Undergraduate Programs

FOR MORE INFORMATION

Department of Decision Sciences BUS 310

415-338-2138

Email: ds@sfsu.edu

Web:

<http://cob.sfsu.edu/DecisionSciences/>

How to apply

Apply online through CSUMentor: www.csumentor.edu. It's the easiest and fastest way to apply. For more information about SFSU admissions, visit the SFSU Prospective Student Web site: www.sfsu.edu/prospect.

Reaching SFSU by mail

To reach any SFSU department or program by mail, write to the specific office, followed by:
San Francisco State University
1600 Holloway Avenue
San Francisco, CA 94132

By phone

University Information
415/338-1111

Admissions Office

415/338-1113
E-mail: ugadmit@sfsu.edu

SFSU on the Internet

For access to the University Bulletin (catalog), Class Schedule, and other campus information, visit SFSU on the Web: www.sfsu.edu

DS 412	Operations Management
MKTG 431	Marketing
BUS 682	Seminar in the Environment of Business
BUS 690	Seminar in Business Policy and Strategic Management

Concentration Course Requirements (21 units)

Students must have a minimum grade point average of 2.0 in all concentration courses. Undergraduate majors may not take departmental concentration courses on a CR/NC basis (unless that is the only grading option available).

Concentration Requirements

12 units selected from the following:

DS 312	Data Analysis with Computer Applications
DS 408	Computer Simulation
DS 601	Applied Management Science
DS 604	Business Forecasting
DS 624	Quality Management

9 units approved electives

Total for Bachelor of Science

63

Minor in Decision Sciences (18 units)

A minimum 2.0 GPA is required for the Decision Sciences minor and at least 50 percent of courses must be taken in residence. Except in cases of credit by examination, no more than six units of the Decision Sciences minor may be offered on a CR/NC basis, electives must be taken for a letter grade.

Minor Program Required Courses

DS 212	Business Statistics I
ISYS 263	Introduction to Information Systems
DS 412	Operations Management

6 units selected from the following:

DS 312	Data Analysis with Computer Applications
DS 408	Computer Simulation
DS 601	Applied Management Science
DS 604	Business Forecasting
DS 624	Quality Management

3 additional units selected from the above list or, with approval of a decision sciences adviser, units from an area related to decision sciences, such as the following: ISYS 562, CSC 665, CSC 671, DAI 440, DAI 460, DAI 510, ECON 325, ECON 630, ENGR 429, ENGR 610, FIN 309, JOUR 421, MATH 430, MATH 460, MKTG 632

Total for Minor

18

Decision Sciences: The Analytical and Computer Skills You Need

Marketing Analyst

"... successful candidate will possess excellent analytical skills ..."

Financial Analyst

"... demonstrated ability in analytic problem solving ..." You must have exceptional analytical ... skills ..."

Pricing Analyst

"Strong math aptitude with analytical skills ... essential."

Application Testing Specialist

"Strong analytical skills ... essential."

Marketing and Planning Coordinator

"... strong analytical skills are ... required."

Corporate Planner

"You should have ... 3–5 years data analyst background."

Quality Assurance Technician

"Requirements include mathematical and analytical skills ..."

Inventory Planning & Control Manager

"Must have strong analytical/forecasting skills ..."

Client Reporting Analyst

"Position requires strong analytical skills and the ability to prepare data and trend analysis using statistical and mathematical principles."

Merchandise Control Analyst

"The successful candidate ... must have strong analytical and conceptual skills ..."

Merchandise Planner

"Position requires strong analytical skills ..."

Planning Coordinator

"To succeed in this position, you must have excellent demonstrated analytical and decision making skills ..."

Inventory Control Assistant

"This individual must possess excellent analytical and computer skills ..."

High School Preparation

General courses in computing and microcomputer applications such as spreadsheets or word processing, and specific language courses such as JAVA, PASCAL, C or COBOL, are helpful. At least two years of algebra is recommended as well as geometry.