BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION: CONCENTRATION IN BUSINESS ANALYTICS ROADMAP

120 Total Units Required
Minimum Number of Units in the Major: 69

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

Course	Title	Units
First Semester		
ECON 101	Introduction to Microeconomic Analysis (Major Prerequisite, D1)	3
ENG 114	Writing the First Year: Finding Your Voice (A2) [1]	3
Select One (Major Prerequisite, B4): [2]		3
DS 110	Calculus with Business Applications	
MATH 110	Business Calculus	
GE Area A [3]		3
GE Area C		3
	Units	**15**
Second Semester		
ECON 102	Introduction to Macroeconomic Analysis (Major Core, D1)	3
ISYS 263	Introduction to Information Systems (Major Prerequisite, D1, GP)	3
GE Area A		3
GE Area B: Physical Science (B1) and Laboratory Science (B3) [4]		3-4
GE Area E		3
	Units	**15-16**
Third Semester		
ACCT 100	Introduction to Financial Accounting (Major Core)	3
Select One (Major Core):		3
DS 212	Business Statistics	
ECON 311	Statistical Methods and Interpretation	
MATH 124	Elementary Statistics (B4)	
GE Area B: Life Science (B2) and Laboratory Science (B3) [4]		3-4
GE Area D: U.S. History (D2)		3
SF State Studies or University Elective		3
	Units	**15-16**
Fourth Semester		
ACCT 101	Introduction to Managerial Accounting (Major Core)	3
GE Area C - Take Two		6
GE Area F [±]		3
U.S. and California Government (http://bulletin.sfsu.edu/undergraduate-education/american-institutions/#usg)		3
	Units	**15**
Fifth Semester		
Select One (Major Concentration):		3
DS 312	Data Analysis with Computer Applications	
ECON 312	Introduction to Econometrics	
DS 412	Operations Management (Major Core)	3
ISYS 363	Information Systems for Management (Major Core)	3
MKTG 431	Principles of Marketing (Major Core)	3
GE Area UD-C: Upper-Division Arts and/or Humanities		3
	Units	**15**
Sixth Semester		
Select One (Major Core):		3
BUS 300GW	Business Communication for Professionals - GWAR	
DS 660GW	Communications for Business Analytics - GWAR	
FIN 350	Business Finance (Major Core)	3
ISYS 412	Application Development for Data Analytics (Major Concentration)	3
ISYS 464	Managing Enterprise Data (Major Concentration)	3

MGMT 405	Introduction to Management and Organizational Behavior (Major Core)	3
	Units	**15**
Seventh Semester		
Select One (Major Concentration):		3
DS 601	Applied Management Science	
ECON 618	Economic Inference: Methods and Applications	
IBUS 330	International Business and Multicultural Relations (Major Core, UD-D, GP)	3
ISYS 650	Business Intelligence (Major Concentration)	3
GE Area UD-B: Upper-Division Physical and/or Life Sciences		3
SF State Studies or University Elective		3
	Units	**15**
Eighth Semester		
DS 612	Data Mining with Business Applications (Major Concentration)	3
BUS 682	Seminar on Business and Society (Major Core)	3
BUS 690	Seminar in Business Policy and Strategic Management (Major Core)	3
Major Elective – Take One [5]		3
SF State Studies or University Elective		3
	Units	**15**
	Total Units	**120-122**

[1] ENG 114 can only be taken if you complete Directed Self-Placement (DSP) and select ENG 114; if you choose ENG 104/ENG 105 through DSP you will satisfy A2 upon successful completion of ENG 105 in the second semester; multilingual students may be advised into alternative English courses.

[2] To determine the best B4 course option, students should complete the online advising activity at mathadvising.sfsu.edu (https://mathadvising.sfsu.edu/). Questions? Contact Gator Smart Start. (https://gatorsmartstart.sfsu.edu/)

[3] To avoid taking additional units, it is recommended that you meet the **SF State Studies** (AERM, GP, ES, SJ) requirements within your GE or major.

[4] Consider taking a class combined with a laboratory or a separate lab to fulfill B3 if not already satisfied.

[5] **Approved Elective (3 units)**
DS 311 Technologies in Data Analytics (3 units)
DS 312 Data Analysis with Computer Applications (3 units)
DS 408 Computer Simulation (3 units)
DS 601 Applied Management Science (3 units)
DS 604 Applied Business Forecasting (3 units)
DS 624 Quality Management (3 units)
DS 655 Sustainable Supply Chain Optimization (3 units)
ECON 301 Intermediate Microeconomic Theory (3 units)
ECON 302 Intermediate Macroeconomic Theory (3 units)
ECON 312 Introduction to Econometrics (3 units)
ECON 450 Health Economics (3 units)
ECON 505 Public Economics (3 units)
ECON 510/LABR 510 Labor Economics (3 units)
ECON 520 Industrial Organization (3 units)
ECON 550 Environmental Economics (3 units)
ECON 611 International Trade Theory and Policy (3 units)
ECON 616 Experimental Economics and Game Theory (3 units)
ECON 618 Economic Inference: Methods and Applications (3 units)
ECON 640 Health Economics Analysis and Research (3 units)
ECON 680 Applied Economics and Data Analysis with R (3 units)
ISYS 350 Building Business Applications (3 units)
ISYS 565 Managing Enterprise Networks (3 units)
ISYS 568 Multimedia Business Applications Development (3 units)
ISYS 569 Information Systems for Business Process Management (3 units)
ISYS 575 Information Security Management (3 units)
ISYS 663 Information Technology Project Management (3 units)
MATH 225 Introduction to Linear Algebra (3 units)
MKTG 632 Marketing Research (3 units)*
MKTG 660 Marketing Analytics (3 units)*
MKTG 661 Introduction to Digital Marketing Analytics (3 units)*

* MKTG courses are available to non-Marketing students on a space-available basis. Students in the Business Analytics concentration are allowed to substitute DS 412 as a prerequisite for MKTG 660.

± Given catalog rights, fall 2023 transfer students do not need to complete an Area F course.