# Bachelor of Science in Business Administration: Concentration in Decision Sciences Roadmap

120 Total Units Required  
Minimum Number of Units in the Major: 60

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<tr>
<td>ECON 101</td>
<td>Introduction to Microeconomic Analysis</td>
<td>3</td>
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<tr>
<td>GE Area A: Oral Communication (A1) or Critical Thinking (A3)</td>
<td>3</td>
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<tr>
<td>GE Area A: Written English Communication (A2)</td>
<td>3</td>
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<tr>
<td>GE Area C: Arts (C1) or Humanities (C2)</td>
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<tr>
<td>GE Area D: U.S. History (D2) or U.S. and California Government (D3)</td>
<td>3</td>
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**Units**: 15

| Second Semester                |                                                      |       |
| ECON 102                       | Introduction to Macroeconomic Analysis               | 3     |
| MATH 110 or DS 110             | Business Calculus or Calculus with Business Applications | 3     |
| GE Area A: Oral Communication (A1) or Critical Thinking (A3) | 3     |
| GE Area A: Written English Communication II (A4) or Written English Communication II Stretch II | 3     |
| GE Area C: Arts (C1)           |                                                      | 3     |

**Units**: 15

| Third Semester                 |                                                      |       |
| ACCT 100                       | Introduction to Financial Accounting                 | 3     |
| Select One:                    |                                                      |       |
| DS 212                         | Business Statistics I                                | 3     |
| MATH 124                       | Elementary Statistics                                |       |
| ISED 160                       | Data Analysis in Education                           |       |
| GE Area A: Written English Communication II (A4) if not already satisfied | 3     |
| or SF State Studies or University Elective | 3     |
| GE Area B: Physical Science (B1) and Laboratory Science (B3) | 3     |
| GE Area D: U.S. History (D2) or U.S. and California Government (D3) | 3     |

**Units**: 15-16

| Fourth Semester                |                                                      |       |
| ACCT 101                       | Introduction to Managerial Accounting                | 3     |

| Fifth Semester                 |                                                      |       |
| ACCT 307 or ISYS 363           | Accounting Information Systems or Information Systems for Management | 3     |
| DS 412                         | Operations Management                                | 3     |
| IBUS 330                       | International Business and Multicultural Relations   | 3     |
| Major Concentration (12 Units Total) | 3     |
| Major Approved Elective (9 Units Total) | 3     |

**Units**: 15

| Sixth Semester                 |                                                      |       |
| DS 660GW                       | Communications for Business Analytics - GWAR         | 3     |
| Major Concentration (12 Units Total) | 3     |
| Major Approved Elective (9 Units Total) | 3     |

**Units**: 15

| Seventh Semester               |                                                      |       |
| FIN 350                        | Business Finance                                     | 3     |
| MGMT 405                       | Introduction to Management and Organizational Behavior | 3     |
| MKTG 431                       | Principles of Marketing                              | 3     |
| Major Concentration (12 Units Total) | 3     |
| GE Area UD–B: Upper Division Physical and/or Life Sciences (Consider SF State Studies Course) | 3     |

**Units**: 15

| Eighth Semester                |                                                      |       |
| BUS 682                        | Seminar on Business and Society                      | 3     |
| BUS 690                        | Seminar in Business Policy and Strategic Management  | 3     |
| Major Concentration (12 Units Total) | 3     |
| Major Approved Elective (9 Units Total) | 3     |

**Units**: 15-16

| ISYS 263                       | Introduction to Information Systems                  | 3     |
| GE Area B: Life Science (B2) and Laboratory Science (B3) | 3-4    |
| GE Area C: Humanities: Literature (C3) | 3     |
| SF State Studies or University Elective | 3     |
1. To avoid taking additional units, it is recommended that you meet LLD and SF State Studies requirements (AERM, GP, ES, SJ) within your GE.

2. 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.

3. Depending on courses completed through Early Start, students in Pathway/Category 3 or 4 may be required to enroll in a stretch format for MATH 110 (MATH 107 in Fall 2018 and MATH 108 in Spring 2019). Before enrolling in a B4 course, students should verify their MATH Pathway/Category in their Student Center (http://cms.sfsu.edu/content/student-center). Information regarding the courses that correspond with your MATH Pathway/Category can be found on the Developmental Studies Office Website (http://developmentalstudies.sfsu.edu).

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

5. **Concentration Courses**
   - 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 612 Data Mining with Business Applications (3 units)
   - DS 624 Quality Management (3 units)
   - DS 655 Sustainable Supply Chain Management (3 units)

6. **Approved Electives**
   - Decision sciences students are advised to take DS 660GW Communications for Business Analytics - GWAR as one of the approved electives; it can substitute for BUS 300GW Business Communication for Professionals - GWAR for the Decision Sciences concentration as it satisfies the University GWAR requirement.