# Bachelor of Science in Business Administration: Concentration in Decision Sciences - Quantitative Reasoning Category I/II and ENG 114

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>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 101</td>
<td>Introduction to Microeconomic Analysis (Major Prerequisite, D1)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 114</td>
<td>Writing the First Year: Finding Your Voice (A2)</td>
<td>3</td>
</tr>
<tr>
<td>GE Area A</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE Area D</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SF State Studies or University Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 102</td>
<td>Introduction to Macroeconomic Analysis (Major Core, D1)</td>
<td>3</td>
</tr>
<tr>
<td>Select One (Major Core):</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>DS 110</td>
<td>Calculus with Business Applications (Prerequisite for DS 601, B4)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110</td>
<td>Business Calculus (B4)</td>
<td>3</td>
</tr>
<tr>
<td>GE Area A</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE Area C</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE Area D</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 100</td>
<td>Introduction to Financial Accounting (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td>Select One (Major Core):</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>DS 212</td>
<td>Business Statistics I (Prerequisite for Many Concentration Courses)</td>
<td></td>
</tr>
<tr>
<td>MATH 124</td>
<td>Elementary Statistics (B4)</td>
<td></td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Introduction to Managerial Accounting (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td>ISYS 263</td>
<td>Introduction to Information Systems (Major Prerequisite)</td>
<td>3</td>
</tr>
<tr>
<td>GE Area B: Physical Science (B1) and Laboratory Science (B3)</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>GE Area C</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE Area D</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SF State Studies or University Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td>15-16</td>
</tr>
<tr>
<td><strong>Fifth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 307 or ISYS 363</td>
<td>Accounting Information Systems (Major Core) or Information Systems for Management</td>
<td>3</td>
</tr>
<tr>
<td>DS 412</td>
<td>Operations Management (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 330</td>
<td>International Business and Multicultural Relations (Major Core, UD-D, GP)</td>
<td>3</td>
</tr>
<tr>
<td>Major Concentration (12 Units Total) - Take One</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Major Approved Elective (9 Units Total) - Take One</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Sixth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DS 660GW</td>
<td>Communications for Business Analytics - GWAR (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td>Major Concentration (12 Units Total) - Take One</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Major Approved Elective (9 Units Total) - Take One</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GE Area UD-C: Upper-Division Arts and/or Humanities (Consider SF State Studies Course)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SF State Studies or University Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Seventh Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIN 350</td>
<td>Business Finance (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 405</td>
<td>Introduction to Management and Organizational Behavior (Major Core)</td>
<td>3</td>
</tr>
</tbody>
</table>
### Bachelor of Science in Business Administration: Concentration in Decision Sciences - Quantitative Reasoning Category I/II and ENG 114

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 431</td>
<td>Principles of Marketing (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Major Concentration (12 Units Total) - Take One 5</td>
<td>3</td>
</tr>
<tr>
<td>GE Area UD-B: Upper-Division Physical and/or Life Sciences (Consider SF State Studies Course)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Eighth Semester</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 682</td>
<td>Seminar on Business and Society (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 690</td>
<td>Seminar in Business Policy and Strategic Management (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Major Concentration (12 Units Total) - Take One 5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Major Approved Elective (9 Units Total) - Take One 6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SF State Studies or University Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td>120-122</td>
</tr>
</tbody>
</table>

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 avoid taking additional units, it is recommended that you meet SF State Studies requirements (AERM, GP, ES, SJ) within your GE.

3. Depending on courses completed through Early Start, students in Pathway/Category III or IV may be required to enroll in a support course to complement their Quantitative Reasoning/B4 requirement. There are multiple course options for this pathway. Before enrolling in a B4 course, students should verify their MATH Pathway/Category in their Student Center. Information regarding the courses that correspond with your MATH Pathway/Category can be found on the Developmental Studies Office Website.

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

5. **Concentration Courses (12 units)**
   Select 12 credit hours from the following:
   - 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)
   - DS 660GW Communications for Business Analytics - GWAR (3 units)

6. **Approved Electives (9 units)**
   Please see one of the undergraduate advisors to select electives. While additional classes from the above list can be used to fulfill this requirement, students may also use upper-level concentration classes from another department to do so, especially if they are quantitative in nature and are relevant to the degree.