# Academic Planning Sheet

## B.S. Computer Information Systems Data Analytics Emphasis

**Colorado State University – Pueblo**

**Gene Lucero, Undergraduate Advisor**

**Phone:** 549-2175  
**Email:** gene.lucero@csupueblo.edu

**Kimberly Wharton, Administrative Assistant**

**Phone:** 549-2142  
**Email:** kimberly.wharton@csupueblo.edu

### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 100/103/104/105: Word, PP, Excel, Access</td>
<td>4</td>
<td>CIS 171: Introduction to Java</td>
<td>4</td>
</tr>
<tr>
<td>CIS 150: Computer Information Systems</td>
<td>3</td>
<td>CIS 185: PC Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101: English Composition I</td>
<td>3</td>
<td>ENG 102: English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 121: College Algebra</td>
<td>4</td>
<td>MATH 220: Quantitative Analysis for Business</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>14</strong></td>
<td><strong>Total Semester Hours</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 271: Advanced Program Design with Java</td>
<td>4</td>
<td>CIS 240: Object Oriented Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 315: Unix Operating System</td>
<td>3</td>
<td>CIS 289: Network Concepts</td>
<td>3</td>
</tr>
<tr>
<td>Gen Ed Course: Nat &amp; Phys Science (1 course w/lab)</td>
<td>4</td>
<td>General Education Course: Humanities</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>17</strong></td>
<td><strong>Total Semester Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 311: Introduction to Web Development</td>
<td>3</td>
<td>CIS 3/400-level Emphasis Area Elective</td>
<td>3</td>
</tr>
<tr>
<td>CIS 350: Database Management</td>
<td>3</td>
<td>BUSAD 270: Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 360: Advanced Business Statistics</td>
<td>3</td>
<td>Business Minor/Environment Elective</td>
<td>3</td>
</tr>
<tr>
<td>Gen Ed Soc Science: ECON 202 Principles of Microeconomics</td>
<td>3</td>
<td>General Education Course: History</td>
<td>3</td>
</tr>
<tr>
<td>Gen Ed Course: Nat &amp; Phys Science (1 course w/lab)</td>
<td>4</td>
<td>General Education Course: Humanities</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>16</strong></td>
<td><strong>Total Semester Hours</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 3/400-level Emphasis Area Elective</td>
<td>3</td>
<td>CIS 432: Senior Professional Project</td>
<td>6</td>
</tr>
<tr>
<td>CIS 3/400-level Emphasis Area Elective</td>
<td>3</td>
<td>CIS 493: Senior Seminar</td>
<td>1</td>
</tr>
<tr>
<td>MGMT 368: Project Management</td>
<td>3</td>
<td>CIS 3/400-level Emphasis Area Elective</td>
<td>3</td>
</tr>
<tr>
<td>Business Minor/Environment Electives</td>
<td>4</td>
<td>Business Minor/Environment Elective</td>
<td>3</td>
</tr>
<tr>
<td>Business Minor/Environment Elective</td>
<td>3</td>
<td><strong>Total Semester Hours</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

### Notes

The Academic Planning Sheet is designed as a guide for students planning their course selections. The information on this page provides only a suggested schedule. Actual course selections should be made with the advice and consent of an academic advisor. While accurately portraying the information contained in the college catalog, this form is not considered a legal substitute for that document. Students should become familiar with the catalog in effect at the time at which they entered the institution.
General Education Requirements: (36 semester hours)

- ENG 101: English Composition I (3)
- ENG 102: English Composition II (3)
- MATH
  - MATH 121: College Algebra (4)
- Humanities Courses (9)
- COMR 103: Speech Communication (3)
- History Course (3)
- Social Sciences (6)
- ECON 201 & ECON 202 if Business Minor
- Natural and Physical Sciences Courses (8) (2 courses with labs)

Major Quantitative Analysis Requirements: (10 semester hours)

- MATH 220: Quantitative Analysis for Business (4)
- BUSAD 265: Inferential Statistics & Problem Solving (3)
- BUSAD 360: Advanced Business Statistics (3)

Required Related Courses: (9 semester hours)

- BUSAD 270: Business Communications (3)
- MGMT 201: Principles of Management (3)
- MGMT 368: Project Management (3)

CIS Major Requirements: (52 semester hours)

- CIS 100: Introduction to Word and Windows (1)
- CIS 103: PowerPoint and Web Publishing (1)
- CIS 104: Excel Spreadsheets (1)
- CIS 105: MS Access DBMS (1)
- CIS 150: Computer Information Systems (3)
- CIS 171: Introduction to Java Programming (4)

CIS Major Requirements (continued):

- CIS 185: PC Architecture (3)
- CIS 240: Object Oriented Analysis and Design (3)
- CIS 271: Advanced Program Design with Java (4)
- CIS 289: Network Concepts (3)
- CIS 311: Introduction to Web Development (3)
- CIS 315: Unix Operating System (3)
- CIS 350: Database Management (3)
- CIS 432: Senior Professional Project (6)
- CIS 493: Senior Seminar (1)
- CIS 3/400: Emphasis Area Electives (12) (see elective choices below)

CIS 3/400 Emphasis Area Elective Courses: (12 semester hours)

- CIS 356: iOS Application Development (3)
- CIS 359: Advanced Programming with C# (3)
- CIS 360: Cyber Security (3)
- CIS 386: Android Application Development (3)
- CIS 401: Network Systems Administration (3)
- CIS 402: Linux Networks and Routing (3)
- CIS 411: Internet Server-Side Programming (3)
- CIS 461: IT Security Risk Management (3)
- CIS 462: Computer Forensics (3)
- CIS 490: Special Projects (1-5)
- CIS 491: Special Topics (1-5)
- CIS 498: Internship (1-5)

Data Analytics Emphasis: (13 semester hours)

- CIS 365: Management Information Systems (3)
- CIS 450: Advanced Data Analytics (3)
- CIS 3/400: Elective (3)
- CIS 3/400: Elective (3)
- CIS 3/400: Elective (1)

Institutional Graduation Requirements:

- Total of 120 semester hours, minimum.
- Complete a minimum of 40 semester hours in upper-division courses.
- Overall cumulative grade point average of 2.00.
- A minimum of 60 semester hours must be earned from a four-year institution. Of these, a minimum of 30 semester hours of credit must be earned in residence.
- Of the last 30 semester credits earned immediately preceding graduation, no more than 15 may be completed at other colleges or universities.
- All other requirements as specified in the Catalog.

Additional Major Graduation Requirements:

- Students must maintain grades of C or higher in all CIS courses.
- All required CIS prerequisites must be completed with a grade of C or better.
- Students must complete no fewer than 21 credits of CIS upper-division course work. At least 16 of these upper-division credits must be taken in residence.

The Academic Planning Sheet is designed as a guide for students planning their course selections. The information on this page provides only a suggested schedule. Actual course selections should be made with the advice and consent of an academic advisor. While accurately portraying the information contained in the college catalog, this form is not considered a legal substitute for that document. Students should become familiar with the catalog in effect at the time at which they entered CSU-Pueblo.

06/29/17