

**2003-05 Catalog Paradigm  
Computer Information Systems**

<b>First Year</b>	
1.	BA105
2.	CS110
3.	CS205
4.	MT124 or 131 (GS8)
5.	General Education
6.	General Education
7.	General Education
8.	General Education

<b>Second Year</b>	
1.	BA206
2.	BA284
3.	CS225 (1 <sup>st</sup> semester)
4.	CS220 (2nd semester)
5.	General Education
6.	General Education
7.	General Education
8.	Elective/Minor

<b>Third Year</b>	
1.	BA230
2.	BA333 (2nd semester)
3.	BA270
4.	CS330 (1 <sup>st</sup> semester)
5.	General Education
6.	General Education
7.	Elective/Minor
8.	Elective/Minor

<b>Fourth Year</b>	
1.	BA345 (1 <sup>st</sup> semester)
2.	BA445 (2nd semester)
3.	CS Elective
4.	General Education
5.	General Education
6.	Elective/Minor
7.	Elective/Minor
8.	Elective/Minor

Elective/Minor courses can be used to take additional major courses, free electives, or to fulfill a minor.

1. Students may choose to take CS110 the second semester of their first year. They would take CS205 first semester second year and CS225 first semester third year.
2. Students may take BA315 (instead of BA206) as a junior and BA230 as a sophomore.
3. Be careful choosing courses. Some courses are prerequisites for others, and some courses are taught only in certain semesters. CS110 is a prerequisite for 205 and 205 is a prerequisite for many other CS courses.

## Progress Sheet Computer Information Systems

Student Name:	
Student ID:	
<b>General Education – Lower Biennium</b>	<b>Major</b>
<input type="checkbox"/> <b>GS1</b> – Religious Studies <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS2</b> – Philosophy of Human Nature <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS3</b> – Human Relationships <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS4</b> – Natural Science <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS5</b> – Creative Expression <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS6</b> – United States Heritage <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS7</b> – Foreign Heritages <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS8</b> – Quantitative Skills <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS9</b> – Writing <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>	<b>Required Courses:</b> <input type="checkbox"/> BA105 – Financial Accounting <input type="checkbox"/> BA206 – Managerial Accounting or BA315 – Managerial Cost Accounting <input type="checkbox"/> BA230 – Foundations of Management <input type="checkbox"/> BA270 – Marketing Concepts and Issues <input type="checkbox"/> BA333 – Operations Management <input type="checkbox"/> BA345 – Systems Analysis and Design <input type="checkbox"/> BA445 – Systems Project <input type="checkbox"/> CS110 – Introduction to Computer Programming <input type="checkbox"/> CS205 – Software Engineering and Elementary Data Structures <input type="checkbox"/> CS220 – Advanced Data and File Structures <input type="checkbox"/> CS225 – Machine Organization and Assembly Language <input type="checkbox"/> CS330 – Database Techniques and Modeling <input type="checkbox"/> CS Elective _____ <input type="checkbox"/> MT124 – Survey of Calculus or MT131 – Calculus and Analytic Geometry I <input type="checkbox"/> BA284 – Statistics for Business and Economics or MT321 – Probability and Statistics
<b>General Education – Upper Biennium</b>	
<input type="checkbox"/> <b>GS1</b> – Religious Studies <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS10</b> – Western Tradition <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS11</b> – Global Society <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <input type="checkbox"/> <b>GS12</b> – Senior Colloquium (GS400) <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/>	<p>Note –1. Students may choose to take CS 110 the second semester of their first year. They would take CS 205 first semester second year and CS 225 first semester third year.</p> <p>2. Students may take BA 315 (instead of BA 206) as a junior and BA 230 as a sophomore.</p> <p>3. Be careful choosing courses. Some courses are prerequisites for others, and some courses are taught only in certain semesters. CS 110 is a prerequisite for 205 and 205 is a prerequisite for many other CS courses.</p> <p>RELATED MINORS</p> <p>4. MATH MINOR=electives MT 132, 233, 250, and 315, take MT 321 instead of BA 284.</p> <p>5. BUSINESS MINOR=electives EC 202 and BA 350.</p>

## 2003-2005 SNC Program Description

### **Computer Information Systems (CIS)**

The objective of the CIS program is to integrate the theory and applications of both business and computer science. Students majoring in CIS prepare for entry-level positions as programmer-analysts, system analysts, and end user liaison, or for entry into graduate school. The major program is consistent with the recommendations of the Association for Computing Machinery for small college CIS programs and with the Data Processing Management Association's Information Systems Program guidelines. It emphasizes oral and written communications skills by requiring thorough documentation of system projects, topical papers, a variety of team projects and several oral presentations. The program reinforces theoretical concepts with a wide variety of hands-on experiences beginning with small programming exercises during the freshman year and culminating with a semester-long project during the senior year. Throughout the program course assignments are designed to develop analytical and problem-solving skills. Students work in both microcomputer and mainframe environments and focus on both the technical and behavioral aspects of CIS. Students take two capstone courses (CSCI 330 and BUAD 445). Small class sizes in these courses enable the students to pursue independent team projects involving real organizations under the close supervision of a faculty member. Upon completion of these projects students are well-prepared to work on system teams in organizations.

**Residency Requirements:** Students majoring in CIS must earn credit in at least three upper-level (300 or above) CIS program courses at St. Norbert College. These courses must be Systems Project (BUAD 445) and two other courses selected in consultation with the CIS Committee.

**Independent Study:** No more than three independent studies are allowed in the 32 courses required for a CIS major. Except in extraordinary circumstances, independent study should not be taken in place of a formalized existing course.

**Internship:** No more than one internship for credit is allowed in the 32 courses required for the CIS major. This limit does not affect internships not taken for credit.

**Assessment:** BUAD 445 Systems Project is the senior capstone course for the CIS curriculum and is used to assess the program. All CIS students are required to take BUAD 445 at St. Norbert College.

**Graduate School Advisor:** Dr. Kathleen Molnar

**Course Requirements for Majors:** For descriptions of courses listed below see the pages under the appropriate discipline headings.

#### **Business Administration:**

BUAD 105 Financial Accounting  
BUAD 206 Managerial Accounting **or**  
BUAD 315 Managerial Cost Accounting  
BUAD 230 Foundations of Management  
BUAD 284 Statistics for Business and Economics **or**  
MATH 321 Probability and Statistics  
BUAD 270 Marketing Concepts and Issues  
BUAD 333 Production/Operations Management  
BUAD 345 Systems Analysis and Design  
BUAD 445 Systems Project

#### **Computer Science:**

CSCI 110 Introduction to Computer Programming  
CSCI 205 Software Engineering and Elementary Data Structures  
CSCI 220 Advanced Data and File Structures  
CSCI 225 Machine Organization and Assembly Language  
CSCI 330 Database Techniques and Modeling

**Other Courses :**

MATH 124 A Survey of Calculus **or**  
MATH 131 Calculus and Analytic Geometry I  
CSCI 2XX one CSCI Elective numbered 200 or above