

# Bachelor of Science in Computer Information Systems (BS)

## Academic Requirements

|   |                           |
|---|---------------------------|
| <b>CIS Major Requirements</b>                       | <b>(36 + 20) = 56 HRS</b> |
|   |                           |
| <b>Required Courses</b>                             | <b>36</b>                 |
| CIS 110 Introduction to Object-Oriented Programming | 4                         |
| CIS 130 Computer systems Hardware                   | 4                         |
| CIS 210 Object-Oriented Programming                 | 4                         |
| *CIS 240 Database Management Concepts               | 4                         |
| *CIS 300 Management Information Systems             | 4                         |
| CIS 303 Discrete Structure                          | 4                         |
| *CIS 315 Technical Writing for CIS                  | 4                         |
| *CIS 325 Data Structures (Using C++)                | 4                         |
| *CIS 460 Senior Project                             | 4                         |
|   |                           |
| <b>Concentration #1</b>                             |                           |
| <b>Database Systems Management</b>                  | <b>20 HRS</b>             |
| *CIS 220 Client-Side Web Development                | 4                         |
| *CIS 310 Database Security Management               | 4                         |
| *CIS 320 Server-Side Web Development                | 4                         |
| *CIS 340 Database Management                        | 4                         |
| *CIS 440 Topics in Advanced Databases               | 4                         |
|   |                           |
| <b>Concentration #2</b>                             |                           |
| <b>Network Systems Administrator</b>                | <b>20 HRS</b>             |
| CIS 216 Operating Systems                           | 4                         |
| CIS 217 Computer Networks                           | 4                         |
| *CIS 328 Network Systems Security                   | 4                         |
| *CIS 360 Advanced Topics in Networks                | 4                         |
| *CIS 370 Network Management                         | 4                         |
|   |                           |
| <b>Concentration #3</b>                             |                           |
| <b>Web-based applications</b>                       | <b>20 HRS</b>             |
| *CIS 220 Client-Side Web Development                | 4                         |
| *CIS 312 Advanced Applications Programming          | 4                         |
| With Visual Basic                                   |                           |
| *CIS 320 Server-Side Web Development                | 4                         |

|  |                |
|--|----------------|
| *CIS 328 Network Systems Security                        | 4              |
| *CIS 400 Ecommerce                                       | 4              |
|  |                |
| <b>General Education Requirements</b>                    | <b>40 HRS</b>  |
| ENG 160 Composition I                                    | 4              |
| ENG 162 Composition II                                   | 4              |
| ENG 165 Speech   | 4              |
| MAT 225 Statistics                                       | 4              |
| PHY 103 Earth Science <b>OR</b>                          | 4              |
| BIO 102 Introduction to Human Biology                    |                |
| HUM 202 Humanities I <b>OR</b>                           | 4              |
| ENG 203 American Culture and Literature <b>OR</b>        |                |
| PHI 200 Introduction to Philosophy <b>OR</b>             |                |
| PHI 220 Ethics   |                |
| SPA 222 The Hispanic-American Experience                 |                |
| Through Literature <b>OR</b>                             |                |
| HUM 202 Humanities I                                     | 4              |
| HUM 204 Music Appreciation <b>OR</b>                     | 4              |
| HUM 205 History and Appreciation of Art                  |                |
| HIS 104 Survey of U.S. History to 1865 <b>OR</b>         | 4              |
| HIS 105 Survey of U.S. History 1865 to Present <b>OR</b> |                |
| PSC 103 American Government and Politics                 |                |
| PSY 101 General Psychology <b>OR</b>                     | 4              |
| SOC 101 Introduction to Sociology                        |                |
|  |                |
| <b>Elective Credits</b>                                  | <b>24 HRS</b>  |
|  |                |
| <b>Total Credit Hours Required</b>                       | <b>120 HRS</b> |