

# COLLEGE OF ARTS & SCIENCES

## 2021-22 COMPUTER SCIENCE - INFORMATION SYSTEMS DEGREE PLAN

| <b>FIRST YEAR - FRESHMAN</b>   |       |  |           |                        |       |   |           |
|--------------------------------|-------|--|-----------|------------------------|-------|---|-----------|
| <b>Fall Semester</b>           |       |  |           | <b>Spring Semester</b> |       |   |           |
| Dept                           | Crse# | Course Name                            | Hrs       | Dept                   | Crse# | Course Name                                   | Hrs       |
| CIS                            | 171   | Computer Programming I                 | 3         | CIS                    | 172   | Computer Programming II <sup>3</sup>          | 3         |
| ENG                            | 101   | English Composition I <sup>1</sup>     | 3         | ENG                    | 102   | English Composition II <sup>1,3</sup>         | 3         |
| MAT                            | 120   | Precalculus <sup>3</sup>               | 4         | MAT                    | 122   | Analytics & Calculus I <sup>2,3</sup>         | 4         |
| COM                            | 140   | Speech Communication <sup>1</sup>      | 3         | CIS                    | 211   | Intro to Web Design                           | 3         |
| BIB                            | 121   | Life of Christ <sup>1</sup>            | 2         | BIB                    | 122   | Acts of the Apostles <sup>1</sup>             | 2         |
|                                |       |  | <b>15</b> |                        |       |   | <b>15</b> |
| <b>SECOND YEAR - SOPHOMORE</b> |       |  |           |                        |       |   |           |
| <b>Fall Semester</b>           |       |  |           | <b>Spring Semester</b> |       |   |           |
| Dept                           | Crse# | Course Name                            | Hrs       | Dept                   | Crse# | Course Name                                   | Hrs       |
| CIS                            | 273   | Data Structures <sup>3</sup>           | 3         | CIS                    | 374   | Algorithms <sup>3</sup>                       | 3         |
| CIS                            | 267   | Application Development I <sup>3</sup> | 3         | CIS                    | 367   | Application Development II <sup>3</sup>       | 3         |
|                                |       | Behavioral Science <sup>1</sup>        | 3         |                        |       | Elective                                      | 3         |
| HIS                            |       | History <sup>1</sup>                   | 3         |                        |       | Creative Works <sup>1</sup>                   | 3         |
|                                |       | Elective                               | 2         | CYB                    | 201   | Intro to Linux                                | 3         |
| BIB                            |       | Bible                                  | 2         | BIB                    |       | Bible   | 2         |
|                                |       |  | <b>16</b> |                        |       |   | <b>17</b> |
| <b>THIRD YEAR - JUNIOR</b>     |       |  |           |                        |       |   |           |
| <b>Fall Semester</b>           |       |  |           | <b>Spring Semester</b> |       |   |           |
| Dept                           | Crse# | Course Name                            | Hrs       | Dept                   | Crse# | Course Name                                   | Hrs       |
| CYB                            | 220   | Windows Security                       | 3         | CIS                    | 345   | Computer Networks <sup>3</sup>                | 3         |
| CIS                            | 388   | Mobile Application Dev <sup>3</sup>    | 3         |                        |       | CIS/CYB Upper-Division Elective               | 3         |
|                                |       | Natural Science <sup>1</sup>           | 3         | MAT                    | 240   | Discrete Mathematics <sup>3</sup>             | 3         |
|                                |       | Elective                               | 2         | MAT                    | 235   | Introductory Statistics                       | 3         |
| CIS                            | 324   | Database Systems <sup>3</sup>          | 3         |                        |       | Elective                                      | 2         |
| BIB                            |       | Bible                                  | 2         | BIB                    |       | Bible   | 3         |
|                                |       |  | <b>16</b> |                        |       |   | <b>17</b> |
| <b>FOURTH YEAR - SENIOR</b>    |       |  |           |                        |       |   |           |
| <b>Fall Semester</b>           |       |  |           | <b>Spring Semester</b> |       |   |           |
| Dept                           | Crse# | Course Name                            | Hrs       | Dept                   | Crse# | Course Name                                   | Hrs       |
| CIS                            | 474   | Artificial Intelligence <sup>3</sup>   | 3         | CIS                    | 491   | Advanced Topics in CS <sup>3</sup>            | 3         |
| CIS                            | 497   | Internship                             | 3         | CIS                    | 460   | Operating Systems <sup>3</sup>                | 3         |
| CIS                            | 441   | System Admin. & Security <sup>3</sup>  | 3         | CIS                    | 322   | Human-Computer Interaction                    | 3         |
| CIS                            | 311   | Advanced Web Design <sup>3</sup>       | 3         |                        |       | Elective                                      | 3         |
| BIB                            | 346   | Foundations of Faith <sup>1</sup>      | 3         | BIB                    | 495   | Values in Human Thought & Action <sup>1</sup> | 3         |
|                                |       |  | <b>15</b> |                        |       |   | <b>15</b> |

<sup>1</sup>Liberal Arts Core Requirement

<sup>2</sup>Liberal Arts Core Requirement in *Undergraduate Catalog*

<sup>3</sup>Course has prerequisite. See corresponding *Undergraduate Catalog*

## ADDITIONAL ITEMS RELATED TO THE MAJOR

The Quantitative Reasoning liberal arts core requirement must be satisfied by MAT 122, Calculus I.

Due to a deep prerequisite structure, it is essential that CIS 171, Computer Programming I, be taken the first fall semester of study in order to graduate in 8 semesters.

**The following guidelines are important. Failure to follow these guidelines may delay graduation.**

1. Plan schedules carefully. Plan to fulfill prerequisites for future courses.
2. Do not alter the sequence of courses without consulting with your academic adviser as not all classes are offered every semester.
3. Before the enrollment period, check to make sure holds will not prevent you from registration.
4. Register for classes early during the registration period to secure classes.

**The Four-Year Degree Plan is a suggested plan of study. This plan does not replace the *Undergraduate Catalog*. The *Undergraduate Catalog* provides the official listing of program requirements.**

### 2021-22 Undergraduate Liberal Arts Core Requirements

| I. Biblical Values   | III. Broadened Perspectives  |
|--|--|
| <b>A. Bible</b>  | <b>A. Behavioral Sciences</b>  |
| BIB 121 & 122 & 346 <b>OR</b> 446 7  | BIB/FAM 230 <b>OR</b> PSY 210 <b>OR</b> SOC 241 <b>OR</b> SOC 251 3  |
| <b>II. Basic Skills</b>  | <b>B. Natural Sciences</b>   |
| <b>A. Written Communication</b>  | BIO 100 <b>OR</b> BIO 105 <b>OR</b> BIO 110 <b>OR</b> BIO 111 <b>OR</b> BIO 112 <b>OR</b> BIO 211 <b>OR</b> CHE 121 & CHE 121L <b>OR</b> PHS 111 <b>OR</b> PHS 112 <b>OR</b> PHS 201 <b>OR</b> PHS 211 3   |
| ENG 101 <b>AND</b> ENG 102 6   |  |
| <b>B. Oral Communication</b>   | <b>C. Arts and Humanities</b>  |
| COM 140 3  | <b>HISTORY:</b> HIS 111 <b>OR</b> HIS 112 <b>OR</b> HIS 221 <b>OR</b> HIS 222 <b>OR</b> HUM 399A <b>OR</b> POL 3   |
| <b>C. Quantitative Reasoning</b>   | <b>CRITICAL AND CREATIVE WORKS:</b> 3  |
| MAT 100 <b>OR</b> MAT 101 <b>OR</b> MAT 120 <b>OR</b> MAT 122 <b>OR</b> MAT235 3   | ART 110 <b>OR</b> ART 201 <b>OR</b> ART 234 <b>OR</b> ENG 215 <b>OR</b> ENG 225 <b>OR</b> ENG 235 <b>OR</b> ENG 299A/399A <b>OR</b> MUS 110 <b>OR</b> MUS 214 <b>OR</b> PHI 243 <b>OR</b> PHI 245 <b>OR</b> PHI246 <b>OR</b> THE 160 <b>OR</b> THE 265 <b>OR</b> THE 299A/399A |
| <i>Complete course names and descriptions for the Liberal Arts Core Requirements are located in the Undergraduate Catalog.</i> | <b>HUMANITIES CAPSTONE:</b> BIB/HUM 495 3  |
|  | <b>Total</b> 34  |