

## B.S. IN COMPUTER SCIENCE MAJOR w/ Minors: Sample 4-Year Plan (2024-2025)

### FRESHMAN (29 hours)

<p><b>Fall Semester (14 hours)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> COR 1002 Gateway Seminar</li> <li><input type="checkbox"/> EGL 1013 English I</li> <li><input type="checkbox"/> MTH 1163 Calculus I</li> <li><input type="checkbox"/> EN 1112 Intro to Engineering/CS</li> <li><input type="checkbox"/> CS 1233 Object-Oriented Programming</li> </ul>	<p><b>Spring Semester (15 hours)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> BBL 1013 Old Testament Survey</li> <li><input type="checkbox"/> EGL 1023 English II</li> <li><input type="checkbox"/> Social Behavioral Science Elective* (3 hrs)</li> <li><input type="checkbox"/> CS 1513 Java Programming</li> <li><input type="checkbox"/> MTH 1153 Linear Algebra</li> </ul>
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### SOPHOMORE (33 hours)

<p><b>Fall Semester (18 hours)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> BBL 1023 New Testament Survey</li> <li><input type="checkbox"/> HST 2013 Integrated Humanities I</li> <li><input type="checkbox"/> Natural Science Elective I* (3 hours)</li> <li><input type="checkbox"/> CS 2173 Computer Networking</li> <li><input type="checkbox"/> CS 2823 C# &amp; DotNet</li> <li><input type="checkbox"/> MTH 2213 Discrete Mathematics</li> </ul>	<p><b>Spring Semester (15 hours)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> HST 2023 Integrated Humanities II</li> <li><input type="checkbox"/> Natural Science Elective II* (3 hours)</li> <li><input type="checkbox"/> EE 2213 Digital Electronics</li> <li><input type="checkbox"/> CS 2243 Data Structures and Algorithms</li> <li><input type="checkbox"/> CS 2423 Web Applications</li> </ul>
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### JUNIOR (30 hours)

<p><b>Fall Semester (15 hours)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> BBL 2013 Evangelical Theology</li> <li><input type="checkbox"/> CS 3213 CA/OS</li> <li><input type="checkbox"/> CS 3363 Database Design</li> <li><input type="checkbox"/> Minor/Elective* (3 hours) - <i>Adv. Web App</i></li> <li><input type="checkbox"/> Minor/Elective* (3 hours) – <i>Artifi. Intel.</i></li> </ul>	<p><b>Spring Semester (15 hours)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> BBL 2022 Christian Formation</li> <li><input type="checkbox"/> Whole Person Wellness Elective* (2 hrs)</li> <li><input type="checkbox"/> Statistics Elective* (3 hrs)</li> <li><input type="checkbox"/> EN 3222 Collaborative Design Lab</li> <li><input type="checkbox"/> CS 3533 Software Engineering</li> <li><input type="checkbox"/> Minor/Elective* (3 hrs) – <i>Machine Learning</i></li> </ul>
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### SENIOR (30 hours)

<p><b>Fall Semester (15 hours)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Arts &amp; Humanities Elective* (3 hours)</li> <li><input type="checkbox"/> Intercultural Engagement Elective* (3 hrs)</li> <li><input type="checkbox"/> EN 4113 Capstone I</li> <li><input type="checkbox"/> Minor/Elective* (3 hours) – <i>Adv Java</i></li> <li><input type="checkbox"/> Minor/Elective* (3 hours) – <i>BigData/Cloud</i></li> </ul>	<p><b>Spring Semester (15 hours)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Arts/Hum or Social/Behavioral Elec* (3 hrs)</li> <li><input type="checkbox"/> EN 4123 Capstone II</li> <li><input type="checkbox"/> Minor/Elective* (3 hours)</li> <li><input type="checkbox"/> Minor/Elective* (3 hours) – <i>Adv. Comp. Conc</i></li> <li><input type="checkbox"/> Minor/Elective* (3 hrs) – <i>Software Tstg &amp; QA</i></li> </ul>
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Revised 4/18/23

\*See the Academic Catalog for the list of classes that meet this criteria.

(Minors as necessary to complete the minimum of 120 hours total) – please turn over the page for Minor courses

**MINORS for BS – Computer Science**  
**(Opt for at least one of the following Minors) - 18 hours**

**Artificial Intelligence**

- CS 1233 OOP
- CS 2243 Data Structures
- CS 3643 Artificial Intelligence
- CS 3773 Big Data & Cloud Computing
- CS 4023 Advanced Computing Concepts
- CYB 7103 Cybersecurity Foundations (Online)

**Full Stack Development**

- CS 1233 OOP
- CS 2423 Web Applications
- CYB 7103 Cybersecurity Foundations (Online)
- CS3683 Advance Java Programming
- CS3473 Advanced Web Applications
- CS4083 Software Testing & Quality Assurance

**Cybersecurity**

- CS 1113 Intro to Computing
- Any ONE**
- BUS 2193 Business Statistics (On Campus and Online)
- MTH 1003 Introduction to Statistics (On Campus and Online)
- MTH 2103 Applied Statistics for Scientists (On Campus)
- Any FOUR**
- CYB 7103 Cybersecurity Foundations (Online)
- CYB 7223 Network and Cloud Security (Online)
- CYB 7233 Information Technology Risk Management (Online)
- CYB 7243 Web Application Security (Online)
- CYB 7433 Incident Management (Online)

**Game Design Minor**

- ART 1123 Computer Graphics
- CS 1113 Introduction to Computing
- CS 3333 Game Design 1
- CS 3343 Game Design 2
- EGL 2273 Introduction to Creative Writing
- Any One**
- ART 2273 3D Modeling for Designers & Illustrators
- ART 2613 Digital Illustration

**Data Analytics**

- Any One**
- CS 1113 Intro to Computing
- CS 1233 Object Oriented Programming
- Any One**
- BUS 2193 Business Statistics
- MTH 1003 Introduction to Statistics
- MTH 2103 Applied Statistics for Scientists
- Any TWO**
- DAT 3113 Basic Data Analytics
- DAT 4253 Business Decision Modeling & Predictive Analysis
- DAT 4313 Data Visualization
- Any TWO**
- CS 2243 Data Structures and Algorithms
- CS 3363 Database Design
- CS 3643 Artificial Intelligence
- CS 3773 Big Data & Cloud Computing