

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

FRESHMAN (30 hours)

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

SOPHOMORE (31 hours)

<p>Fall Semester (15 hours)</p> <ul style="list-style-type: none"> <input type="checkbox"/> HST 2013 Integrated Humanities I <input type="checkbox"/> Natural Science Elective I* (3 hours) <input type="checkbox"/> CS 2173 Computer Networking <input type="checkbox"/> CS 2823 C# & DotNet <input type="checkbox"/> MTH 2213 Discrete Mathematics 	<p>Spring Semester (16 hours)</p> <ul style="list-style-type: none"> <input type="checkbox"/> HST 2023 Integrated Humanities II <input type="checkbox"/> Natural Science Elective II* (4 hours w/lab) <input type="checkbox"/> CS 2243 Data Structures and Algorithms <input type="checkbox"/> CS 2423 Web Applications <input type="checkbox"/> Minor/Elective* (3 hours)
--	--

JUNIOR (31 hours)

<p>Fall Semester (15 hours)</p> <ul style="list-style-type: none"> <input type="checkbox"/> BBL 2013 Evangelical Theology <input type="checkbox"/> Statistics Elective* (3 hours) <input type="checkbox"/> CS 3363 Database Design <input type="checkbox"/> Minor/Elective* (3 hours) – <i>Adv. Web App</i> <input type="checkbox"/> Minor/Elective* (3 hours) – <i>Artifi. Intel.</i> 	<p>Spring Semester (16 hours)</p> <ul style="list-style-type: none"> <input type="checkbox"/> BBL 2022 Christian Formation <input type="checkbox"/> Whole Person Wellness Elective* (2 hours) <input type="checkbox"/> CS 3533 Software Engineering <input type="checkbox"/> Minor/Elective* (3 hours) – <i>Machine Learning</i> <input type="checkbox"/> Minor/Elective* (3 hours) <input type="checkbox"/> Minor/Elective* (3 hours)
--	---

SENIOR (28 hours)

<p>Fall Semester (15 hours)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Arts & Humanities Elective* (3 hours) <input type="checkbox"/> Intercultural Engagement Elective* (3 hours) <input type="checkbox"/> Minor/Elective* (3 hours) – <i>Adv Java</i> <input type="checkbox"/> Minor/Elective* (3 hours) – <i>Big Data/Cloud</i> <input type="checkbox"/> Minor/Elective* (3 hours) 	<p>Spring Semester (13 hours)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Arts/Hum or Social/Behavioral Elec* (3 hours) <input type="checkbox"/> Minor/Elective* (3 hours) – <i>Adv. Comp. Conc</i> <input type="checkbox"/> Minor/Elective* (3 hours) – <i>SW Testing/QA</i> <input type="checkbox"/> Minor/Elective* (3 hours) <input type="checkbox"/> Minor/Elective* (1-3 hours)
--	---

Revised 7/8/24

*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 BA – 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