B.S. DEGREE IN COMPUTER SCIENCE WITH GAMING AND ANIMATION
82 HOURS

A graduate with a Bachelor of Science degree in Computer Science with Gaming and Animation will:
1. Be able to demonstrate understanding of and the ability to apply core computer science principles, knowledge, and skills to solve problems using computers.
2. Be able to demonstrate understanding of and ability to apply gaming and animation knowledge and skills to solve problems in the computer gaming industry.
3. Be able to apply a Christian worldview in the practice of computer science.
4. Be prepared for a career and/or vocation using computer science, especially in the gaming and animation field.

Students must complete a minimum of 122 hours including the major, core, and minor if required. Elective hours may be needed to reach 122 hours.

24 HOURS LOWER DIVISION
CMSC-1113   Programming I
CMSC-1123   Programming II
CMSC-1313   Software Engineering I: Introduction
CMSC-2133   Object-Oriented Software Engineering
CMSC-2213   Internet Application Development
CMSC-2233   Data Structures and Algorithm Analysis
CMSC-2313   Software Engineering II: Practices
CMSC-2413   Assembly Language

21 HOURS UPPER DIVISION
CMSC-3313   Software Engineering III: Ethics
CMSC-3443   Computer Organization and Architecture
CMSC-4123   Software Engineering IV: Tools
CMSC-4243   Software Engineering V: Projects
CMSC-4323   Database Systems
CMSC-4413   Operating Systems
CMSC-4513   Programming Languages

9 HOURS UPPER DIVISION CHOSEN FROM
Take any upper-division CMSC course not already taken, which can include CENG-4213.

3 HOURS COMMUNICATION CHOSEN FROM
COMM-3113   Business and Professional Communication
ENGL-3493   Technical Writing

6 HOURS MATHEMATICS
MATH-1623   Introduction to Discrete Mathematics
MATH-2913   Statistical Methods

15 HOURS GAMING AND ANIMATION
ARTS-2133   Introduction to Game Technology
ARTS-2743   3D Modeling I
ARTS-3453   Team Game Production I
CMSC-3203   Game Programming - Unity
CMSC-3253   Game Programming - Unreal

2 HOURS LOWER DIVISION COMPUTER SCIENCE TEAM EXPERIENCE
CMSC-2011   Computer Science Team Experience I
CMSC-2011   Computer Science Team Experience I

2 HOURS UPPER DIVISION COMPUTER SCIENCE TEAM EXPERIENCE
CMSC-4011   Computer Science Team Experience II
CMSC-4011   Computer Science Team Experience II

UNIVERSITY CORE CURRICULUM
B.S. - 51 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
COMM-1213: Oral Communication
ENGL-1113: English Composition I
ENGL-1213: English Composition II

MATHEMATICS, 3 HOURS
MATH-1623: Introduction to Discrete
   Mathematics

REQUIRED BIBLE, 6 HOURS
BIBL-1023: Foundations: Introduction to the
   Good Life
BIBL-1103: Story: Introduction to Christian
   Worldview

BIBLE ELECTIVES, 3 HOURS

CAPSTONE, 3 HOURS
BIBL-4533: Bible Capstone

POLITICAL SCIENCE, 3 HOURS
POLS-2113: Introduction to American
   Government

AMERICAN HISTORY, 3 HOURS
HIST-2213: History of the U.S. to 1877
HIST-2223: History of the U.S. Since 1877

GREAT WORKS, 3 HOURS
ARTS-2013: Survey of Visual Culture
ARTS-2423: History of Photography and
   Motion Pictures
ENGL-2213: Perspectives in Literature
MATH-2123: The History of Mathematics
MUSC-2013: Music Appreciation
MUSC-2023: Jazz Appreciation
MUSC-3213: Perspectives in World Music

SCIENCE, 6 HOURS
One course must include a lab

**PSYC, SOCIAL SCIENCES, FINE ARTS,
OR FOREIGN LANGUAGE, 3 HOURS**
3 hours from these areas: Fine Arts, Family
Science, French, German, History, Japanese,
Music, Political Science, Psychology, or
Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any liberal arts area

For more information on how to apply study
abroad trips to the core, see page 25.