# B.S. DEGREE IN COMPUTER SCIENCE WITH BUSINESS 82 HOURS

A graduate with a Bachelor of Science degree in Computer Science with Business will:

- Be able to demonstrate understanding of and the ability to apply core computer science principles, knowledge, and skills to solve problems using computers.
- Be able to demonstrate understanding of and ability to apply accounting, finance, management, and marketing knowledge to solve problems in business, especially using
- Be able to apply a Christian worldview in the practice of computer science.
- Be prepared for a career and/or vocation using computer science, especially in the business 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 BUSINESS CHOSEN FROM

ACCT-2113	Accounting Principles I
ACCT-2213	Accounting Principles II
ECON-2113	Macroeconomics
FINC-3113	Financial Management
INFO-3613	Management Information Systems
MGMT-3113	Principles of Management
MKTG-3313	Principles of Marketing

#### 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.